EDUS091558E





Engineering Data

Split Type Air Conditioners

- Heat Pump -

FTX-N/U, FVXS-N, FDMQ-R Series



Split Type Air Conditioners FTX-N/U, FVXS-N, FDMQ-R Series

1.	Lineup	4
2.	Functions	5
3.	Specifications	7
4.	Dimensions	14
	4.1 Indoor Unit	14
	4.2 Outdoor Unit	19
5.	Wiring Diagrams	21
	5.1 Indoor Unit	21
	5.2 Outdoor Unit	24
6.	Piping Diagrams	26
	6.1 Indoor Unit	26
	6.2 Outdoor Unit	28
7.	Capacity Tables	31
	7.1 Capacity Correction Factor by the Length of Refrigerant Piping	
	(Reference)	53
8.	Operation Limit	55
9.	Fan Characteristics	56
	9.1 External Static Pressure	56
	9.2 Airflow Auto Adjustment	
10	. Sound Level	61
	10.1 Measuring Location	61
	10.2 Indoor Unit	62
	10.3 Outdoor Unit	67
11	. Electric Characteristics	70
12	. Installation Manual	71
	12.1 FTX09/12/15NMVJU	71
	12.2 FTX18/24UVJU	83
	12.3 FVXS09/12/15NVJU	93
	12.4 FDMQ12/18/24RVJU	110
	12.5 <brc1e73> Wired Remote Controller</brc1e73>	129
	12.6 <brc082a43> Wireless Remote Controller</brc082a43>	149
	12.7 RXL09QMVJU, RXL12QMVJU9	154

	12.8 RXL15QMVJUA	166
	12.9 RXL18/24UMVJUA	178
13.	Operation Manual	190
	13.1 FTX09/12/15NMVJU	190
	13.2 FTX18/24UVJU	218
	13.3 FVXS09/12/15NVJU	253
	13.4 FDMQ12/18/24RVJU	286
	13.5 With <brc1e73> Wired Remote Controller</brc1e73>	294
	13.6 With <brc082a43> Wireless Remote Controller</brc082a43>	344
14.	Options	352
	14.1 Option List	352
	14.2 <brc944b2> Wired Remote Controller Installation Manual</brc944b2>	354
	14.3 <brc944b2> Wired Remote Controller Operation Manual</brc944b2>	356
	14.4 <brp072a43> Wireless LAN Connection Adapter</brp072a43>	368
	14.5 <krp413bb1s> Wiring Adaptor for Timer Clock/Remote Control</krp413bb1s>	
		376
	14.6 <krp928bb2s> Interface Adaptor for DIII-NET</krp928bb2s>	
	14.7 <krp067a41> Interface Adaptor for Residential Air Conditioner .</krp067a41>	
	14.8 <krp980b2> Interface Adaptor for Residential Air Conditioner</krp980b2>	
	14.9 <dcs302c71> Central Remote Controller Installation Manual</dcs302c71>	
	14.10 <dcs302c71> Central Remote Controller Operation Manual</dcs302c71>	
	14.11 <dcs301c71> Unified ON/OFF Controller Installation Manual</dcs301c71>	
	14.12 <dcs301c71> Unified ON/OFF Controller Operation Manual</dcs301c71>	
	14.13 <dst301ba61> Schedule Timer Controller</dst301ba61>	
	14.14 <dst301ba61> Schedule Timer Controller Installation Manual.</dst301ba61>	430
	14.15 <dst301ba61> Schedule Timer Controller Operation Manual</dst301ba61>	
	14.16 <krcs01-4b> Remote Sensor</krcs01-4b>	_
	14.17 <krp1c74> Wiring Adaptor</krp1c74>	
	14.18 <krp4a98> Installation Box for Adaptor PCB</krp4a98>	
	14.19 <kpw937f4> Air Direction Adjustment Grille</kpw937f4>	
	14.20 <kpw063b4> Air Direction Adjustment Grille</kpw063b4>	
	14.21 <kkg067a41> Back Protection Wire Net</kkg067a41>	458
	14.22 <kkg063a42> Back Protection Wire Net</kkg063a42>	459
	14.23 <keh067a41e, ftdbhml="" ftdbhms,="" keh063a4e,=""> Drain Pa</keh067a41e,>	
	14.24 <kps067a41> Snow Hood (Intake Side Plate)</kps067a41>	466

14.25	<kps067a42></kps067a42>	Snow Hood (Intake Rear Plate)	468
14.26	<kps067a44></kps067a44>	Snow Hood (Outlet)	470
14.27	<kps063a41></kps063a41>	Snow Hood (Intake Side Plate)	472
14.28	<kps063a44></kps063a44>	Snow Hood (Intake Rear Plate)	474
14.29	<kps063a47></kps063a47>	Snow Hood (Outlet)	476

1. Lineup

Ind	oor Unit	Outdoor Unit	Power Supply
	FTX09NMVJU	RXL09QMVJU	
	FTX12NMVJU	RXL12QMVJU9	
Wall mounted type	FTX15NMVJU	RXL15QMVJUA	
	FTX18UVJU	RXL18UMVJUA	
	FTX24UVJU	RXL24UMVJUA	-
	FVXS09NVJU	RXL09QMVJU	1 phase, 208 - 230 V, 60 Hz
Floor standing type	FVXS12NVJU	RXL12QMVJU9	
	FVXS15NVJU	RXL15QMVJUA	
	FDMQ12RVJU	RXL12QMVJU9	-
Duct connected type	FDMQ18RVJU	RXL18UMVJUA	
	FDMQ24RVJU	RXL24UMVJUA	

Note: Power Supply Intake ; Outdoor Unit



Cautions 1. Air conditioners should not be installed in areas where corrosive gasses, such as acid gas or alkaline gas, are produced. 2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided and

choose an outdoor unit with anti-corrosion treatment.

2. Functions

			F	ТХ			FDMQ	
Category	Functions	09	12	15	18/24	FVXS	Wired R/C	Wireless R/C
Basic Function	Inverter (with inverter power control)	•	•	•	•	•	•	•
	Operation limit			Re	efer to page	55		
	PAM control	•	•	•	•	•	•	•
	Standby electricity saving	•	_	•	_	_	_	_
Compressor	Swing compressor	•	•	•	•	•	•	•
	Reluctance DC motor	•	•	•	•	•	•	•
Comfortable	Power-airflow flap (horizontal blade)	•	•	—	—	•	_	—
Airflow	Power-airflow dual flaps (horizontal blades)	_	—	•	•	_	_	—
	Wide-angle louvers (vertical blades)	•	•	•	•	•	_	—
	Auto-swing (up and down)	•	•	•	•	•	_	_
	Auto-swing (right and left)	_	_	—	•	_	_	_
	3-D airflow	_	_	—	•	_	_	_
	COMFORT AIRFLOW operation	•	•	•	•	_	_	_
Comfort	Auto fan speed	•	•	•	•	•	•	
Control	Switchable fan speed	5 steps	5 steps	5 steps	5 steps	5 steps	3 steps	3 steps
	Indoor unit quiet operation	•	•	•	•	•	_	
	OUTDOOR UNIT QUIET operation (manual)	_	—	_	•	•	_	_
	INTELLIGENT EYE operation (auto energy saving)	_	_	_	•	_	_	_
	2 selectable temperature sensors		_	_			•	
	Quick warming function	•	•	•	•		•	•
	Hot-start function	•	•	•	•	•	•	•
	Automatic defrosting	•	•	•	•	•	•	•
Operation	Automatic cooling/heating changeover	•	•	•	•	•	•	•
	Program dry operation	•	•	•	•	•	•	•
	Fan only	•	•	•	•	•	•	•
Lifestyle	Inverter POWERFUL operation	•	•	•	•	•	_	_
Convenience	ECONO operation	•	•	•	•	•	_	_
	Indoor unit ON/OFF switch	•	•	•	•	•	_	_
	Emergency operation switch	_	_	_	_	_	_	•
	Signal receiving sign	•	•	•	•	•	_	●★1
Health and	Titanium apatite deodorizing filter	•	•	•	•	•	_	_
Cleanliness	Air filter (prefilter)	•	•	•	•	•	_	_
	Wipe-clean flat panel	•	•	•	•	•	_	
	Silver ion anti-bacterial drain pan	_	_	_		_	•	•
	Filter cleaning indicator	_	_	_		_	•	•
Remote	WEEKLY TIMER operation	_	_	_	•	•	_	_
Control & Timer	Schedule timer	_	_	_	_	_	•	_
	24-hour ON/OFF TIMER	_	_	_	•	•	•	_
	72-hour ON/OFF TIMER	_		_			_	•
	Count up-down ON/OFF timer	•	•	•		_	_	•
	Off timer (turns unit off after set time)		_	_		_	•	_
	Setpoint auto reset			_		_	•	
	Setpoint range set	_	_	_	_	_	•	_
	NIGHT SET mode	•	•	•	•	•	_	_
	Remote controller with back light	•	•	•	•	•	•	_
	DIII-NET compatible (adaptor)	Option	Option	Option	Option	Option	Option	Option
	Wireless LAN connection	Option	Option	Option	Option	Option	· ·	

FTX-N/U, FVXS-N, FDMQ-R Series

			F	ТХ			FD	MQ
Category	Functions	09	12	15	18/24	FVXS	Wired R/C	Wireless R/C
Worry Free	Auto-restart (after power failure)	•	•	•	•	•	•	•
(Reliability & Durability)	Self-diagnosis (R/C, LED)	•	•	•	•	•	•	•
	Anti-corrosion treatment of outdoor heat exchanger	•	•	•	•	•	•	•
Work &	Multi-split/split type compatible indoor unit	—	—	—	—	•	•	•
Servicing	Chargeless	32.8 ft. (10 m)						
	Drain pump		_	—	_	_	•	•
	Either side drain (right or left)	•	•	•	•	—	_	—
	Low temperature cooling operation	-4°F ★2 (-20°C)	-4°F ★2 (-20°C)	-4°F ★2 (-20°C)	-4°F ★2 (-20°C)	–4°F ★2 (–20°C)	–4°F ★2 (–20°C)	-4°F ★2 (-20°C)
	°F/°C changeover R/C temperature display (factory setting: °F)	•	•	•	•	•	•	(°F only)

Available Not available

Receiving sound only Below 50°F (10°C): ★1 : ★2 :

Below 14°F (-10°C):

Needs setting on outdoor unit. 09/12/15 class cutting jumper on the main PCB 18/24 class switch on the service monitor PCB Need to install the air direction adjustment grille.

3. Specifications

	Indoor Unit		FTX09N	IMVJU	FTX12NMVJU		
Model	Outdoor Unit		RXL090	2MVJU	RXL120	QMVJU9	
			Cooling	Heating	Cooling Heating		
Power Supply			1 φ , 60 Hz, :		1 φ , 60 Hz,		
Capacity Rated (N	∕lin. ~ Max.)	kW	2.64 (1.30 ~ 3.20)	3.20 (1.30 ~ 4.70)	3.11 (1.30 ~ 3.90)	3.93 (1.30 ~ 5.50)	
		Btu/h	9,000 (4,400 ~ 10,900)	10,900 (4,400 ~ 16,000)	10,600 (4,400 ~ 13,300)	13,400 (4,400 ~ 18,800)	
		kcal/h	2,270 (1,120 ~ 2,750)	2,750 (1,120 ~ 4,040)	2,670 (1,120 ~ 3,350)	3,380 (1,120 ~ 4,730)	
Moisture Remova		gal/h	0.32		0.42		
Running Current (Rated) A		3.76 - 3.40	3.95 - 3.57	4.26 - 3.85	5.12 - 4.63		
· ·	ion Rated (Min. ~ Max.)	W	720 (250 ~ 1,180)	760 (230 ~ 1,440)	850 (280 ~ 1,390)	1,030 (240 ~ 1,660)	
,		%	92.1 - 92.1	92.6 - 92.6	96.0 - 96.0	96.7 - 96.7	
COP Rated (Min.		W/W	3.66 (5.20 ~ 2.70) 4.20 (5.64 ~ 3.26)		3.66 (4.64 ~ 2.80)	3.80 (5.42 ~ 3.30)	
EER Rated (Min.	~ Max.)	Btu/h·W	12.5 (17.6 ~ 9.2) 14.3 (19.1 ~ 11.1)		12.5 (15.7 ~ 9.6)	13.0 (18.3 ~ 11.3)	
SEER / HSPF		1. ()	20.0	12.5	20.0 12.0		
Piping Liquid Connections Coo		in. (mm)	φ 1/4 (φ 6.4)		φ 1/4 (φ 6.4) φ 3/8 (φ 9.5)		
Connocación	Gas	in. (mm)	φ 3/8 (, ,	
Heat Insulation	Drain	in. (mm)	φ 5/8 (φ	,	φ 5/8 (, ,	
	ing Langth	ft (ma)	Both Liquid an		Both Liquid a	•	
Max. Interunit Pip	<u> </u>	ft (m)	65-5/8	()	65-5/	()	
Max. Interunit Hei	Ignt Difference	ft (m)	49-1/4		49-1/-		
Chargeless	anal Charge of	ft (m)	32-13/1		32-13/		
Amount of Additio Refrigerant	mai Gharge of	oz/ft (g/m)	0.21	(20)	0.21	(20)	
Indoor Unit	· · · · · · · · · · · · · · · · · · ·		FTX09N	ULVM	FTX12	UVVJU	
Front Panel Color			Wh		Wh		
Airflow Rate	Н		417 (11.8)	403 (11.4)	434 (12.3)	413 (11.7)	
	M	cfm	297 (8.4)	328 (9.3)	311 (8.8)	321 (9.1)	
	L	(m³/min)	244 (6.9)	251 (7.1)	247 (7.0)	258 (7.3)	
	SL	1	141 (4.0)	215 (6.1)	145 (4.1)	219 (6.2)	
Fan	Type / Motor Output	W	Cross Flov	v Fan / 21	Cross Flo	v Fan / 28	
	Speed	Steps	5 Steps, Quiet, Auto		5 Steps, Quiet, Auto		
Air Direction Cont	trol		Right, Left, Horizontal, Downward		Right, Left, Horiz	ontal, Downward	
Air Filter			Removable, Washable, Mildew Proof		Removable, Washable, Mildew Proof		
Running Current ((Rated)	A	0.25 - 0.23	0.23 - 0.21	0.28 - 0.25	0.25 - 0.23	
Power Consumpti	ion (Rated)	W	28 - 28	25 - 25	31 - 31	28 - 28	
Power Factor (Ra	ited)	%	53.8 - 52.9	52.3 - 51.8	53.2 - 53.9	53.8 - 52.9	
Temperature Con	itrol		Microcomputer Control		Microcomp	uter Control	
Dimensions (H ×	W × D)	in. (mm)	11-1/4 × 30-5/16 × 8-3/4 (285 × 770 × 223)		11-1/4 × 30-5/16 × 8-3/4 (285 × 770 × 223)		
Packaged Dimens	sions (H × W × D)	in. (mm)	14-3/16 × 32-11/16 × 12 (360 × 831 × 305)		14-3/16 × 32-11/16 ×	12 (360 × 831 × 305)	
Weight (Mass)		Lbs (kg)	18 (8)		18 (8)		
Gross Weight (Gr		Lbs (kg)	24 (11)		25 (12)		
Sound Pressure	H/M/L/SL	dB(A)	43 / 36 / 30 / 19	43 / 36 / 29 / 25	45 / 37 / 30 / 19	45 / 37 / 30 / 26	
Level		()					
Outdoor Unit			RXL090		RXL120		
Casing Color Heat Exchanger	Fin / Spec. Tube		lvory \ Waffle Fin (PE) / ∳		lvory Waffle Fin (PE) / ∳		
Compressor	Туре		Hermetically Sea				
Compressor	Model				Hermetically Sealed Swing Type 2YC36PXD		
	Motor Output	W	1YC23AUXD 790		1,100		
Refrigerant Oil	Type		FVC		FVC		
	Charge	oz (L)	12.4 (0		21.5 (
Refrigerant	Туре	J (L)	R-4		R-4		
	Charge	Lbs (kg)	2.09 (2.09		
Airflow Rate	H	cfm	1,105 (31.3)	922 (26.1)	1.144 (32.4)	1,006 (28.5)	
	SL	(m³/min)	865 (24.5)	777 (22.0)	865 (24.5)	777 (22.0)	
E						ler / 20	
Fan		W	Propell				
Fan Running Current (Type / Motor Output		3.51 - 3.17	3.72 - 3.36	3.98 - 3.60	4.87 - 4.40	
	Type / Motor Output (Rated)	W				4.87 - 4.40 1002 - 1002	
Running Current (Type / Motor Output (Rated) ion (Rated)	W A	3.51 - 3.17	3.72 - 3.36	3.98 - 3.60		
Running Current (Power Consumpti	Type / Motor Output (Rated) ion (Rated)	W A W	3.51 - 3.17 692 - 692	3.72 - 3.36 735 - 735 95.1 - 95.1	3.98 - 3.60 819 - 819	1002 - 1002 98.9 - 99.0	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H ×	Type / Motor Output (Rated) ion (Rated) tted) W × D)	W A W %	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-7	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/16 (550 × 675 × 284)	3.98 - 3.60 819 - 819 98.9 - 98.9 4.	1002 - 1002 98.9 - 99.0	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H × Packaged Dimensi	Type / Motor Output (Rated) ion (Rated) ited)	W A W % A	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/16 (550 × 675 × 284)	3.98 - 3.60 819 - 819 98.9 - 98.9 4.	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284)	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H ×	Type / Motor Output (Rated) ion (Rated) tted) W × D)	W A W % In. (mm) in. (mm) Lbs (kg)	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-7	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/16 (550 × 675 × 284) 16 (629 × 830 × 407)	3.98 - 3.60 819 - 819 98.9 - 98.9 4. 21-5/8 × 26-9/16 × 11-	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284) 16 (629 × 830 × 407)	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H × Packaged Dimensi	Type / Motor Output (Rated) ion (Rated) tted) W × D) sions (H × W × D)	W A W % A in. (mm) in. (mm)	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-7 24-3/4 × 32-11/16 × 1	3.72 - 3.36 735 - 735 95.1 - 95.1 35 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27)	3.98 - 3.60 819 - 819 98.9 - 98.9 4.: 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 ×	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32)	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H × Packaged Dimens Weight (Mass)	Type / Motor Output (Rated) ion (Rated) ited) W × D) sions (H × W × D) ross Mass)	W A W % In. (mm) in. (mm) Lbs (kg)	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-3 24-3/4 × 32-11/16 × 7 60 (71 (49	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32) 49	3.98 - 3.60 819 - 819 98.9 - 98.9 4. 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 × 70 0 80 (50	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36) 50	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H × Packaged Dimens Weight (Mass) Gross Weight (Gr Sound Pressure L Conditions Based	Type / Motor Output (Rated) ion (Rated) ited) W × D) sions (H × W × D) ross Mass) Level H	W A W A in. (mm) in. (mm) Lbs (kg) Lbs (kg)	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-2 24-3/4 × 32-11/16 × 1 60 (71 (49 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/6 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32) 49 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)	3.98 - 3.60 819 - 819 98.9 - 98.9 4. 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 × 70 (80 °FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36) 1ndoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)	
Running Current (Power Consumpti Power Factor (Ra Starting Current Dimensions (H × Packaged Dimens Weight (Mass) Gross Weight (Gr Sound Pressure L	Type / Motor Output (Rated) ion (Rated) ited) W × D) sions (H × W × D) ross Mass) Level H	W A W A in. (mm) in. (mm) Lbs (kg) Lbs (kg)	3.51 - 3.17 692 - 692 94.8 - 94.9 3.5 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 11-5 24-3/4 × 32-11/16 × 11-5 60 (71 (49 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	3.72 - 3.36 735 - 735 95.1 - 95.1 95 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32) 49 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m) 01720	3.98 - 3.60 819 - 819 98.9 - 98.9 4. 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 × 70 (80 (50 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	1002 - 1002 98.9 - 99.0 94 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36) 50 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m) 23801A	

	Indoor Unit		FTX15NMVJU				
Model	Outdoor Unit		RXL15QMV				
			Cooling	Heating			
Power Supply			1 \u00e9 , 60 Hz, 208				
Capacity Rated (N	Min. ~ Max.)	kW	4.40 (1.70 ~ 5.40) 5.35 (1.70 ~ 7.20)				
	Btu/h		15,000 (5,800 ~ 18,400)	18,300 (5,800 ~ 24,600)			
		kcal/h	3,780 (1,460 ~ 4,640)	4,600 (1,460 ~ 6,190)			
/loisture Remova	al	gal/h	0.63	_			
Running Current	(Rated)	A	5.92 - 5.35	6.81 - 6.16			
Power Consumpt	ion Rated (Min. ~ Max.)	W	1,150 (290 ~ 1,630)	1,340 (390 ~ 2,310)			
Power Factor (Ra		%	93.5 - 93.5	94.6 - 94.6			
COP Rated (Min.	/	W/W	3.82 (5.86 ~ 3.30)	4.00 (4.36 ~ 3.12)			
ER Rated (Min.		Btu/h·W	13 (20 ~ 11.3)	13.7 (14.9 ~ 10.6)			
SEER / HSPF	- Wax.)	Dtu/IT VV	· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,			
	1		20.0	12.5			
Piping Connections	Liquid	in. (mm)	φ 1/4 (φ 6.	, ,			
onnections	Gas	in. (mm)	φ 1/2 (φ 12				
	Drain	in. (mm)	φ 5/8 (φ 16.0)				
leat Insulation			Both Liquid and C	Bas Pipes			
/lax. Interunit Pip	ing Length	ft (m)	98-1/2 (3)	0)			
Iax. Interunit Hei		ft (m)	65-5/8 (2)	,			
Chargeless	5	ft (m)	32-13/16 (,			
Amount of Additic	anal Charge of	oz/ft		,			
Refrigerant	nai Graige O	(g/m)	0.21 (20)			
ndoor Unit	·	(9,)	FTX15NM\	/III			
Front Panel Color			White	~~			
	1			CE0 (40 E)			
Airflow Rate	Н		593 (16.8)	653 (18.5)			
	M	cfm	505 (14.3)	554 (15.7)			
	L	(m³/min)	431 (12.2)	470 (13.3)			
	SL		367 (10.4)	399 (11.3)			
an	Type / Motor Output W		Cross Flow Fan / 33				
	Speed	Steps	5 Steps, Quiet, Auto				
Air Direction Cont			Right, Left, Horizonta				
Air Filter			Removable, Washable				
	(Potod)		0.23 - 0.21 0.25 - 0.23				
Running Current		A		38 - 38			
Power Consumpt	<u>, , , , , , , , , , , , , , , , , , , </u>	W	33 - 33				
Power Factor (Ra		%	69.0 - 68.3	73.1 - 71.8			
emperature Con			Microcomputer Control				
Dimensions (H ×		in. (mm)	11-5/8 × 39 × 10-3/8 (2				
Packaged Dimen	sions (H × W × D)	in. (mm)	14-9/16 × 42-1/2 × 15-3/8 (370 × 1,080 × 390)			
Veight (Mass)		Lbs (kg)	27 (12)				
Gross Weight (Gr	ross Mass)	Lbs (kg)	37 (17)				
Sound Pressure	H/M/L/SL						
evel	dB(A)		45 / 41 / 36 / 33	45 / 41 / 37 / 33			
Outdoor Unit			RXL15QMV	AUA			
Casing Color							
*	Ein / Spec Tubo		Ivory White				
leat Exchanger	Fin / Spec. Tube		Waffle Fin (PE) / ∳ 7 mm Hi-XSL Tube				
Compressor	Туре		Hermetically Sealed	0 31			
	Model		2YC36PX	D			
	Motor Output	W	1,100				
Refrigerant Oil	Туре		FVC50K				
	Charge	oz (L)	21.5 (0.65				
Refrigerant	Туре	· · · ·	R-410A				
5	Charge	Lbs (kg)	3.20 (1.4	5)			
Airflow Rate	H		2,044 (57.9)	,			
Airflow Rate		cfm		2,044 (57.9)			
	SL	(m³/min)	1,762 (49.9)	1,585 (44.9)			
an	Type / Motor Output	W	Propeller /				
Running Current	<u> </u>	A	5.69 - 5.14	6.56 - 5.93			
Power Consumpt	ion (Rated)	W	1,117 - 1,117	1,302 - 1,302			
ower Factor (Ra	ated)	%	94.4 - 94.5	95.4 - 95.5			
Starting Current		A	6.81				
Dimensions (H ×	W × D)	in. (mm)	28-15/16 × 34-1/4 × 12-5/8	(735 × 870 × 320)			
	sions (H × W × D)	in. (mm)	31-7/8 × 41-9/16 × 18-1/4 (
<u> </u>	SIUIS (Π ^ VV × U)						
Veight (Mass)		Lbs (kg)	108 (49)				
Gross Weight (Gr		Lbs (kg)	123 (56)				
Sound Pressure L	_evel H	dB(A)	50	55			
Conditions Based	lon		Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)			
Drowing Ma							
Drawing No.			C: 3D1271	-			
Notes			SL: The quiet fan level of the airflow rate setting.				

	Indoor Unit		FTX18			IUVJU	
Model	Outdoor Unit		RXL18L	IMVJUA	RXL24L	IMVJUA	
	Outdoor onit		Cooling Heating		Cooling Heating		
Power Supply			1.1	208 - 230 V	1		
Capacity Rated (I	/	Btu/h	18,000 (9,000 ~ 21,600)	21,600 (9,000 ~ 28,000)	21,200 (9,000 ~ 25,800)	24,000 (9,000 ~ 32,000)	
Power Consumpt	(/	W	1,440 (570 ~ 1,930)	1,809 (540 ~ 3,080)	1,696 (580 ~ 2,360)	2,132 (570 ~ 3,800)	
Power Factor (Ra		%	96	97	96	97	
COP (Min. ~ Max		W/W		3.50 (4.88 ~ 2.66)	—	3.30 (4.62 ~ 2.46)	
EER (Min. ~ Max	.)	Btu/h·W	12.50 (15.80 ~ 11.20)		12.50 (15.50 ~ 10.90)	—	
SEER / HSPF			20.30 10.30		20.00	10.30	
Piping	Liquid	in. (mm)	φ 1/4	(\$ 6.4)	φ 1/4		
Connections	Gas	in. (mm)	φ 1/2 (φ 12.7)		φ 5/8 (φ 15.9)		
	Drain	in. (mm)	φ 5/8		φ 5/8		
Max. Interunit Pip		ft (m)	98-1/		98-1/		
Max. Interunit He	ight Difference	ft (m)	65-5/	8 (20)	65-5/	8 (20)	
Chargeless		ft (m)	32-13/	16 (10)	32-13/	16 (10)	
Amount of Addition Refrigerant	onal Charge of	oz/ft (g/m)	0.32	(30)	0.32	(30)	
Indoor Unit			FTX18	BUVJU	FTX24	IUVJU	
Front Panel Colo	r (Munsell No.)		White	(N-95)	White	(N-95)	
Airflow Rate	Н /		583 (16.5)	713 (20.2)	643 (18.2)	699 (19.8)	
	M	cfm	484 (13.7)	583 (16.5)	494 (14.0)	572 (16.2)	
	L	(m³/min)	385 (10.9)	431 (12.2)	350 (9.9)	445 (12.6)	
	SL	- ` ´	360 (10.2)	399 (11.3)	328 (9.3)	403 (11.4)	
Fan	Туре		()	low Fan		low Fan	
	Speed	Steps		Quiet, Auto	5 Steps, Quiet, Auto		
Dimensions (H ×		in. (mm)		1/4 (340 × 1.050 × 261)	13-3/8 × 41-5/16 × 10-1/4 (340 × 1.050 × 261)		
`	sions (H × W × D)	in. (mm)	13-1/2 × 45-1/2 × 17 (342 × 1,160 × 429)			(342 × 1,160 × 429)	
Weight (Mass)		Lbs (kg)				(, ,	
Gross Weight (G	ross Mass)	Lbs (kg)	33 (15) 42 (19)		33 (15) 44 (20)		
Sound Pressure	H/M/L/SL	LD3 (Kg)	72	(13)		(20)	
Level		dB(A)	46 / 41 / 36 / 33	48 / 42 / 35 / 32	51 / 44 / 37 / 34	48 / 42 / 37 / 34	
Outdoor Unit				IMVJUA	RXL24UMVJUA		
Casing Color	,			White	, , , , , , , , , , , , , , , , , , ,	White	
Heat Exchanger	Fin / Spec. Tube		() 1	7 mm Hi-XSL Tube	Waffle Fin (PE) / ϕ 7 mm Hi-XSL Tube		
Compressor	Туре			aled Swing Type	Hermetically Sealed Swing Type		
	Model			BAAXD	2YC63AAXD		
Refrigerant Oil	Туре			50K		50K	
	Charge	oz (L)		(0.900)		(0.900)	
Refrigerant	Туре		R-4		R-410A		
	Charge	Lbs (kg)		(1.60)	3.53	,	
Airflow Rate	Н	cfm	2,417 (68.5)	2,361 (66.9)	2,417 (68.5)	2,361 (66.9)	
	SL	(m³/min)	1,907 (54.0)	2,134 (60.4)	1,907 (54.0)	2,134 (60.4)	
Fan	Туре			beller		peller	
Dimensions (H ×	,	in. (mm)		2-5/8 (735 × 870 × 320)		2-5/8 (735 × 870 × 320)	
0	sions (H × W × D)	in. (mm)		/4 (810 × 1,056 × 464)		/4 (810 × 1,056 × 464)	
Weight (Mass)		Lbs (kg)		(59)	130		
Gross Weight (Gr	,	Lbs (kg)		(62)	137		
Sound Pressure I	Level	dB(A)	54 / —	55 / —	55 / —	55 / —	
Conditions Based	d on		Indoor ; 80.0°FDB (26.7°CDB)/ 67.0°FWB (19.4°CWB) Outdoor ; 95.0°FDB (35°CDB)/ 75°FWB (23.9°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 70.0°FDB (21.1°CDB) / 60.0°FWB (15.6°CWB) Outdoor ; 47°FDB (8.33°CDB) / 43.0°FWB (6.11°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 80.0°FDB (26.7°CDB) / 67.0°FWB (19.4°CWB) Outdoor ; 95.0°FDB (35°CDB) / 75°FWB (23.9°CWB) Piping Length: 25 ft (7.5 m)	Indoor ; 70.0°FDB (21.1°CDB) 60.0°FWB (15.6°CWB) Outdoor ; 47°FDB (8.33°CDB) 43.0°FWB (6.11°CWB) Piping Length: 25 ft (7.5 m)	
Drawing No.			C: 3D1			127171	
Drawing No. Note				of the airflow rate setting.	SL: The guiet fan level of the airflow rate setting.		

	Indoor Unit		FVXS0		FVXS12NVJU		
Model	Outdoor Unit		RXL090		RXL12QMVJU9		
			Cooling	Heating	Cooling	Heating	
Power Supply		1	1 ¢ , 60 Hz, 1		1 ¢ , 60 Hz,		
Capacity Rated (Min. ~ Max.)	kW	2.64 (1.30 ~ 3.00)	2.95 (1.30 ~ 4.20)	3.00 (1.30 ~ 3.60)	3.80 (1.30 ~ 5.00)	
		Btu/h	9,000 (4,400 ~ 10,200)	10,100 (4,400 ~ 14,300)	10,200 (4,400 ~ 12,300)	13,000 (4,400 ~ 17,100)	
		kcal/h	2,270 (1,120 ~ 2,580)	2,540 (1,120 ~ 3,610)	2,580 (1,120 ~ 3,100)	3,270 (1,120 ~ 4,300)	
Moisture Removal gal/h		0.32		0.45			
Running Current		A	3.75 - 3.39	3.67 - 3.32	4.20 - 3.80	4.69 - 4.24	
·	tion Rated (Min. ~ Max.)	W	720 (250 ~ 820)	720 (240 ~ 1.390)	850 (270 ~ 1,350)	950 (250 ~ 1,570)	
Power Factor (Ra		%	92.3 - 92.3	94.3 - 94.3	97.3 - 97.3	97.4 - 97.4	
COP Rated (Min. ~ Max.) W/W		3.66 (5.20 ~ 3.66)	4.10 (5.42 ~ 3.02)	3.52 (4.80 ~ 2.66)	4.00 (5.20 ~ 3.18)		
,		Btu/h·W	12.5 (17.6 ~ 12.4) 14 (18.3 ~ 10.3)		12.0 (16.3 ~ 9.1)	13.7 (17.6 ~ 10.9)	
SEER / HSPF	<u> </u>	in. (mm)	20.0	11.7	20.0	11.4	
Piping Connections			φ 1/4 (φ 1/4 (. ,	
Connections	Gas	in. (mm)	φ 3/8 (φ 3/8 (φ 9.5)		
	Drain	in. (mm)	φ 13/16		φ 13/16		
Heat Insulation			Both Liquid ar	· · · · · · · · · · · · · · · · · · ·	Both Liquid ar		
Max. Interunit Pip		ft (m)	65-5/8		65-5/8		
Max. Interunit He	eight Difference	ft (m)	49-1/4	4 (15)	49-1/4	l (15)	
Chargeless		ft (m)	32-13/1	16 (10)	32-13/1	6 (10)	
Amount of Addition	onal Charge of	oz/ft	0.21	(20)	0.21	(20)	
Refrigerant		(g/m)					
Indoor Unit			FVXS0		FVXS1		
Front Panel Colo	1	, I	Wh		Wh		
Airflow Rate	Н	4	290 (8.2)	311 (8.8)	300 (8.5)	332 (9.4)	
	M	cfm	230 (6.5)	244 (6.9)	237 (6.7)	258 (7.3)	
	L	(m³/min)	169 (4.8)	177 (5.0)	173 (4.9)	184 (5.2)	
	SL		145 (4.1)	155 (4.4)	159 (4.5)	166 (4.7)	
Fan	Type / Motor Output	W	Turbo Fa		Turbo Fa		
	Speed	Steps	5 Steps, Quiet, Auto		5 Steps, Quiet, Auto		
Air Direction Con	trol		Right, Left, Horizontal, Downward		Right, Left, Horizontal, Downward		
Air Filter			Removable, Washa	able, Mildew Proof	Removable, Wash	able, Mildew Proof	
Running Current	(Rated)	A	0.14 - 0.13	0.15 - 0.14	0.14 - 0.13	0.15 - 0.14	
Power Consumpt	tion (Rated)	W	15 - 15	17 - 17	15 - 15	17 - 17	
Power Factor (Ra	ated)	%	51.5 - 50.2	54.5 - 52.8	51.5 - 50.2	54.5 - 52.8	
Temperature Cor	ntrol	· · · · · · · · · · · · · · · · · · ·	Microcompu	uter Control	Microcompu	Iter Control	
Dimensions (H ×	W × D)	in. (mm)	23-5/8 × 27-9/16 × 8-1/4 (600 × 700 × 210)		23-5/8 × 27-9/16 × 8-	1/4 (600 × 700 × 210)	
Packaged Dimen	isions (H × W × D)	in. (mm)	27-3/8 × 30-15/16 × 1	11 (696 × 786 × 280)	27-3/8 × 30-15/16 × 11 (696 × 786 × 280)		
Weight (Mass)		Lbs (kg)	31 (14)		31 (
Gross Weight (G	ross Mass)	Lbs (kg)	40 (18)		40 (18)		
Sound Pressure			Ì /				
Level		dB(A)	38 / 32 / 26 / 23	38 / 32 / 26 / 23	39 / 33 / 27 / 24	39 / 33 / 27 / 24	
Outdoor Unit			RXL090	XWAN	RXL120	MVJU9	
Casing Color			lvory	White	lvory	White	
Heat Exchanger	Fin / Spec. Tube		Waffle Fin (PE) / ϕ	7 mm Hi-XD Tube	Waffle Fin (PE) / ϕ	7 mm Hi-XD Tube	
Compressor	Туре		Hermetically Sea	aled Swing Type	Hermetically Sealed Swing Type		
	Model		1YC23AUXD		2YC36PXD		
	Motor Output		790		1,100		
	motor output	W			1,1	00	
Refrigerant Oil	Туре	w	79 FVC		1,1 FVC		
Refrigerant Oil		W oz (L)		50K		50K	
0	Туре		FVC	50K 0.375)	FVC	50K 0.650)	
0	Type Charge Type	oz (L)	FVC 12.4 (0 R-4	50K 0.375) 10A	FVC 21.5 (0	50K 0.650) 10A	
Refrigerant	Type Charge Type Charge	oz (L) Lbs (kg)	FVC 12.4 (0 R-4 2.09 (50K 0.375) 10A	FVC 21.5 (0 R-4 2.09 (50K 0.650) 10A 0.95)	
Refrigerant	Type Charge Type Charge H	oz (L)	FVC 12.4 (t R-4 2.09 (1,105 (31.3)	50K 0.375) 10A 0.95) 922 (26.1)	FVC 21.5 (0 R-4 2.09 (1,144 (32.4)	50K 0.650) 10A 0.95) 1,006 (28.5)	
Refrigerant Airflow Rate	Type Charge Type Charge H SL	oz (L) Lbs (kg) cfm (m³/min)	FVC 12.4 (t R-4 2.09 (1,105 (31.3) 865 (24.5)	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0)	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5)	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0)	
Refrigerant Airflow Rate Fan	Type Charge Type Charge H SL Type / Motor Output	oz (L) Lbs (kg) cfm (m³/min) W	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20	
Refrigerant Airflow Rate Fan Running Current	Type Charge Type Charge H SL Type / Motor Output (Rated)	oz (L) Lbs (kg) cfm (m³/min) W A	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10	
Refrigerant Airflow Rate Fan Running Current Power Consumpl	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated)	oz (L) Lbs (kg) cfm (m³/min) W A W W	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propel 3.61 - 3.26 705 - 705	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 <u>3.52 - 3.18</u> 703 - 703	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (Ra	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated)	oz (L) Lbs (kg) cfm (m³/min) W A W W %	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (Ra Starting Current	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated)	oz (L) Lbs (kg) cfm (m³/min) W A W W A W A A	FVC 12.4 (0 R-4: 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.5	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54	
Refrigerant Airflow Rate Fan Running Current Power Consump Power Factor (Ra Starting Current Dimensions (H ×	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D)	oz (L) Lbs (kg) cfm (m³/min) W A W % A in. (mm)	FVC 12.4 (0 R-4: 2.09 (1.105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11-5	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284)	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.5 21-5/8 × 26-9/16 × 11-5	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54 3/16 (550 × 675 × 284)	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (F Starting Current Dimensions (H × Packaged Dimen	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated)	oz (L) Lbs (kg) cfm (m³/min) W A W % A in. (mm) in. (mm)	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 × 1	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284) 16 (629 × 830 × 407)	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 21-5/8 × 26-9/16 × 11- 24-3/4 × 32-11/16 ×	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54 54 54 6 (650 × 675 × 284) 16 (629 × 830 × 407)	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (Re Starting Current Dimensions (H × Packaged Dimen Weight (Mass)	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) sions (H × W × D)	oz (L) Lbs (kg) cfm (m³/min) W A in. (mm) in. (mm) Lbs (kg)	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 1 60 (50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27)	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.3 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 70 (50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32)	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass) Gross Weight (G	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) isions (H × W × D) ross Mass)	oz (L) Lbs (kg) cfm (m³/min) W A W % A in. (mm) in. (mm) Lbs (kg) Lbs (kg) Lbs (kg)	FVC 12.4 (0 R-4 2.09 (1,105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 1 60 (71 (50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32)	FVC 21.5 ((R-4 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.3 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 70 (80 (50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36)	
Weight (Mass) Gross Weight (G Sound Pressure Conditions Based	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) ross Mass) Level H	oz (L) Lbs (kg) cfm (m³/min) W A in. (mm) in. (mm) Lbs (kg)	FVC 12.4 ((R-4: 2.09 (1.105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 1 60 (71 (49 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (26.5°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32) 49 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.3 21-5/8 × 26-9/16 × 11-7 24-3/4 × 32-11/16 × 17 70 (80 (50 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB) Piping Length: 25 ft (7.5 m)	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 98.8 - 98.9 54 376 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36) 50 Indoor ; 70°FDB (21°CDB) 60°FWB (15.6°CVB) 00tdoor ; 47°FDB (8.3°CDB 43°FWB (6°CVB) Piping Length: 25 ft (7.5 m	
Refrigerant Airflow Rate Fan Running Current Power Consumpl Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass) Gross Weight (G Sound Pressure	Type Charge Type Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) ross Mass) Level H	oz (L) Lbs (kg) cfm (m³/min) W A W % A in. (mm) in. (mm) Lbs (kg) Lbs (kg) Lbs (kg)	FVC 12.4 (0 R-4' 2.09 (1.105 (31.3) 865 (24.5) Propell 3.61 - 3.26 705 - 705 93.9 - 94.0 3.7 21-5/8 × 26-9/16 × 11-5 24-3/4 × 32-11/16 × 1 60 (71 (49 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	50K 0.375) 10A 0.95) 922 (26.1) 777 (22.0) er / 18 3.52 - 3.18 703 - 703 96.0 - 96.1 76 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 27) 32) 49 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)	FVC 21.5 ((R-4: 2.09 (1,144 (32.4) 865 (24.5) Propell 4.06 - 3.67 835 - 835 98.8 - 98.9 4.1 21-5/8 × 26-9/16 × 11-7 24-3/4 × 32-11/16 × 70 (80 (50 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (24°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	50K 0.650) 10A 0.95) 1,006 (28.5) 777 (22.0) er / 20 4.54 - 4.10 933 - 933 933 - 933 98.8 - 98.9 54 3/16 (550 × 675 × 284) 16 (629 × 830 × 407) 32) 36) 50 Indoor ; 70°FDB (21°CDB) 60°FWB (15.6°CWB) 00tdoor ; 47°FDB (8.3°CDB 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)	

10

	Indoor Unit		FVXS15NVJU				
Model	Outdoor Unit		RXL15QMV.				
ower Supply			Cooling 1 \u03c6, 60 Hz, 208	Heating			
Capacity Rated (I	Min ~ Max)	kW	4.40 (1.70 ~ 5.00)	- 230 V 5.28 (1.70 ~ 7.00)			
	wiit. * wiax.)	Btu/h	15,000 (5,800 ~ 17,100)	18,000 (5,800 ~ 24,000)			
		kcal/h	3,780 (1,460 ~ 4,300)	4,540 (1,460 ~ 6,020)			
loisture Remova	al	gal/h	0.63	4,540 (1,400 ~ 0,020)			
			6.06 - 5.48	7.00 - 6.33			
Running Current		A					
	tion Rated (Min. ~ Max.)		1,200 (320 ~ 1,560)	1,400 (340 ~ 2,190)			
Power Factor (Ra		%	95.2 - 95.2	96.2 - 96.2			
COP Rated (Min.	,	W/W	3.66 (5.30 ~ 3.20)	3.76 (5.00 ~ 3.20)			
ER Rated (Min.	~ Max.)	Btu/h·W	12.5 (18.1 ~ 11.0)	12.9 (17.1 ~ 11.0)			
SEER / HSPF			20.0	11.3			
Piping .	Liquid	in. (mm)	φ 1/4 (φ 6.	4)			
connections	Gas	in. (mm)	φ 1/2 (φ 12.7)				
	Drain	in. (mm)	φ 13/16 (φ 2	0.0)			
leat Insulation	_!		Both Liquid and G	as Pipes			
lax. Interunit Pip	ping Length	ft (m)	98-1/2 (30))			
lax. Interunit He		ft (m)	65-5/8 (20	,			
hargeless		ft (m)	32-13/16 (1				
mount of Additio	onal Charge of	oz/ft					
Refrigerant	unai Unaige Ul	(g/m)	0.21 (20)				
ndoor Unit		(3)	FVXS15NV	JU			
Front Panel Color	r		White	•			
Airflow Rate	1		378 (10.7)	417 (11.8)			
annow reale	H	┥ , ┝					
	M	cfm	325 (9.2)	357 (10.1)			
	L	(m³/min)	275 (7.8)	300 (8.5)			
	SL		233 (6.6)	251 (7.1)			
an	Type / Motor Output	W	Turbo Fan / 2				
	Speed	Steps	5 Steps, Quiet, Auto				
ir Direction Cont	trol		Right, Left, Horizontal, Downward				
ir Filter			Removable, Washable, Mildew Proof				
Running Current	(Rated)	A	0.19 - 0.17 0.21 - 0.19				
Power Consumpt		W	27 - 27	34 - 34			
ower Factor (Ra		%	68.3 - 69.1	77.8 - 77.8			
emperature Con	/		Microcomputer Control				
imensions (H ×		in. (mm)	23-5/8 × 27-9/16 × 8-1/4 (600 × 700 × 210)				
			23-3/8 × 27-9/16 × 6-1/4 (600 × 700 × 210) 27-3/8 × 30-15/16 × 11 (696 × 786 × 280)				
	sions (H × W × D)	in. (mm)					
Weight (Mass)		Lbs (kg)	31 (14)				
Gross Weight (Gr		Lbs (kg)	40 (18)				
Sound Pressure	H/M/L/SL	dB(A)	44 / 40 / 36 / 32	45 / 40 / 36 / 32			
evel							
Dutdoor Unit			RXL15QMV				
Casing Color	1		Ivory White				
leat Exchanger	Fin / Spec. Tube		Waffle Fin (PE) / ∳ 7 mr				
Compressor	Туре		Hermetically Sealed				
	Model		2YC36PX	D			
	Motor Output	W	1,100				
Refrigerant Oil	Туре		FVC50K				
	Charge	oz (L)	21.5 (0.65	0)			
		· · · ·	R-410A				
Refrigerant	Туре		3.20 (1.45	;)			
Refrigerant		Lbs (ka)					
Refrigerant	Charge	Lbs (kg)					
-	Charge H	cfm	2,044 (57.9)	2,044 (57.9)			
Airflow Rate	Charge H SL	cfm (m³/min)	2,044 (57.9) 1,762 (49.9)	2,044 (57.9) 1,585 (44.9)			
Airflow Rate	Charge H SL Type / Motor Output	cfm (m³/min) W	2,044 (57.9) 1,762 (49.9) Propeller /	2,044 (57.9) 1,585 (44.9) 71			
irflow Rate	Charge H SL Type / Motor Output (Rated)	cfm (m³/min) W A	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14			
irflow Rate an tunning Current	Charge H SL Type / Motor Output (Rated) tion (Rated)	cfm (m³/min) W A W	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366			
irflow Rate an Running Current Power Consumpt Power Factor (Ra	Charge H SL Type / Motor Output (Rated) tion (Rated)	cfm (m ³ /min) W A W W	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14			
Airflow Rate	Charge H SL Type / Motor Output (Rated) tion (Rated) ated)	cfm (m³/min) W A W	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7			
Airflow Rate Fan Running Current Power Consumpt Power Factor (Ra Starting Current	Charge H SL Type / Motor Output (Rated) tion (Rated) ated)	cfm (m ³ /min) W A W W	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7			
Airflow Rate Fan Running Current Power Consumpt Oower Factor (Ra Starting Current Dimensions (H ×	Charge H SL Type / Motor Output (Rated) tion (Rated) ated)	cfm (m³/min) W A W W % A	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320)			
Airflow Rate Fan Running Current Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen	Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D)	cfm (m³/min) W A W % A in. (mm) in. (mm)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-5/8 31-7/8 × 41-9/16 × 18-1/4 (2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 810 × 1,056 × 464)			
Airflow Rate Fan Running Current Power Consumpt Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass)	Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) sisions (H × W × D)	cfm (m³/min) W A W % A in. (mm) in. (mm) Lbs (kg)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-5/8 31-7/8 × 41-9/16 × 18-1/4 (108 (49)	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 810 × 1,056 × 464)			
Airflow Rate Fan Running Current Power Consumpt Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass) Gross Weight (Gr	Charge H SL Type / Motor Output (Rated) tion (Rated) ated) W × D) usions (H × W × D) ross Mass)	cfm (m³/min) W A W % A in. (mm) Lbs (kg) Lbs (kg)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-5/8 31-7/8 × 41-9/16 × 18-1/4 (: 108 (49) 123 (56)	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 810 × 1,056 × 464)			
Airflow Rate Fan Running Current Power Consumpt Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass) Gross Weight (Gr Sound Pressure I	Charge H SL Type / Motor Output (Rated) ition (Rated) ated) w × D) ross Mass) Level H	cfm (m³/min) W A W % A in. (mm) in. (mm) Lbs (kg)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-5/8 31-7/8 × 41-9/16 × 18-1/4 (108 (49) 123 (56) 50	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 310 × 1,056 × 464) 55			
Airflow Rate	Charge H SL Type / Motor Output (Rated) ition (Rated) ated) w × D) ross Mass) Level H	cfm (m³/min) W A W % A in. (mm) Lbs (kg) Lbs (kg)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-5/8 31-7/8 × 41-9/16 × 18-1/4 (: 108 (49) 123 (56)	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 810 × 1,056 × 464)			
Airflow Rate Fan Running Current Power Consumpt Power Factor (Ra Starting Current Dimensions (H × Packaged Dimen Weight (Mass) Gross Weight (Gr Sound Pressure I	Charge H SL Type / Motor Output (Rated) ition (Rated) ated) w × D) ross Mass) Level H	cfm (m³/min) W A W % A in. (mm) Lbs (kg) Lbs (kg)	2,044 (57.9) 1,762 (49.9) Propeller / 5.87 - 5.31 1,173 - 1,173 96.1 - 96.0 6.79 28-15/16 × 34-1/4 × 12-56 31-7/8 × 41-9/16 × 18-1/4 (: 108 (49) 123 (56) 50 Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	2,044 (57.9) 1,585 (44.9) 71 6.79 - 6.14 1,366 - 1,366 96.7 - 96.7 (735 × 870 × 320) 310 × 1,056 × 464) 55 Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB) Piping Length: 25 ft (7.5 m)			

	Indoor Unit Outdoor Unit		FDMQ1		FDMQ18RVJU			
Model			RXL12C		RXL18UMVJUA			
Devier Cumply			Cooling Heating 1 φ , 60 Hz, 208 - 230 V V		Cooling Heating 1 ψ , 60 Hz, 208 - 230 V 1			
Power Supply Capacity (Min. ~	(Max)	kW	3.18 (1.91 ~ 3.87) ★1	208 - 230 V 3.99 (1.85 ~ 4.98) ★2	5.16 (2.64 ~ 5.92) ★1	6.33 (2.64 ~ 7.33) ★2		
★4	iviax.)	Btu/h	10,800 (6,500 ~ 13,200) ★1	13,600 (6,300 ~ 17,000) ★2	17,600 (9,000 ~ 20,200) ★1	21,600 (9,000 ~ 25,000) *2		
		kcal/h	2,720 (1,640 ~ 3,330) ★1	3,430 (1,590 ~ 4,280) ★2	4.440 (2.270 ~ 5.090) ★1	5,440 (2,270 ~ 6,300) *2		
Capacity		kW		2.52		4.28		
★3, ★4		Btu/h		8,600		14,600		
kcal/h			2,170		3,680			
COP (Min. ~ Max.)			3.70 (4.62 ~ 2.40)		3.80 (5.28 ~ 2.78)			
EER (Min. ~ Max.)		11.7 (14.4 ~ 9.9)	3.70 (4.02 2.40)	12.7 (15.8 ~ 11.7)	3.00 (3.20 2.70)			
SEER / HSPF		18.0	10.8	12.7 (15.8 ~ 11.7)	10.3			
ndoor Unit			FDMQ1	1		10.3		
			FDMQ1	ZRVJU	FDMQ	lokvju		
Casing Color Dimensions (H :		in (mana)	9-5/8 × 27-9/16 × 31-		9-5/8 × 39-3/8 × 31-1/	-		
Coil	,	in. (mm)	9-5/6 × 27-9/16 × 31- Cross F			Fin Coil		
COII	Туре	The second second						
	Rows × Stages × F		3 × 26			6 × 18		
	Face Area	ft² (m²)	1-15/16			(0.288)		
an	Туре		Siroco			co Fan		
	Motor Output	W	13			30		
	Airflow H/M/L	L cfm	392 / 332 / 275	392 / 332 / 275	675 / 572 / 473	675 / 572 / 473		
	Rate	(m³/min)	(11.1 / 9.4 / 7.8)	(11.1 / 9.4 / 7.8)	(19.1 / 16.2 / 13.4)	(19.1 / 16.2 / 13.4)		
	External Static	inH ₂ O	0.20 (0.60	,	1	- 0.20) ★5		
	Pressure	Pa	50 (150	- 30) ★5	50 (150	- 50) ★5		
Sound Pressure	Level		33	33	35	35		
Sound Power Le	evel		47	47	49	49		
Air Filter				*6		*6		
	oss Weight (Gross Ma	iss) Lbs (kg)	64 (29)			/ 88 (40)		
Piping	Liquid	in. (mm)	φ 1/4 (6.4	(/	· · ·	4) (Flare)		
Connections	Gas	in. (mm)	φ 1/4 (0.5	7, ,	1 (.7) (Flare)		
			I.D. φ 1 (25) / O					
Domoto Control		in. (mm)		1E73	I.D. φ 1 (25) / O.D. φ 1-1/4 (32)			
Remote Control Option)	lei	Wired			BRC1E73			
,		Wireless	BRC082A43		BRC082A43			
Outdoor Unit			RXL12C		RXL18UMVJUA			
Casing Color			Ivory White		Ivory White			
Dimensions (H	,	in. (mm)	21-5/8 × 26-9/16 × 11-3/16 (550 × 675 × 284)		28-15/16 × 34-1/4 × 12-5/8 (735 × 870 × 320)			
Coil	Туре		Cross Fin Coil		Cross	Fin Coil		
	Rows × Stages × Fin per inch		2 × 24	4 × 17	2 × 33	2 × 18		
	Face Area ft² (m²) Model Type		3-11/16 (0.342) 2YC36PXD Hermetically Sealed Swing Type		7-1/16 (0.658) 2YC63AAXD			
Compressor								
					Hermetically Se	aled Swing Type		
	Motor Output W		1,1	00	1,9	920		
Fan	Type W Motor Output W Airflow Rate cfm		Propeller		Prog	peller		
			2	0	7	6		
			1					
		(m³/min)	1,144 (32.4)	1,006 (28.5)	2,418 (68.5)	2,361 (66.9)		
Sound Pressure		dB(A)	50	50	54	55		
Sound Pressure		dB(A)	62	62	66	67		
	oss Weight (Gross Ma		02 70 (32) /			/ 137 (62)		
. ,		,						
Piping Connections	Liquid Gas	in. (mm)	φ 1/4 (6.4		φ 1/4 (6.4) (Flare)			
		in. (mm)	φ 3/8 (9.5	/ / /	φ 1/2 (12.7) (Flare)			
2-6-6-5	Drain	in. (mm)	I.D. ¢ 5		· · · ·	5/8 (16)		
Safety Devices	ala a Lana V		Fu		Fuse			
Max. Interunit P		ft (m)	65-5/8			2 (30)		
	eight Difference	ft (m)	49-1/4	()		8 (20)		
Chargeless		ft (m)	32-13/	16 (10)	32-13/	16 (10)		
	ional Charge of	oz/ft	0.21	(20)	0.32	(30)		
Refrigerant		(g/m)						
Refrigerant Oil	Туре		FVC	50K	FVC	50K		
	Charge	oz (L)	12.4 (0.375)	31.75	(0.900)		
Refrigerant	Туре		R-4	10A	R-4	10A		
	Charge	Lbs (kg)	2.09 ((0.95)	3.53	(1.60)		
Drawing No.			C: 3D12	23805A	C: 3D1	23805A		
Notes			★1 Indoor temp.: 80.0°FDB (26.7° Outdoor temp.: 95.0°FDB (35.0°C ft (7.6 m) / Level difference: 0 ★2 Indoor temp.: 70.0°FDB (21.1° (8.3°CDB), 43.0°FWB (6.1°CWB) (7.6 m) / Level difference: 0 ★3 Indoor temp.: 70.0°FDB (21.1° (-8.3°CDB), 15.0°FWB (-9.4°CWB) (7.6 m) / Level difference: 0 ★4 Capacities are net, including a addition for heating) for indoor fan ★5 External static pressure is cha controller.	DB) / Equivalent piping length: 25 'CDB) / Outdoor temp.: 47.0°FDB / Equivalent piping length: 25 ft 'CDB) / Outdoor temp.: 17.0°FDB b) / Equivalent piping length: 25 ft deduction for cooling (an motor heat. ngeable in 13 stages by remote	★1 Indoor temp.: 80.0°FDB (26.7) Outdoor temp.: 95.0°FDB (35.0°C ft (7.6 m) / Level difference: 0 ★2 Indoor temp.: 70.0°FDB (21.1' (8.3°CDB), 43.0°FWB (6.1°CWB) (7.6 m) / Level difference: 0 ★3 Indoor temp.: 70.0°FDB (21.1' (-8.3°CDB), 15.0°FWB (-9.4°CWE (7.6 m) / Level difference: 0 ★4 Capacities are net, including a addition for heating) for indoor fan ★5 Air filter is not standard acces	DB) / Equivalent piping length: °CDB) / Outdoor temp.; 47.0° FI / Equivalent piping length: 25 f °CDB) / Outdoor temp.; 17.0° FI 8) / Equivalent piping length: 25 a deduction for cooling (an motor heat, ingeable in 11 stages by remot		
			★6 Air filter is not standard access duct system of the suction side. So (gravity method) 50% or more.		★6 Air filter is not standard acces duct system of the suction side. S (gravity method) 50% or more.	elect its dust collection efficien		

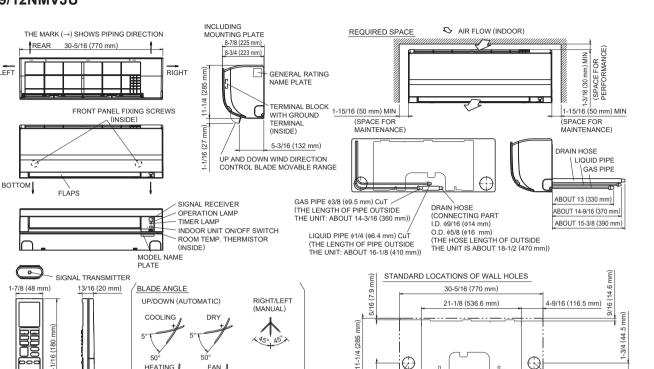
Model					
		Outdoor U	Init	RXL24U	
		• • • • • •		Cooling	Heating
Power Supply	(A.C.)		1.144	1 φ , 60 Hz,	
Cooling Capacity ★4	(Min. ~ Max.)		kW	6.21 (2.64 ~ 7.03) ★ 1	7.02 (2.64 ~ 8.09) ★2
~ ~			Btu/h	21,200 (9,000 ~ 24,000) *1	24,000 (9,000 ~ 27,600) ★2
			kcal/h	5,340 (2,270 ~ 6,050) ★1	6,050 (2,270 ~ 6,960) ★2
Heating Capacity ★3, ★4			kW	—	4.69
AU, AH			Btu/h	—	16,000
			kcal/h	—	4,030
COP (Min. ~ Max				—	3.80 (5.38 ~ 2.66)
EER (Min. ~ Max.	.)			12.5 (15.8 ~ 11.4)	—
SEER / HSPF				18.6	10.0
Indoor Unit				FDMQ2	4RVJU
Casing Color					-
Dimensions (H ×	W × D)		in. (mm)	9-5/8 × 39-3/8 × 31-1/	2 (245 × 1,000 × 800)
Coil	Туре			Cross F	Fin Coil
	Rows × Stag	ies × Fin per	r inch	3 × 26	5 × 18
	Face Area		ft² (m²)	3-1/8 (0.288)
Fan	Туре			Siroco	o Fan
	Motor Outpu	t	W	23	30
			cfm	798 / 678 / 558	798 / 678 / 558
	Airflow Rate	H/M/L	(m³/min)	(22.6 / 19.2 / 15.8)	(22.6 / 19.2 / 15.8)
	External Stat	tic	inH ₂ O	0.20 (0.60	- 0.20) ★5
	Pressure		Pa	· · · · · · · · · · · · · · · · · · ·	- 50) * 5
Sound Pressure L	evel			40	40
Sound Pressure L				54	54
Air Filter				54	
Weight (Mass) / G	roce Maicht (O	roce Mose)	Lbs (kg)	82 (37)	
. ,		ioss mass)			
Piping Connections	Liquid		in. (mm)	φ 1/4 (6.4	
Connections	Gas		in. (mm)	φ 5/8 (15.	
	Drain		in. (mm)	I.D. φ 1 (25) / O	
Remote Controlle (Option)	er		Wired	BRC	-
,			Wireless	BRC0	
Outdoor Unit				RXL24U	IMVJUA
Casing Color				lvory	
Dimensions (H ×	W × D)		in. (mm)	28-15/16 × 34-1/4 × 12	-5/8 (735 × 870 × 320)
Coil	Туре			Cross F	Fin Coil
	Rows × Stag	les × Fin per	· inch	2 × 32	2 × 18
	Face Area		ft² (m²)	7-1/16	(0.658)
Compressor	Model			2YC63	AAXD
	Туре			Hermetically Sea	aled Swing Type
	Motor Outpu	t	W	1,9	20
Fan	Туре			Prop	eller
	Motor Outpu	t	W	7	6
	Airflow Rate		cfm		
			(m ³ /min)	2,418 (68.5)	2,361 (66.9)
Sound Pressure L	_evel		dB(A)	55	55
Sound Power Lev			dB(A)	67	67
Weight (Mass) / G		ross Mass)	Lbs (kg)	130 (59) /	-
Piping	Liquid		in. (mm)	φ 1/4 (6.4	
Connections	Gas		in. (mm)	φ 1/4 (0 φ 5/8 (15.	
	Drain		in. (mm)	φ 5/8 (15. I.D. φ 5	
Safety Devices	Dialli		L (11111)		
Max. Interunit Pip	ing Length		ft (m)	Fu	
			ft (m)	98-1/2	
Max. Interunit Hei	igni Dinerence		ft (m)	65-5/8	
Chargeless			ft (m)	32-13/	ט (וט)
Amount of Addition Refrigerant	onal Charge of		oz/ft	0.32	(30)
			(g/m)		
Refrigerant Oil	Туре			FVC	
	Charge		oz (L)	31.75 (,
Refrigerant	Туре			R-4	
	Charge		Lbs (kg)	3.53 (
Drawing No.				C: 3D12	23805A
Notes				★1 Indoor temp.: 80.0°FDB (26.7°CDB), 67.0°FWB (19.4°CWB) / O ft (7.6 m) / Level difference: 0 ★2 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 47.0°FDB (7.6 m) / Level difference: 0 ★3 Indoor temp.: 70.0°FDB (21.1°CDB) / Outdoor temp.: 17.0°FDB (7.6 m) / Level difference: 0 ★4 Capacities are net, including a deduction for cooling (an additior ★5 External static pressure is changeable in 11 stages by remote co t %6 Air filter is not standard accessory, but please mount it in the du (gravity method) 50% or more.	(8.3°CDB), 43.0°FWB (6.1°CWB) / Equivalent piping length: 25 ft (-8.3°CDB), 15.0°FWB (-9.4°CWB) / Equivalent piping length: 25 ft of rheating) for indoor fan motor heat.



4. Dimensions

4.1 Indoor Unit FTX09/12NMVJU

LEFT



FTX15NMVJU

0

WIRELESS REMOTE CONTROLLER

(ARC480A8)

50

HEATING



WALL HOLE ¢2-9/16 (¢65 mm) HOLE

ß

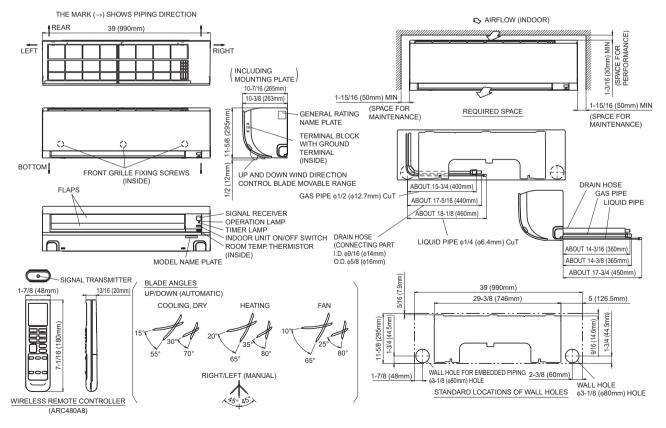
1-7/8 (48 mm)

1-7/8 (48 mm)

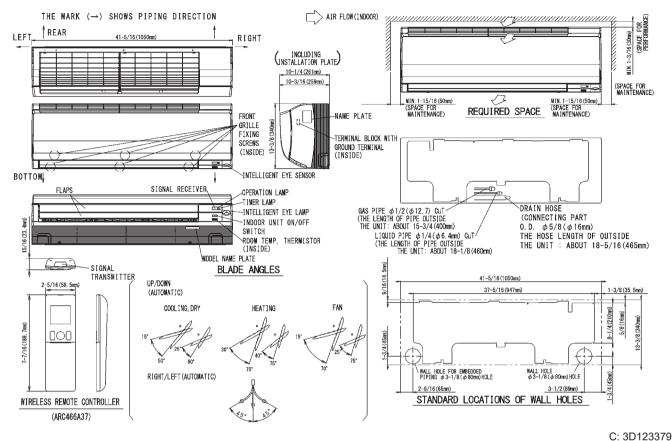
WALL HOLE FOR EMBEDDED PIPING \$\phi2-9/16 (\$\phi65 mm) HOLE

44.5

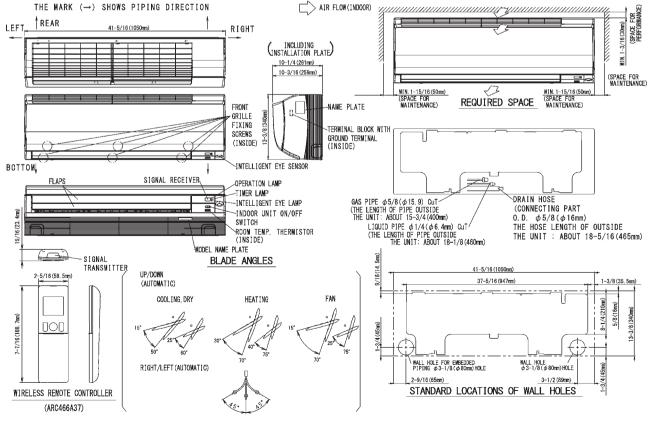
-3/4



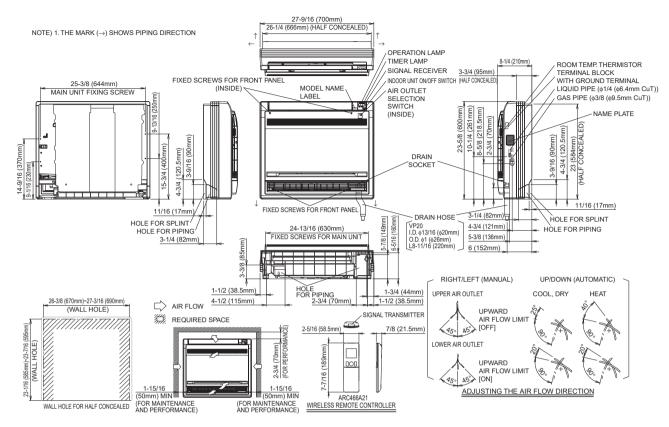
FTX18UVJU



FTX24UVJU

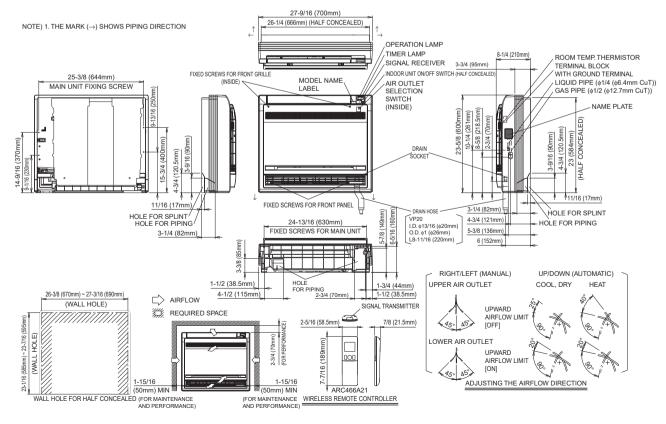


FVXS09/12NVJU

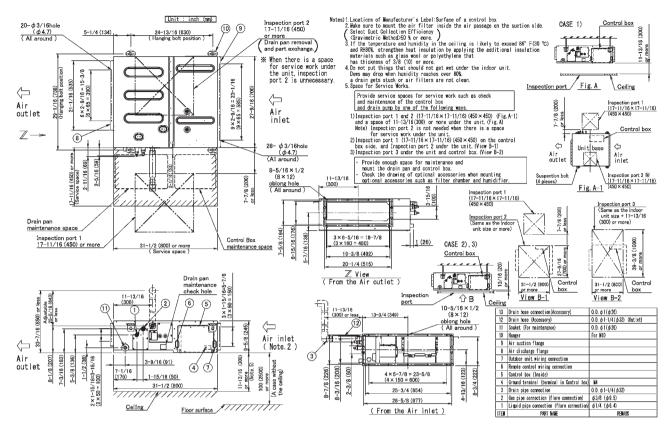


3D091758

FVXS15NVJU

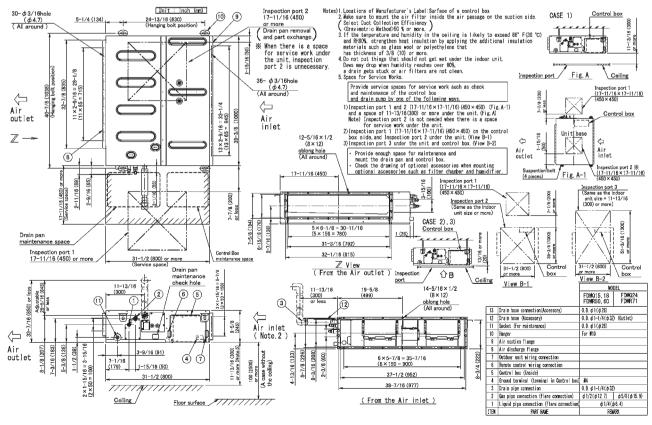


FDMQ12RVJU



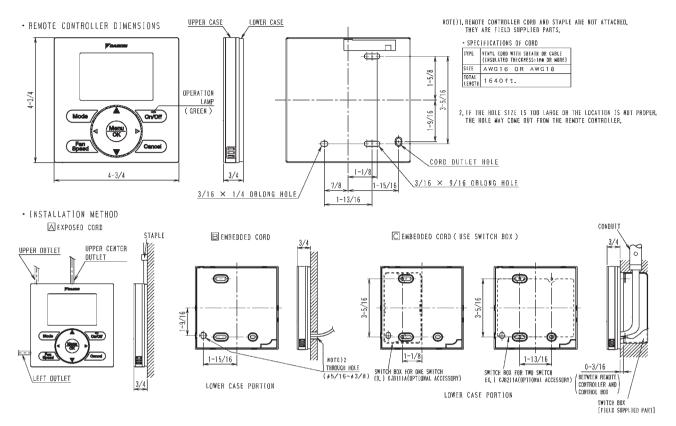
3D112918B

FDMQ18/24RVJU



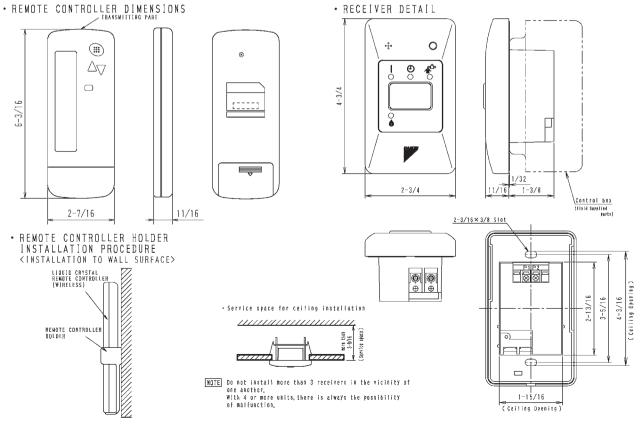
3D112919B

BRC1E73



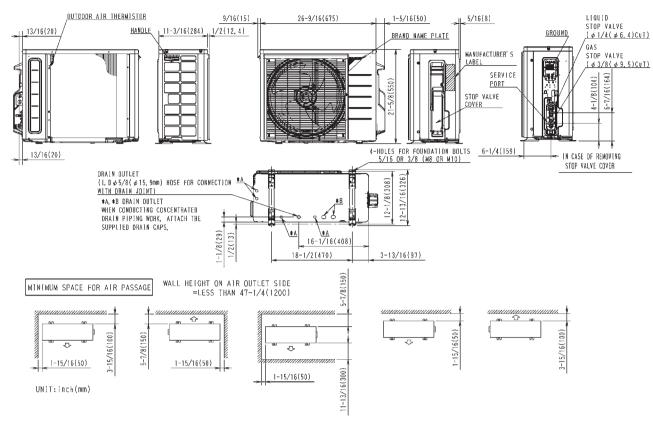
C: 3D091305A

BRC082A43



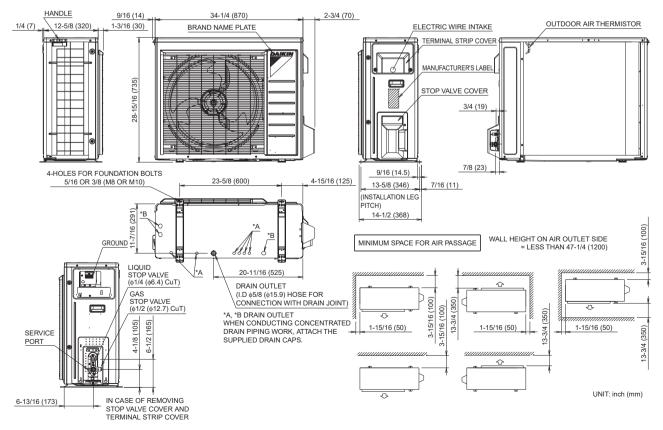
3D049611A

4.2 Outdoor Unit RXL09QMVJU, RXL12QMVJU9

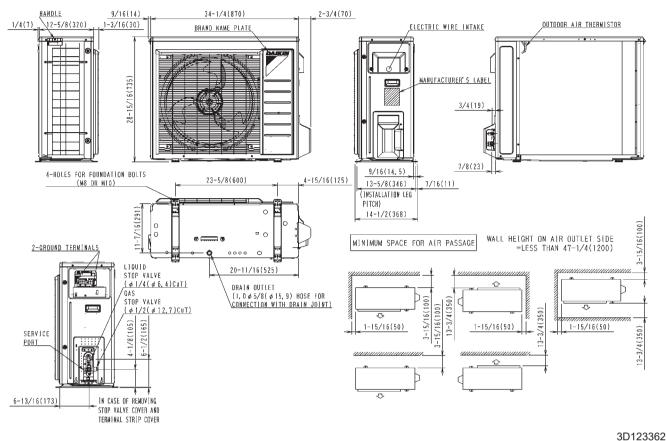


3D092206E

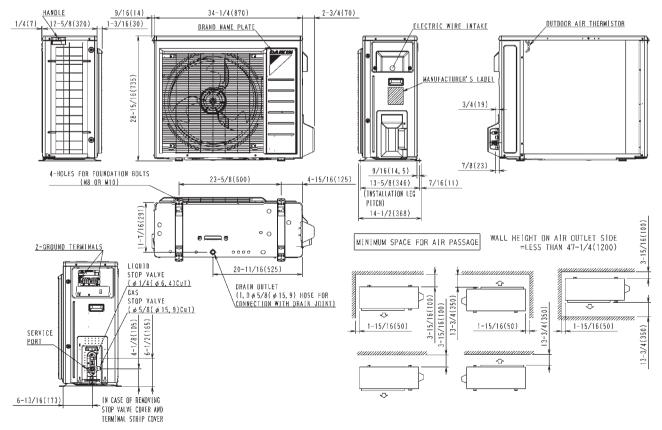
RXL15QMVJUA



RXL18UMVJUA

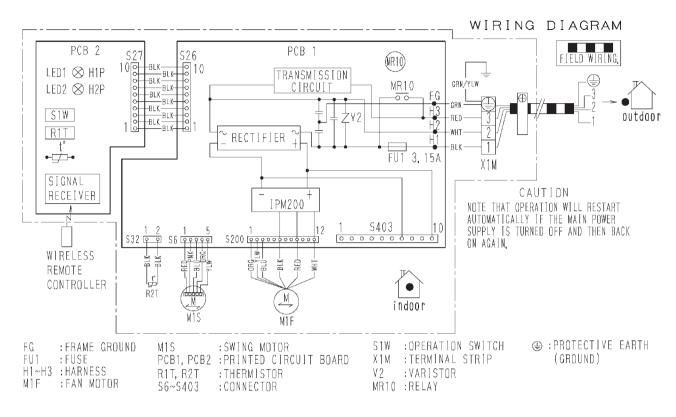


RXL24UMVJUA



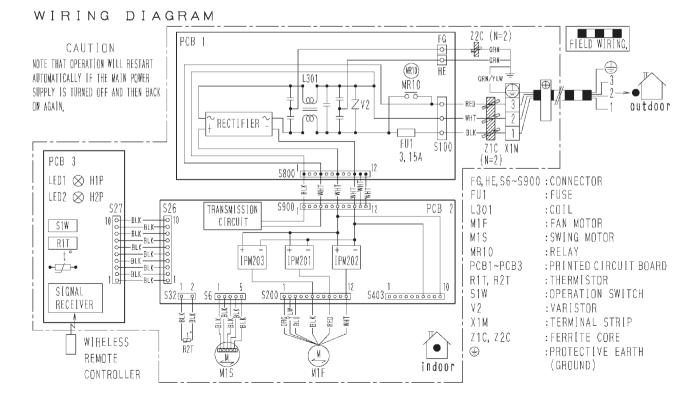
5. Wiring Diagrams

5.1 Indoor Unit FTX09/12NMVJU



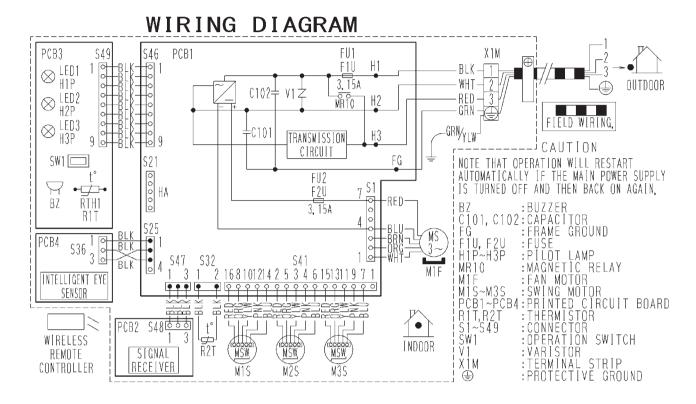
3D086429D

FTX15NMVJU



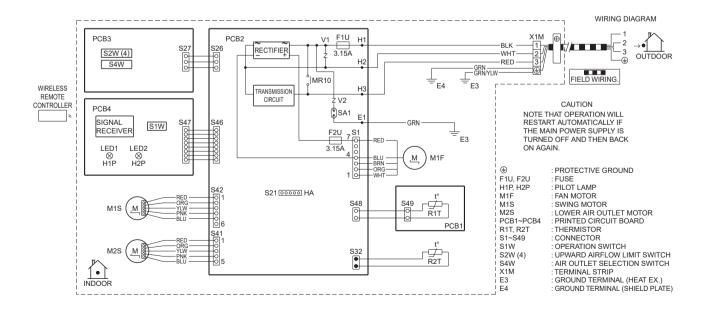
VJU

FTX18/24UVJU

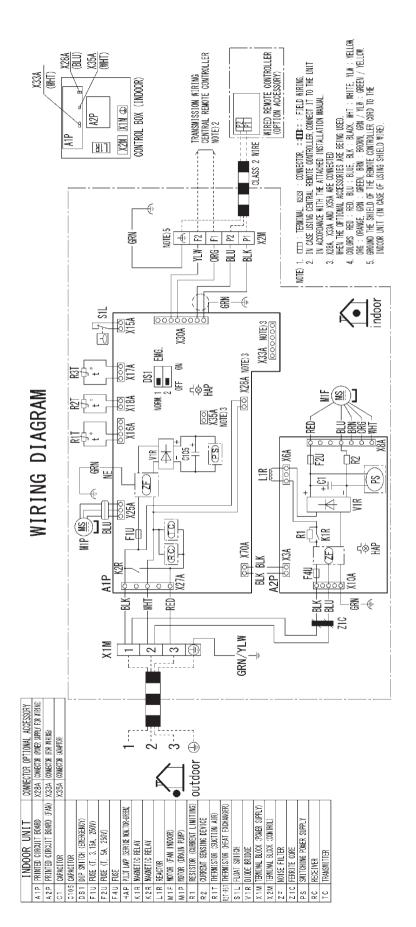


C: 3D060942W

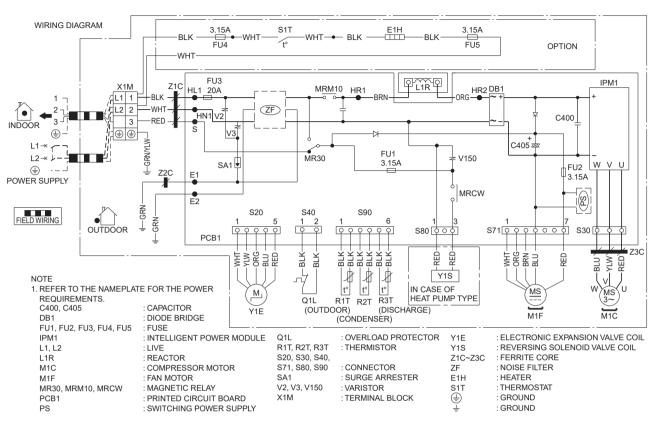
FVXS09/12/15NVJU



C: 3D090604A

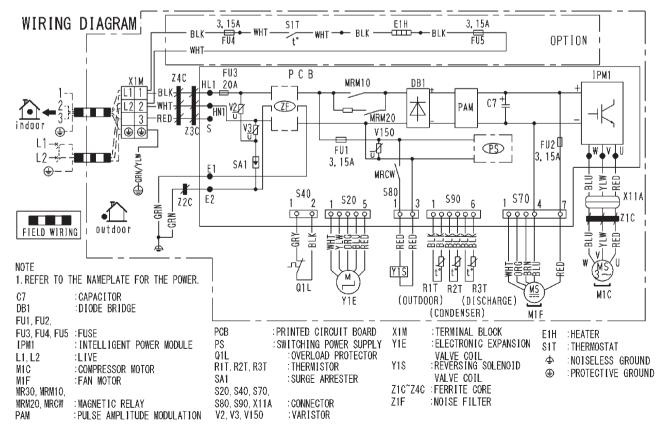


5.2 Outdoor Unit RXL09QMVJU



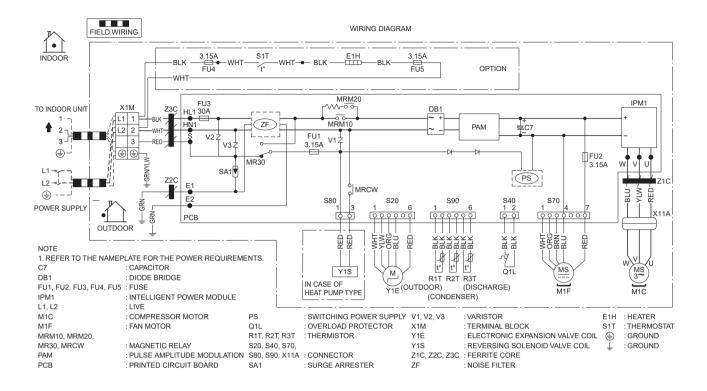
C: 3D099947

RXL12QMVJU9



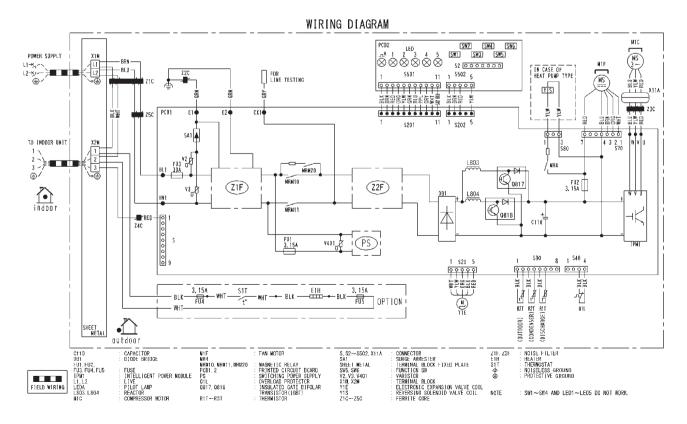
C: 3D122861

RXL15QMVJUA



C: 3D099952

RXL18/24UMVJUA

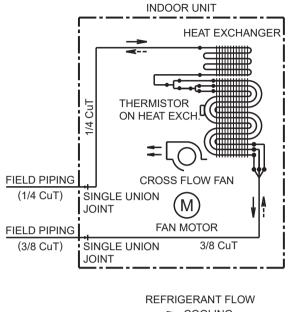


C:3D122866

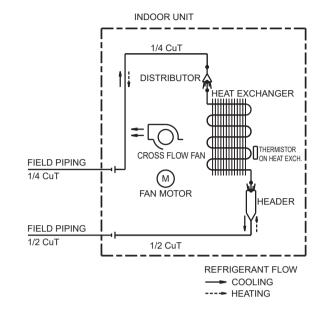
6. Piping Diagrams

6.1 Indoor Unit FTX09/12NMVJU

FTX15NMVJU



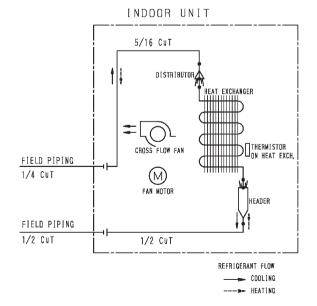


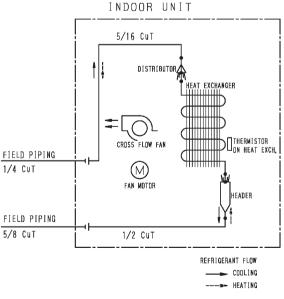


FTX18UVJU

4D091708A





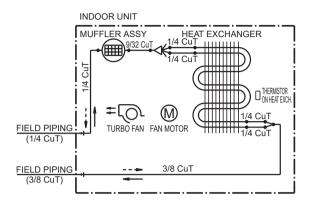


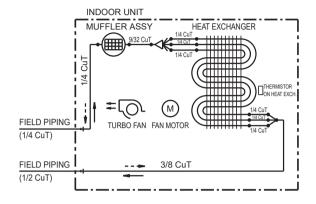
4D091769C

4D074609A

FVXS09/12NVJU

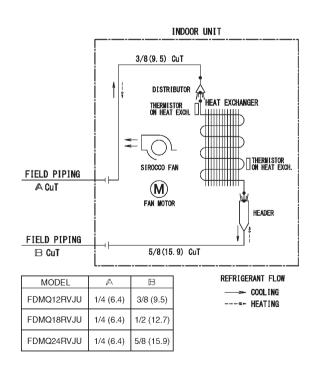
FVXS15NVJU





4D091794

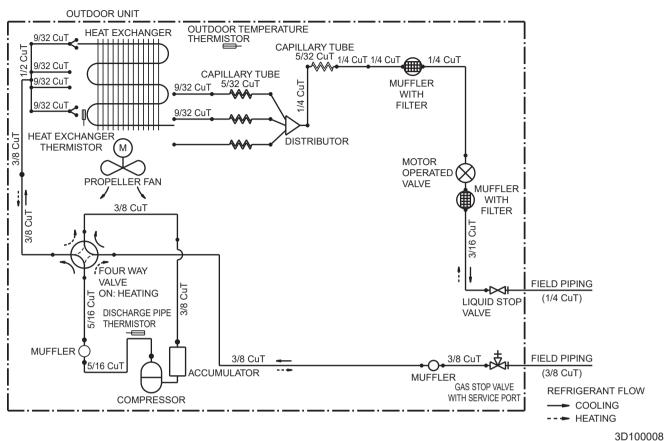
FDMQ12/18/24RVJU



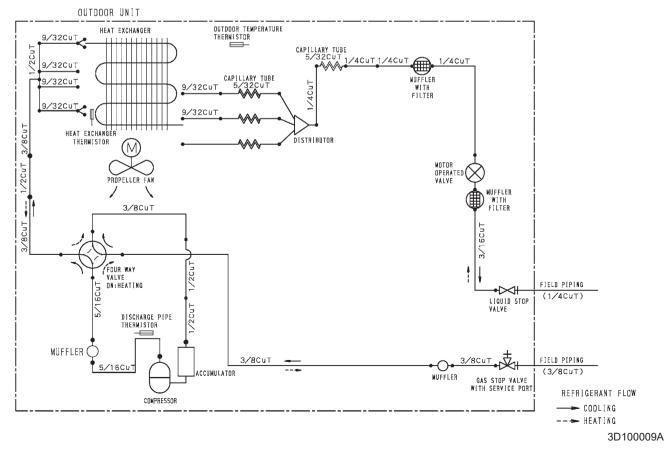
4D091795A

C: 4D112974A

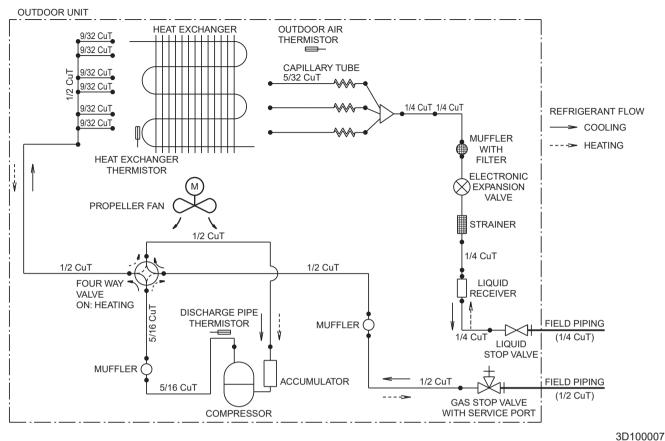
6.2 Outdoor Unit RXL09QMVJU



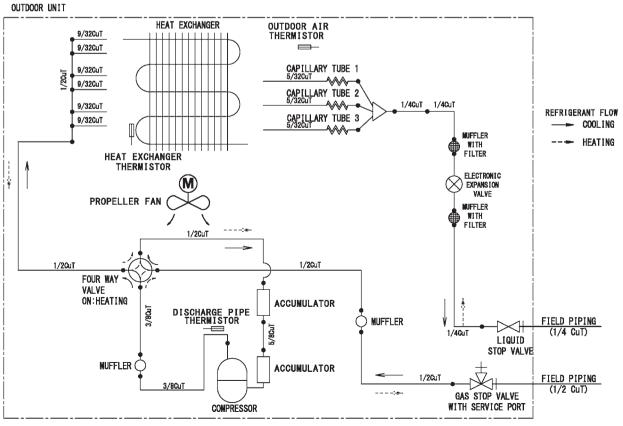
RXL12QMVJU9



RXL15QMVJUA

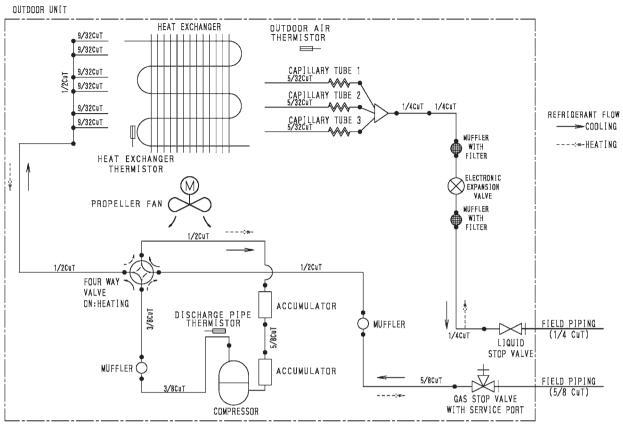


RXL18UMVJUA



3D123368

RXL24UMVJUA



3D107985A

7. Capacity Tables

FTX09NMVJU + RXL09QMVJU

Cooling (60 Hz, 208 V)

11.8
0.22

Temp: Celsius / TC, SHC, PI: kW

IND	OOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	2.95	2.38	0.45	2.70	2.27	0.55	2.46	2.15	0.66	2.34	2.10	0.71	2.21	2.04	0.77	2.07	1.97	0.83
16.0	22.0	3.07	2.34	0.45	2.83	2.23	0.56	2.58	2.12	0.66	2.46	2.07	0.72	2.33	2.02	0.77	2.19	1.96	0.83
18.0	25.0	3.19	2.47	0.45	2.95	2.37	0.56	2.70	2.27	0.67	2.58	2.22	0.72	2.46	2.18	0.77	2.31	2.12	0.84
19.4	26.7	3.25	2.63	0.45	3.01	2.54	0.56	2.76	2.44	0.67	2.64	2.39	0.72	2.52	2.35	0.77	2.37	2.29	0.84
22.0	30.0	3.44	2.54	0.46	3.19	2.46	0.57	2.95	2.37	0.67	2.82	2.33	0.73	2.70	2.29	0.78	2.55	2.24	0.84
24.0	32.0	3.56	2.48	0.57	3.31	2.41	0.57	3.07	2.33	0.68	2.94	2.29	0.73	2.82	2.25	0.78	2.67	2.21	0.85

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	10.07	8.13	0.45	9.23	7.73	0.55	8.39	7.34	0.66	7.97	7.15	0.71	7.55	6.96	0.77	7.05	6.74	0.83
60.8	71.6	10.48	7.98	0.45	9.64	7.61	0.56	8.80	7.24	0.66	8.39	7.06	0.72	7.97	6.89	0.77	7.46	6.68	0.83
64.4	77.0	10.90	8.44	0.45	10.06	8.09	0.56	9.22	7.76	0.67	8.80	7.59	0.72	8.38	7.43	0.77	7.88	7.23	0.84
67.0	80.0	11.10	8.98	0.45	10.27	8.65	0.56	9.43	8.33	0.67	9.00	8.17	0.72	9.00	8.01	0.77	8.08	7.82	0.84
71.6	86.0	11.73	8.68	0.46	10.89	8.39	0.57	10.05	8.10	0.67	9.63	7.96	0.73	9.21	7.82	0.78	8.71	7.66	0.84
75.2	89.6	12.14	8.47	0.57	11.30	8.21	0.57	10.46	7.95	0.68	10.05	7.82	0.73	9.63	7.69	0.78	9.12	7.54	0.85

Heating (60 Hz, 208 V)

AFR 11.4

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0		5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.17	1.51	2.80	1.54	3.41	1.58	3.75	1.60	4.09	1.62	4.44	1.64	4.86	1.66	5.53	1.80
21.1	1.95	1.56	2.59	1.59	3.20	1.62	3.56	1.64	3.91	1.66	4.27	1.68	4.70	1.70	5.38	1.83
22.0	1.86	1.58	2.47	1.58	2.95	1.50	3.42	1.61	3.84	1.68	4.20	1.69	4.64	1.72	5.32	1.85
24.0	1.62	1.39	2.09	1.30	2.57	1.28	3.04	1.40	3.77	1.69	4.13	1.71	4.57	1.73	5.26	1.86
25.0	1.43	1.20	1.90	1.16	2.38	1.17	2.85	1.30	3.73	1.70	4.10	1.72	4.54	1.74	5.23	1.87
27.0	1.05	0.85	1.52	0.91	2.00	0.96	2.47	1.10	3.42	1.54	4.03	1.73	4.47	1.75	5.16	1.89

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						O	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	7.40	1.51	9.55	1.54	11.62	1.58	12.77	1.60	13.94	1.62	15.12	1.64	16.55	1.66	18.83	1.80
70.0	6.63	1.56	8.81	1.59	10.90	1.62	12.11	1.64	13.33	1.66	14.54	1.68	16.00	1.70	18.31	1.83
71.6	6.33	1.58	8.43	1.58	10.05	1.50	11.68	1.61	13.08	1.68	14.31	1.69	15.78	1.72	18.10	1.85
75.2	5.51	1.39	7.14	1.30	8.76	1.28	10.38	1.40	12.84	1.69	14.08	1.71	15.56	1.73	17.89	1.86
77.0	4.87	1.20	6.49	1.16	8.11	1.17	9.73	1.30	12.72	1.70	13.96	1.72	15.45	1.74	17.79	1.87
80.6	3.57	0.85	5.19	0.91	6.81	0.96	8.43	1.10	11.68	1.54	13.73	1.73	15.23	1.75	17.58	1.89

Cooling (60 Hz, 230 V)

AFR	11.8
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	2.95	2.38	0.45	2.70	2.27	0.55	2.46	2.15	0.66	2.34	2.10	0.71	2.21	2.04	0.77	2.07	1.97	0.83
16.0	22.0	3.07	2.34	0.45	2.83	2.23	0.56	2.58	2.12	0.66	2.46	2.07	0.72	2.33	2.02	0.77	2.19	1.96	0.83
18.0	25.0	3.19	2.47	0.45	2.95	2.37	0.56	2.70	2.27	0.67	2.58	2.22	0.72	2.46	2.18	0.77	2.31	2.12	0.84
19.4	26.7	3.25	2.63	0.45	3.01	2.54	0.56	2.76	2.44	0.67	2.64	2.39	0.72	2.52	2.35	0.77	2.37	2.29	0.84
22.0	30.0	3.44	2.54	0.46	3.19	2.46	0.57	2.95	2.37	0.67	2.82	2.33	0.73	2.70	2.29	0.78	2.55	2.24	0.84
24.0	32.0	3.56	2.48	0.57	3.31	2.41	0.57	3.07	2.33	0.68	2.94	2.29	0.73	2.82	2.25	0.78	2.67	2.21	0.85

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	10.07	8.13	0.45	9.23	7.73	0.55	8.39	7.34	0.66	7.97	7.15	0.71	7.55	6.96	0.77	7.05	6.74	0.83
60.8	71.6	10.48	7.98	0.45	9.64	7.61	0.56	8.80	7.24	0.66	8.39	7.06	0.72	7.97	6.89	0.77	7.46	6.68	0.83
64.4	77.0	10.90	8.44	0.45	10.06	8.09	0.56	9.22	7.76	0.67	8.80	7.59	0.72	8.38	7.43	0.77	7.88	7.23	0.84
67.0	80.0	11.10	8.98	0.45	10.27	8.65	0.56	9.43	8.33	0.67	9.00	8.17	0.72	9.00	8.01	0.77	8.08	7.82	0.84
71.6	86.0	11.73	8.68	0.46	10.89	8.39	0.57	10.05	8.10	0.67	9.63	7.96	0.73	9.21	7.82	0.78	8.71	7.66	0.84
75.2	89.6	12.14	8.47	0.57	11.30	8.21	0.57	10.46	7.95	0.68	10.05	7.82	0.73	9.63	7.69	0.78	9.12	7.54	0.85

Heating (60 Hz, 230 V)

AFR 11.4

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0		5	()	(6	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI
15.0	2.17	1.51	2.80	1.54	3.41	1.58	3.75	1.60	4.09	1.62	4.44	1.64	4.86	1.66	5.53	1.80
21.1	1.95	1.56	2.59	1.59	3.20	1.62	3.56	1.64	3.91	1.66	4.27	1.68	4.70	1.70	5.38	1.83
22.0	1.86	1.58	2.47	1.58	2.95	1.50	3.42	1.61	3.84	1.68	4.20	1.69	4.64	1.72	5.32	1.85
24.0	1.62	1.39	2.09	1.30	2.57	1.28	3.04	1.40	3.77	1.69	4.13	1.71	4.57	1.73	5.26	1.86
25.0	1.43	1.20	1.90	1.16	2.38	1.17	2.85	1.30	3.73	1.70	4.10	1.72	4.54	1.74	5.23	1.87
27.0	1.05	0.85	1.52	0.91	2.00	0.96	2.47	1.10	3.42	1.54	4.03	1.73	4.47	1.75	5.16	1.89

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	7.40	1.51	9.55	1.54	11.62	1.58	12.77	1.60	13.94	1.62	15.12	1.64	16.55	1.66	18.83	1.80
70.0	6.63	1.56	8.81	1.59	10.90	1.62	12.11	1.64	13.33	1.66	14.54	1.68	16.00	1.70	18.31	1.83
71.6	6.33	1.58	8.43	1.58	10.05	1.50	11.68	1.61	13.08	1.68	14.31	1.69	15.78	1.72	18.10	1.85
75.2	5.51	1.39	7.14	1.30	8.76	1.28	10.38	1.40	12.84	1.69	14.08	1.71	15.56	1.73	17.89	1.86
77.0	4.87	1.20	6.49	1.16	8.11	1.17	9.73	1.30	12.72	1.70	13.96	1.72	15.45	1.74	17.79	1.87
80.6	3.57	0.85	5.19	0.91	6.81	0.96	8.43	1.10	11.68	1.54	13.73	1.73	15.23	1.75	17.58	1.89

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating). 1.

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

FTX12NMVJU + RXL12QMVJU9

Cooling (60 Hz, 208 V)

AFR	12.3
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.48	2.68	0.53	3.19	2.54	0.65	2.90	2.40	0.78	2.75	2.33	0.84	2.61	2.26	0.90	2.43	2.18	0.98
16.0	22.0	3.62	2.62	0.53	3.33	2.49	0.66	3.04	2.36	0.78	2.90	2.30	0.84	2.75	2.24	0.91	2.58	2.16	0.98
18.0	25.0	3.76	2.76	0.53	3.47	2.64	0.66	3.18	2.52	0.79	3.04	2.46	0.85	2.89	2.40	0.91	2.72	2.33	0.99
19.4	26.7	3.83	2.92	0.54	3.54	2.80	0.66	3.25	2.69	0.79	3.11	2.63	0.85	2.97	2.58	0.91	2.79	2.51	0.99
22.0	30.0	4.05	2.82	0.54	3.76	2.71	0.67	3.47	2.61	0.79	3.32	2.56	0.86	3.18	2.51	0.92	3.01	2.45	0.99
24.0	32.0	4.19	2.74	0.67	3.90	2.65	0.67	3.61	2.56	0.80	3.47	2.51	0.86	3.32	2.47	0.92	3.15	2.41	1.00

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	11.86	9.13	0.53	10.87	8.65	0.65	9.88	8.19	0.78	9.39	7.95	0.84	8.90	7.73	0.90	8.30	7.45	0.98
60.8	71.6	12.35	8.96	0.53	11.36	8.51	0.66	10.37	8.07	0.78	9.88	7.85	0.84	9.38	7.64	0.91	8.79	7.38	0.98
64.4	77.0	12.84	9.42	0.53	11.85	9.00	0.66	10.86	8.59	0.79	10.37	8.39	0.85	9.87	8.19	0.91	9.28	7.95	0.99
67.0	80.0	13.08	9.97	0.54	12.09	9.57	0.66	11.11	9.18	0.79	10.60	8.98	0.85	10.12	8.79	0.91	9.52	8.56	0.99
71.6	86.0	13.82	9.61	0.54	12.83	9.26	0.67	11.84	8.91	0.79	11.34	8.74	0.86	10.85	8.57	0.92	10.26	8.37	0.99
75.2	89.6	14.30	9.36	0.67	13.32	9.04	0.67	12.33	8.73	0.80	11.83	8.57	0.86	11.34	8.42	0.92	10.75	8.23	1.00

Heating (60 Hz, 208 V)

AFR 11.7

Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)														
EDB	-2	25	-2	20	-1	15	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.85	1.73	3.68	1.77	4.48	1.81	4.75	1.74	5.04	1.68	5.33	1.61	5.69	1.53	6.87	1.65
21.1	2.56	1.79	3.40	1.82	4.20	1.86	4.51	1.79	4.82	1.72	5.13	1.65	5.50	1.56	6.68	1.68
22.0	2.31	1.65	3.20	1.77	4.09	1.88	4.41	1.81	4.73	1.74	5.05	1.66	5.42	1.58	6.44	1.63
24.0	1.92	1.35	2.81	1.53	3.71	1.69	4.31	1.83	4.64	1.75	4.96	1.68	5.35	1.59	6.05	1.51
25.0	1.72	1.20	2.62	1.41	3.51	1.59	4.27	1.84	4.60	1.76	4.92	1.69	5.31	1.60	5.85	1.46
27.0	1.33	0.91	2.23	1.18	3.12	1.39	3.90	1.66	4.51	1.78	4.84	1.70	5.23	1.61	5.46	1.34

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	-13 -4			Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	PI
59.0	9.73	1.73	12.55	1.77	15.27	1.81	16.23	1.74	17.21	1.68	18.22	1.61	19.45	1.53	23.48	1.65
70.0	8.72	1.79	11.58	1.82	14.33	1.86	15.39	1.79	16.46	1.72	17.52	1.65	18.80	1.56	22.83	1.68
71.6	7.88	1.65	10.93	1.77	13.95	1.88	15.06	1.81	16.16	1.74	17.24	1.66	18.54	1.58	21.97	1.63
75.2	6.55	1.35	9.60	1.53	12.65	1.69	14.73	1.83	15.85	1.75	16.96	1.68	18.28	1.59	20.64	1.51
77.0	5.88	1.20	8.93	1.41	11.98	1.59	14.56	1.84	15.70	1.76	16.82	1.69	18.15	1.60	19.97	1.46
80.6	4.55	0.91	7.60	1.18	10.65	1.39	13.32	1.66	15.40	1.78	16.54	1.70	17.89	1.61	18.64	1.34

Cooling (60 Hz, 230 V)

AFR	12.3
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.48	2.68	0.53	3.19	2.54	0.65	2.90	2.40	0.78	2.75	2.33	0.84	2.61	2.26	0.90	2.43	2.18	0.98
16.0	22.0	3.62	2.62	0.53	3.33	2.49	0.66	3.04	2.36	0.78	2.90	2.30	0.84	2.75	2.24	0.91	2.58	2.16	0.98
18.0	25.0	3.76	2.76	0.53	3.47	2.64	0.66	3.18	2.52	0.79	3.04	2.46	0.85	2.89	2.40	0.91	2.72	2.33	0.99
19.4	26.7	3.83	2.92	0.54	3.54	2.80	0.66	3.25	2.69	0.79	3.11	2.63	0.85	2.97	2.58	0.91	2.79	2.51	0.99
22.0	30.0	4.05	2.82	0.54	3.76	2.71	0.67	3.47	2.61	0.79	3.32	2.56	0.86	3.18	2.51	0.92	3.01	2.45	0.99
24.0	32.0	4.19	2.74	0.67	3.90	2.65	0.67	3.61	2.56	0.80	3.47	2.51	0.86	3.32	2.47	0.92	3.15	2.41	1.00

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	11.86	9.13	0.53	10.87	8.65	0.65	9.88	8.19	0.78	9.39	7.95	0.84	8.90	7.73	0.90	8.30	7.45	0.98
60.8	71.6	12.35	8.96	0.53	11.36	8.51	0.66	10.37	8.07	0.78	9.88	7.85	0.84	9.38	7.64	0.91	8.79	7.38	0.98
64.4	77.0	12.84	9.42	0.53	11.85	9.00	0.66	10.86	8.59	0.79	10.37	8.39	0.85	9.87	8.19	0.91	9.28	7.95	0.99
67.0	80.0	13.08	9.97	0.54	12.09	9.57	0.66	11.11	9.18	0.79	10.60	8.98	0.85	10.12	8.79	0.91	9.52	8.56	0.99
71.6	86.0	13.82	9.61	0.54	12.83	9.26	0.67	11.84	8.91	0.79	11.34	8.74	0.86	10.85	8.57	0.92	10.26	8.37	0.99
75.2	89.6	14.30	9.36	0.67	13.32	9.04	0.67	12.33	8.73	0.80	11.83	8.57	0.86	11.34	8.42	0.92	10.75	8.23	1.00

Heating (60 Hz, 230 V)

AFR 11.7

Temp: Celsius / TC, PI: kW

INDOOR		OUTDOOR TEMPERATURE (°CWB)														
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.85	1.73	3.68	1.77	4.48	1.81	4.75	1.74	5.04	1.68	5.33	1.61	5.69	1.53	6.87	1.65
21.1	2.56	1.79	3.40	1.82	4.20	1.86	4.51	1.79	4.82	1.72	5.13	1.65	5.50	1.56	6.68	1.68
22.0	2.31	1.65	3.20	1.77	4.09	1.88	4.41	1.81	4.73	1.74	5.05	1.66	5.42	1.58	6.44	1.63
24.0	1.92	1.35	2.81	1.53	3.71	1.69	4.31	1.83	4.64	1.75	4.96	1.68	5.35	1.59	6.05	1.51
25.0	1.72	1.20	2.62	1.41	3.51	1.59	4.27	1.84	4.60	1.76	4.92	1.69	5.31	1.60	5.85	1.46
27.0	1.33	0.91	2.23	1.18	3.12	1.39	3.90	1.66	4.51	1.78	4.84	1.70	5.23	1.61	5.46	1.34

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR		OUTDOOR TEMPERATURE (°FWB)														
EDB	-1	-13 -4			5	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	9.73	1.73	12.55	1.77	15.27	1.81	16.23	1.74	17.21	1.68	18.22	1.61	19.45	1.53	23.48	1.65
70.0	8.72	1.79	11.58	1.82	14.33	1.86	15.39	1.79	16.46	1.72	17.52	1.65	18.80	1.56	22.83	1.68
71.6	7.88	1.65	10.93	1.77	13.95	1.88	15.06	1.81	16.16	1.74	17.24	1.66	18.54	1.58	21.97	1.63
75.2	6.55	1.35	9.60	1.53	12.65	1.69	14.73	1.83	15.85	1.75	16.96	1.68	18.28	1.59	20.64	1.51
77.0	5.88	1.20	8.93	1.41	11.98	1.59	14.56	1.84	15.70	1.76	16.82	1.69	18.15	1.60	19.97	1.46
80.6	4.55	0.91	7.60	1.18	10.65	1.39	13.32	1.66	15.40	1.78	16.54	1.70	17.89	1.61	18.64	1.34

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

4. Airflow rate (AFR) and Bypass factor (BF) are tabulated above table.

FTX15NMVJU + RXL15QMVJUA

Cooling (60 Hz, 208 V)

AFR	16.8
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.92	3.74	0.71	4.51	3.54	0.88	4.10	3.34	1.05	3.89	3.25	1.14	3.69	3.15	1.22	3.44	3.04	1.32
16.0	22.0	5.12	3.67	0.72	4.71	3.48	0.89	4.30	3.30	1.06	4.10	3.21	1.14	3.89	3.12	1.23	3.65	3.01	1.33
18.0	25.0	5.32	3.85	0.72	4.91	3.67	0.89	4.50	3.50	1.06	4.30	3.42	1.15	4.09	3.34	1.23	3.85	3.24	1.33
19.4	26.7	5.42	4.07	0.72	5.01	3.90	0.89	4.60	3.74	1.06	4.40	3.66	1.15	4.20	3.58	1.24	3.95	3.48	1.34
22.0	30.0	5.73	3.92	0.73	5.32	3.77	0.90	4.91	3.63	1.07	4.70	3.56	1.16	4.50	3.48	1.24	4.25	3.40	1.34
24.0	32.0	5.93	3.82	0.91	5.52	3.68	0.91	5.11	3.55	1.08	4.91	3.48	1.16	4.70	3.42	1.25	4.46	3.34	1.35

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	16.78	12.76	0.71	15.38	12.08	0.88	13.98	11.41	1.05	13.28	11.08	1.14	12.58	10.75	1.22	11.75	10.37	1.32
60.8	71.6	17.47	12.51	0.72	16.07	11.87	0.89	14.67	11.24	1.06	13.98	10.94	1.14	13.28	10.63	1.23	12.44	10.27	1.33
64.4	77.0	18.16	13.13	0.72	16.76	12.53	0.89	15.37	11.95	1.06	14.67	11.66	1.15	13.97	11.38	1.23	13.13	11.04	1.33
67.0	80.0	18.51	13.88	0.72	17.11	13.31	0.89	15.71	12.75	1.06	15.00	12.47	1.15	15.00	12.20	1.24	13.47	11.88	1.34
71.6	86.0	19.55	13.38	0.73	18.15	12.87	0.90	16.75	12.37	1.07	16.05	12.13	1.16	15.35	11.89	1.24	14.51	11.60	1.34
75.2	89.6	20.24	13.02	0.91	18.84	12.56	0.91	17.44	12.11	1.08	16.74	11.89	1.16	16.04	11.67	1.25	15.20	11.41	1.35

Heating (60 Hz, 208 V)

AFR 18.5

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0		5	()	6	3	15	5.5
°C	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.63	2.20	4.69	2.24	5.70	2.30	6.10	2.29	6.52	2.28	6.94	2.27	7.45	2.26	8.99	2.44
21.1	3.26	2.27	4.32	2.31	5.35	2.36	5.79	2.35	6.23	2.34	6.67	2.32	7.20	2.31	8.74	2.49
22.0	3.11	2.30	4.18	2.34	5.21	2.39	5.67	2.37	6.12	2.36	6.56	2.34	7.10	2.33	8.65	2.51
24.0	2.96	2.32	4.04	2.36	5.07	2.41	5.54	2.40	6.00	2.38	6.46	2.37	7.00	2.35	8.14	2.30
25.0	2.78	2.18	3.96	2.38	5.00	2.43	5.48	2.41	5.94	2.39	6.41	2.38	6.95	2.36	7.87	2.19
27.0	2.23	1.66	3.82	2.40	4.86	2.45	5.35	2.43	5.83	2.42	6.30	2.40	6.85	2.38	7.33	1.98

INDOOR						Ol	JTDOOF	R TEMP	ERATUR	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	12.42	2.20	16.03	2.24	19.50	2.30	20.87	2.29	22.28	2.28	23.71	2.27	25.45	2.26	30.73	2.44
70.0	11.14	2.27	14.79	2.31	18.30	2.36	19.80	2.35	21.30	2.34	22.80	2.32	24.60	2.31	29.88	2.49
71.6	10.63	2.30	14.30	2.34	17.82	2.39	19.37	2.37	20.91	2.36	22.44	2.34	24.26	2.33	29.54	2.51
75.2	10.11	2.32	13.80	2.36	17.34	2.41	18.94	2.40	20.52	2.38	22.07	2.37	23.92	2.35	27.78	2.30
77.0	9.47	2.18	13.56	2.38	17.10	2.43	18.73	2.41	20.32	2.39	21.89	2.38	23.75	2.36	26.85	2.19
80.6	7.62	1.66	13.06	2.40	16.62	2.45	18.30	2.43	19.93	2.42	21.53	2.40	23.41	2.38	25.00	1.98

AFR	16.8
BF	0.22

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.92	3.74	0.71	4.51	3.54	0.88	4.10	3.34	1.05	3.89	3.25	1.14	3.69	3.15	1.22	3.44	3.04	1.32
16.0	22.0	5.12	3.67	0.72	4.71	3.48	0.89	4.30	3.30	1.06	4.10	3.21	1.14	3.89	3.12	1.23	3.65	3.01	1.33
18.0	25.0	5.32	3.85	0.72	4.91	3.67	0.89	4.50	3.50	1.06	4.30	3.42	1.15	4.09	3.34	1.23	3.85	3.24	1.33
19.4	26.7	5.42	4.07	0.72	5.01	3.90	0.89	4.60	3.74	1.06	4.40	3.66	1.15	4.20	3.58	1.24	3.95	3.48	1.34
22.0	30.0	5.73	3.92	0.73	5.32	3.77	0.90	4.91	3.63	1.07	4.70	3.56	1.16	4.50	3.48	1.24	4.25	3.40	1.34
24.0	32.0	5.93	3.82	0.91	5.52	3.68	0.91	5.11	3.55	1.08	4.91	3.48	1.16	4.70	3.42	1.25	4.46	3.34	1.35

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	16.78	12.76	0.71	15.38	12.08	0.88	13.98	11.41	1.05	13.28	11.08	1.14	12.58	10.75	1.22	11.75	10.37	1.32
60.8	71.6	17.47	12.51	0.72	16.07	11.87	0.89	14.67	11.24	1.06	13.98	10.94	1.14	13.28	10.63	1.23	12.44	10.27	1.33
64.4	77.0	18.16	13.13	0.72	16.76	12.53	0.89	15.37	11.95	1.06	14.67	11.66	1.15	13.97	11.38	1.23	13.13	11.04	1.33
67.0	80.0	18.51	13.88	0.72	17.11	13.31	0.89	15.71	12.75	1.06	15.00	12.47	1.15	15.00	12.20	1.24	13.47	11.88	1.34
71.6	86.0	19.55	13.38	0.73	18.15	12.87	0.90	16.75	12.37	1.07	16.05	12.13	1.16	15.35	11.89	1.24	14.51	11.60	1.34
75.2	89.6	20.24	13.02	0.91	18.84	12.56	0.91	17.44	12.11	1.08	16.74	11.89	1.16	16.04	11.67	1.25	15.20	11.41	1.35

Heating (60 Hz, 230 V)

AFR 18.5

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	(6	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.63	2.20	4.69	2.24	5.70	2.30	6.10	2.29	6.52	2.28	6.94	2.27	7.45	2.26	8.99	2.44
21.1	3.26	2.27	4.32	2.31	5.35	2.36	5.79	2.35	6.23	2.34	6.67	2.32	7.20	2.31	8.74	2.49
22.0	3.11	2.30	4.18	2.34	5.21	2.39	5.67	2.37	6.12	2.36	6.56	2.34	7.10	2.33	8.65	2.51
24.0	2.96	2.32	4.04	2.36	5.07	2.41	5.54	2.40	6.00	2.38	6.46	2.37	7.00	2.35	8.14	2.30
25.0	2.78	2.18	3.96	2.38	5.00	2.43	5.48	2.41	5.94	2.39	6.41	2.38	6.95	2.36	7.87	2.19
27.0	2.23	1.66	3.82	2.40	4.86	2.45	5.35	2.43	5.83	2.42	6.30	2.40	6.85	2.38	7.33	1.98

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						O	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	12.42	2.20	16.03	2.24	19.50	2.30	20.87	2.29	22.28	2.28	23.71	2.27	25.45	2.26	30.73	2.44
70.0	11.14	2.27	14.79	2.31	18.30	2.36	19.80	2.35	21.30	2.34	22.80	2.32	24.60	2.31	29.88	2.49
71.6	10.63	2.30	14.30	2.34	17.82	2.39	19.37	2.37	20.91	2.36	22.44	2.34	24.26	2.33	29.54	2.51
75.2	10.11	2.32	13.80	2.36	17.34	2.41	18.94	2.40	20.52	2.38	22.07	2.37	23.92	2.35	27.78	2.30
77.0	9.47	2.18	13.56	2.38	17.10	2.43	18.73	2.41	20.32	2.39	21.89	2.38	23.75	2.36	26.85	2.19
80.6	7.62	1.66	13.06	2.40	16.62	2.45	18.30	2.43	19.93	2.42	21.53	2.40	23.41	2.38	25.00	1.98

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FTX18UVJU + RXL18UMVJUA

Cooling (60 Hz, 208 V)

AFR	16.5
BF	0.07

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC						SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.90	4.45	0.89	5.40	4.21	1.10	4.91	3.97	1.32	4.67	3.85	1.42	4.42	3.74	1.53	4.13	3.60	1.66
16.0	22.0	6.14	4.36	0.90	5.65	4.13	1.11	5.16	3.91	1.32	4.91	3.80	1.43	4.67	3.70	1.54	4.37	3.57	1.66
18.0	25.0	6.38	4.57	0.90	5.89	4.36	1.12	5.40	4.15	1.33	5.15	4.05	1.44	4.91	3.95	1.54	4.61	3.83	1.67
19.4	26.7	6.50	4.83	0.91	6.01	4.62	1.12	5.52	4.43	1.33	5.28	4.33	1.44	5.03	4.23	1.55	4.74	4.12	1.67
22.0	30.0	6.87	4.65	0.92	6.38	4.47	1.13	5.89	4.30	1.34	5.64	4.21	1.45	5.39	4.12	1.56	5.10	4.02	1.68
24.0	32.0	7.11	4.52	1.14	6.62	4.36	1.14	6.13	4.20	1.35	5.88	4.12	1.46	5.64	4.05	1.56	5.34	3.95	1.69

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	20.12	15.18	0.89	18.44	14.35	1.10	16.76	13.54	1.32	15.93	13.15	1.42	15.09	12.75	1.53	14.08	12.29	1.66
60.8	71.6	20.95	14.88	0.90	19.27	14.11	1.11	17.59	13.35	1.32	16.76	12.98	1.43	15.92	12.61	1.54	14.91	12.18	1.66
64.4	77.0	21.78	15.60	0.90	20.10	14.88	1.12	18.42	14.17	1.33	17.59	13.83	1.44	16.75	13.49	1.54	15.74	13.08	1.67
67.0	80.0	22.19	16.47	0.91	20.51	15.78	1.12	18.84	15.10	1.33	18.00	14.77	1.44	17.16	14.44	1.55	16.16	14.05	1.67
71.6	86.0	23.43	15.86	0.92	21.76	15.25	1.13	20.08	14.66	1.34	19.24	14.36	1.45	18.41	14.07	1.56	17.40	13.73	1.68
75.2	89.6	24.26	15.44	1.14	22.59	14.88	1.14	20.91	14.34	1.35	20.07	14.07	1.46	19.24	13.81	1.56	18.23	13.49	1.69

Heating (60 Hz, 208 V)

AFR 20.2

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0		5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.94	2.46	5.83	2.77	6.75	3.08	7.14	3.06	7.56	3.05	7.98	3.03	8.49	3.01	10.25	3.26
21.1	4.43	2.53	5.38	2.85	6.33	3.17	6.78	3.15	7.22	3.13	7.67	3.11	8.21	3.08	9.97	3.33
22.0	3.82	2.16	5.20	2.88	6.16	3.20	6.63	3.18	7.09	3.16	7.55	3.14	8.09	3.11	9.85	3.35
24.0	3.17	1.77	4.65	2.55	6.00	3.23	6.48	3.21	6.96	3.19	7.43	3.17	7.98	3.14	9.74	3.38
25.0	2.84	1.57	4.33	2.34	5.91	3.25	6.41	3.23	6.89	3.20	7.36	3.18	7.92	3.15	9.68	3.39
27.0	2.19	1.19	3.68	1.93	5.38	2.90	6.26	3.26	6.76	3.23	7.24	3.21	7.81	3.18	9.42	3.32

INDOOR						O	JTDOOF	R TEMP	ERATUR	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	16.86	2.46	19.90	2.77	23.02	3.08	24.37	3.06	25.78	3.05	27.22	3.03	28.97	3.01	34.97	3.26
70.0	15.12	2.53	18.36	2.85	21.60	3.17	23.12	3.15	24.65	3.13	26.17	3.11	28.00	3.08	34.01	3.33
71.6	13.02	2.16	17.75	2.88	21.03	3.20	22.62	3.18	24.19	3.16	25.75	3.14	27.61	3.11	33.62	3.35
75.2	10.80	1.77	15.88	2.55	20.47	3.23	22.12	3.21	23.74	3.19	25.34	3.17	27.23	3.14	33.23	3.38
77.0	9.69	1.57	14.77	2.34	20.18	3.25	21.87	3.23	23.52	3.20	25.13	3.18	27.03	3.15	33.04	3.39
80.6	7.48	1.19	12.56	1.93	18.34	2.90	21.37	3.26	23.06	3.23	24.71	3.21	26.65	3.18	32.13	3.32

AFR	16.5
BF	0.07

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	5.90	4.45	0.89	5.40	4.21	1.10	4.91	3.97	1.32	4.67	3.85	1.42	4.42	3.74	1.53	4.13	3.60	1.66
16.0	22.0	6.14	4.36	0.90	5.65	4.13	1.11	5.16	3.91	1.32	4.91	3.80	1.43	4.67	3.70	1.54	4.37	3.57	1.66
18.0	25.0	6.38	4.57	0.90	5.89	4.36	1.12	5.40	4.15	1.33	5.15	4.05	1.44	4.91	3.95	1.54	4.61	3.83	1.67
19.4	26.7	6.50	4.83	0.91	6.01	4.62	1.12	5.52	4.43	1.33	5.28	4.33	1.44	5.03	4.23	1.55	4.74	4.12	1.67
22.0	30.0	6.87	4.65	0.92	6.38	4.47	1.13	5.89	4.30	1.34	5.64	4.21	1.45	5.39	4.12	1.56	5.10	4.02	1.68
24.0	32.0	7.11	4.52	1.14	6.62	4.36	1.14	6.13	4.20	1.35	5.88	4.12	1.46	5.64	4.05	1.56	5.34	3.95	1.69

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	20.12	15.18	0.89	18.44	14.35	1.10	16.76	13.54	1.32	15.93	13.15	1.42	15.09	12.75	1.53	14.08	12.29	1.66
60.8	71.6	20.95	14.88	0.90	19.27	14.11	1.11	17.59	13.35	1.32	16.76	12.98	1.43	15.92	12.61	1.54	14.91	12.18	1.66
64.4	77.0	21.78	15.60	0.90	20.10	14.88	1.12	18.42	14.17	1.33	17.59	13.83	1.44	16.75	13.49	1.54	15.74	13.08	1.67
67.0	80.0	22.19	16.47	0.91	20.51	15.78	1.12	18.84	15.10	1.33	18.00	14.77	1.44	17.16	14.44	1.55	16.16	14.05	1.67
71.6	86.0	23.43	15.86	0.92	21.76	15.25	1.13	20.08	14.66	1.34	19.24	14.36	1.45	18.41	14.07	1.56	17.40	13.73	1.68
75.2	89.6	24.26	15.44	1.14	22.59	14.88	1.14	20.91	14.34	1.35	20.07	14.07	1.46	19.24	13.81	1.56	18.23	13.49	1.69

Heating (60 Hz, 230 V)

AFR 20.2

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI
15.0	4.94	2.46	5.83	2.77	6.75	3.08	7.14	3.06	7.56	3.05	7.98	3.03	8.49	3.01	10.25	3.26
21.1	4.43	2.53	5.38	2.85	6.33	3.17	6.78	3.15	7.22	3.13	7.67	3.11	8.21	3.08	9.97	3.33
22.0	3.82	2.16	5.20	2.88	6.16	3.20	6.63	3.18	7.09	3.16	7.55	3.14	8.09	3.11	9.85	3.35
24.0	3.17	1.77	4.65	2.55	6.00	3.23	6.48	3.21	6.96	3.19	7.43	3.17	7.98	3.14	9.74	3.38
25.0	2.84	1.57	4.33	2.34	5.91	3.25	6.41	3.23	6.89	3.20	7.36	3.18	7.92	3.15	9.68	3.39
27.0	2.19	1.19	3.68	1.93	5.38	2.90	6.26	3.26	6.76	3.23	7.24	3.21	7.81	3.18	9.42	3.32

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						O	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI
59.0	16.86	2.46	19.90	2.77	23.02	3.08	24.37	3.06	25.78	3.05	27.22	3.03	28.97	3.01	34.97	3.26
70.0	15.12	2.53	18.36	2.85	21.60	3.17	23.12	3.15	24.65	3.13	26.17	3.11	28.00	3.08	34.01	3.33
71.6	13.02	2.16	17.75	2.88	21.03	3.20	22.62	3.18	24.19	3.16	25.75	3.14	27.61	3.11	33.62	3.35
75.2	10.80	1.77	15.88	2.55	20.47	3.23	22.12	3.21	23.74	3.19	25.34	3.17	27.23	3.14	33.23	3.38
77.0	9.69	1.57	14.77	2.34	20.18	3.25	21.87	3.23	23.52	3.20	25.13	3.18	27.03	3.15	33.04	3.39
80.6	7.48	1.19	12.56	1.93	18.34	2.90	21.37	3.26	23.06	3.23	24.71	3.21	26.65	3.18	32.13	3.32

Symbols:

: Airflow rate	(m³/min.)
: Bypass factor	
: Entering wet bulb temp.	(°C) / (°F)
: Entering dry bulb temp.	(°C) / (°F)
: Total capacity	(kW) / (kBtu/h)
: Sensible heat capacity	(kW) / (kBtu/h)
: Power input	(kW)
	: Bypass factor : Entering wet bulb temp. : Entering dry bulb temp. : Total capacity : Sensible heat capacity

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FTX24UVJU + RXL24UMVJUA

Cooling (60 Hz, 208 V)

AFR	18.2
BF	0.08

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC						SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	6.94	5.11	1.05	6.37	4.82	1.30	5.79	4.54	1.55	5.50	4.40	1.68	5.21	4.26	1.80	4.86	4.10	1.95
16.0	22.0	7.23	5.01	1.06	6.65	4.74	1.31	6.07	4.47	1.56	5.78	4.34	1.68	5.49	4.21	1.81	5.15	4.06	1.96
18.0	25.0	7.52	5.23	1.07	6.94	4.98	1.32	6.36	4.73	1.57	6.07	4.61	1.69	5.78	4.49	1.82	5.43	4.34	1.97
19.4	26.7	7.66	5.51	1.07	7.08	5.26	1.32	6.50	5.02	1.57	6.20	4.91	1.70	5.92	4.79	1.82	5.58	4.65	1.97
22.0	30.0	8.09	5.29	1.08	7.51	5.08	1.33	6.93	4.87	1.58	6.64	4.76	1.71	6.35	4.66	1.83	6.01	4.54	1.98
24.0	32.0	8.38	5.15	1.34	7.80	4.95	1.34	7.22	4.76	1.59	6.93	4.66	1.71	6.64	4.57	1.84	6.29	4.46	1.99

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	23.69	17.44	1.05	21.72	16.45	1.30	19.75	15.48	1.55	18.76	15.00	1.68	17.77	14.53	1.80	16.59	13.97	1.95
60.8	71.6	24.67	17.09	1.06	22.70	16.16	1.31	20.72	15.25	1.56	19.73	14.81	1.68	18.75	14.37	1.81	17.56	13.85	1.96
64.4	77.0	25.65	17.84	1.07	23.67	16.98	1.32	21.70	16.13	1.57	20.71	15.72	1.69	19.72	15.31	1.82	18.54	14.82	1.97
67.0	80.0	26.14	18.79	1.07	24.16	17.95	1.32	22.19	17.14	1.57	21.20	16.74	1.70	20.21	16.34	1.82	19.03	15.88	1.97
71.6	86.0	27.60	18.06	1.08	25.63	17.33	1.33	23.65	16.61	1.58	22.67	16.26	1.71	21.68	15.91	1.83	20.49	15.50	1.98
75.2	89.6	28.58	17.56	1.34	26.60	16.89	1.34	24.63	16.23	1.59	23.64	15.91	1.71	22.65	15.59	1.84	21.47	15.22	1.99

Heating (60 Hz, 208 V)

AFR 19.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	ΡI
15.0	5.49	3.03	6.48	3.42	7.50	3.80	8.00	3.78	8.52	3.76	9.06	3.74	9.70	3.71	11.51	3.91
21.1	4.81	3.04	5.98	3.52	7.03	3.91	7.59	3.88	8.15	3.86	8.71	3.83	9.38	3.80	11.02	3.91
22.0	4.11	2.67	5.72	3.51	6.81	3.91	7.42	3.91	8.00	3.89	8.57	3.87	9.25	3.83	10.84	3.91
24.0	3.41	2.27	5.02	3.12	6.59	3.91	7.21	3.91	7.83	3.91	8.43	3.90	9.12	3.87	10.66	3.91
25.0	3.06	2.07	4.67	2.93	6.49	3.91	7.11	3.91	7.73	3.91	8.35	3.91	9.05	3.89	10.57	3.91
27.0	2.36	1.64	3.97	2.52	5.80	3.55	6.91	3.91	7.54	3.91	8.16	3.91	8.92	3.91	10.15	3.80

INDOOR						0	UTDOOF	R TEMP	ERATUR	RE (°FW	/B)					
EDB	-1	3	-4	4	5	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	18.73	3.03	22.11	3.42	25.58	3.80	27.30	3.78	29.09	3.76	30.90	3.74	33.10	3.71	39.26	3.91
70.0	16.42	3.04	20.40	3.52	24.00	3.91	25.90	3.88	27.81	3.86	29.71	3.83	32.00	3.80	37.61	3.91
71.6	14.04	2.67	19.51	3.51	23.25	3.91	25.31	3.91	27.30	3.89	29.24	3.87	31.56	3.83	36.98	3.91
75.2	11.65	2.27	17.12	3.12	22.50	3.91	24.61	3.91	26.71	3.91	28.77	3.90	31.12	3.87	36.36	3.91
77.0	10.45	2.07	15.93	2.93	22.13	3.91	24.26	3.91	26.38	3.91	28.49	3.91	30.90	3.89	36.05	3.91
80.6	8.06	1.64	13.54	2.52	19.78	3.55	23.59	3.91	25.73	3.91	27.86	3.91	30.42	3.91	34.64	3.80

AFR	18.2
BF	0.08

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	6.94	5.11	1.05	6.37	4.82	1.30	5.79	4.54	1.55	5.50	4.40	1.68	5.21	4.26	1.80	4.86	4.10	1.95
16.0	22.0	7.23	5.01	1.06	6.65	4.74	1.31	6.07	4.47	1.56	5.78	4.34	1.68	5.49	4.21	1.81	5.15	4.06	1.96
18.0	25.0	7.52	5.23	1.07	6.94	4.98	1.32	6.36	4.73	1.57	6.07	4.61	1.69	5.78	4.49	1.82	5.43	4.34	1.97
19.4	26.7	7.66	5.51	1.07	7.08	5.26	1.32	6.50	5.02	1.57	6.20	4.91	1.70	5.92	4.79	1.82	5.58	4.65	1.97
22.0	30.0	8.09	5.29	1.08	7.51	5.08	1.33	6.93	4.87	1.58	6.64	4.76	1.71	6.35	4.66	1.83	6.01	4.54	1.98
24.0	32.0	8.38	5.15	1.34	7.80	4.95	1.34	7.22	4.76	1.59	6.93	4.66	1.71	6.64	4.57	1.84	6.29	4.46	1.99

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	23.69	17.44	1.05	21.72	16.45	1.30	19.75	15.48	1.55	18.76	15.00	1.68	17.77	14.53	1.80	16.59	13.97	1.95
60.8	71.6	24.67	17.09	1.06	22.70	16.16	1.31	20.72	15.25	1.56	19.73	14.81	1.68	18.75	14.37	1.81	17.56	13.85	1.96
64.4	77.0	25.65	17.84	1.07	23.67	16.98	1.32	21.70	16.13	1.57	20.71	15.72	1.69	19.72	15.31	1.82	18.54	14.82	1.97
67.0	80.0	26.14	18.79	1.07	24.16	17.95	1.32	22.19	17.14	1.57	21.20	16.74	1.70	20.21	16.34	1.82	19.03	15.88	1.97
71.6	86.0	27.60	18.06	1.08	25.63	17.33	1.33	23.65	16.61	1.58	22.67	16.26	1.71	21.68	15.91	1.83	20.49	15.50	1.98
75.2	89.6	28.58	17.56	1.34	26.60	16.89	1.34	24.63	16.23	1.59	23.64	15.91	1.71	22.65	15.59	1.84	21.47	15.22	1.99

Heating (60 Hz, 230 V)

AFR 19.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	6	15	5.5
°C	TC					PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI
15.0	5.49	3.03	6.48	3.42	7.50	3.80	8.00	3.78	8.52	3.76	9.06	3.74	9.70	3.71	11.71	4.01
21.1	4.81	3.04	5.98	3.52	7.03	3.91	7.59	3.88	8.15	3.86	8.71	3.83	9.38	3.80	11.39	4.10
22.0	4.11	2.67	5.72	3.51	6.85	3.95	7.43	3.92	8.00	3.89	8.57	3.87	9.25	3.83	11.26	4.13
24.0	3.41	2.27	5.02	3.12	6.66	3.99	7.26	3.96	7.85	3.93	8.43	3.90	9.12	3.87	11.13	4.17
25.0	3.06	2.07	4.67	2.93	6.50	3.95	7.18	3.98	7.78	3.95	8.36	3.92	9.05	3.89	10.85	4.07
27.0	2.36	1.64	3.97	2.52	5.80	3.55	7.02	4.02	7.63	3.99	8.22	3.96	8.93	3.92	10.15	3.80

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	PI
59.0	18.73	3.03	22.11	3.42	25.58	3.80	27.30	3.78	29.09	3.76	30.90	3.74	33.10	3.71	39.97	4.01
70.0	16.42	3.04	20.40	3.52	24.00	3.91	25.90	3.88	27.81	3.86	29.71	3.83	32.00	3.80	38.87	4.10
71.6	14.04	2.67	19.51	3.51	23.37	3.95	25.34	3.92	27.30	3.89	29.24	3.87	31.56	3.83	38.42	4.13
75.2	11.65	2.27	17.12	3.12	22.74	3.99	24.78	3.96	26.79	3.93	28.77	3.90	31.12	3.87	37.98	4.17
77.0	10.45	2.07	15.93	2.93	22.17	3.95	24.50	3.98	26.53	3.95	28.53	3.92	30.90	3.89	37.03	4.07
80.6	8.06	1.64	13.54	2.52	19.78	3.55	23.94	4.02	26.02	3.99	28.05	3.96	30.45	3.92	34.64	3.80

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FVXS09NVJU + RXL09QMVJU

Cooling (60 Hz, 208 V)

AFR	8.2
BF	0.10

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC PI TC SHC PI 2.20 0.45 2.70 2.07 0.5					TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI
14.0	20.0	2.95	2.20	0.45	2.70	2.07	0.55	2.46	1.95	0.66	2.34	1.90	0.71	2.21	1.84	0.77	2.07	1.77	0.83
16.0	22.0	3.07	2.15	0.45	2.83	2.04	0.56	2.58	1.93	0.66	2.46	1.87	0.72	2.33	1.82	0.77	2.19	1.75	0.83
18.0	25.0	3.19	2.25	0.45	2.95	2.15	0.56	2.70	2.04	0.67	2.58	1.99	0.72	2.46	1.94	0.77	2.31	1.88	0.84
19.4	26.7	3.25	2.38	0.45	3.01	2.27	0.56	2.76	2.17	0.67	2.64	2.12	0.72	2.52	2.07	0.77	2.37	2.02	0.84
22.0	30.0	3.44	2.29	0.46	3.19	2.19	0.57	2.95	2.11	0.67	2.82	2.06	0.72	2.70	2.02	0.78	2.55	1.97	0.84
24.0	32.0	3.56	2.22	0.57	3.31	2.14	0.57	3.07	2.06	0.67	2.94	2.02	0.73	2.82	1.98	0.78	2.67	1.93	0.85

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC PI TC SHC PI 7.50 0.45 9.23 7.08 0.55					TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	10.07	7.50	0.45	9.23	7.08	0.55	8.39	6.67	0.66	7.97	6.47	0.71	7.55	6.27	0.77	7.05	6.04	0.83
60.8	71.6	10.48	7.35	0.45	9.64	6.96	0.56	8.80	6.57	0.66	8.39	6.39	0.72	7.97	6.20	0.77	7.46	5.98	0.83
64.4	77.0	10.90	7.69	0.45	10.06	7.32	0.56	9.22	6.97	0.67	8.80	6.79	0.72	8.38	6.62	0.77	7.88	6.41	0.84
67.0	80.0	11.10	8.10	0.45	10.27	7.75	0.56	9.43	7.41	0.67	9.00	7.24	0.72	9.00	7.08	0.77	8.08	6.88	0.84
71.6	86.0	11.73	7.80	0.46	10.89	7.49	0.57	10.05	7.19	0.67	9.63	7.04	0.72	9.21	6.89	0.78	8.71	6.72	0.84
75.2	89.6	12.14	7.58	0.57	11.30	7.30	0.57	10.46	7.03	0.67	10.05	6.89	0.73	9.63	6.76	0.78	9.12	6.60	0.85

Heating (60 Hz, 208 V)

AFR 8.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.00	1.29	2.58	1.32	3.14	1.35	3.42	1.34	3.71	1.34	4.00	1.33	4.34	1.33	4.90	1.43
21.1	1.80	1.33	2.38	1.35	2.95	1.38	3.25	1.38	3.55	1.37	3.84	1.36	4.20	1.36	4.77	1.46
22.0	1.71	1.35	2.30	1.37	2.87	1.40	3.18	1.39	3.48	1.38	3.78	1.38	4.14	1.37	4.71	1.47
24.0	1.63	1.36	2.23	1.39	2.71	1.35	3.11	1.41	3.41	1.40	3.72	1.39	4.08	1.38	4.66	1.49
25.0	1.59	1.37	2.07	1.28	2.55	1.26	3.07	1.41	3.38	1.40	3.69	1.40	4.06	1.39	4.63	1.49
27.0	1.35	1.18	1.75	1.07	2.23	1.09	3.00	1.43	3.32	1.42	3.63	1.41	4.00	1.40	4.46	1.44

INDOOR						O	JTDOOF	R TEMP	ERATU	RE (°FW	′B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	6.86	1.29	8.85	1.32	10.76	1.35	11.70	1.34	12.66	1.34	13.62	1.33	14.79	1.33	16.66	1.43
70.0	6.15	1.33	8.16	1.35	10.10	1.38	11.10	1.38	12.10	1.37	13.10	1.36	14.30	1.36	16.20	1.46
71.6	5.86	1.35	7.89	1.37	9.83	1.40	10.86	1.39	11.88	1.38	12.89	1.38	14.10	1.37	16.02	1.47
75.2	5.58	1.36	7.60	1.39	9.23	1.35	10.62	1.41	11.66	1.40	12.68	1.39	13.91	1.38	15.83	1.49
77.0	5.44	1.37	7.06	1.28	8.69	1.26	10.50	1.41	11.54	1.40	12.58	1.40	13.81	1.39	15.74	1.49
80.6	4.62	1.18	5.97	1.07	7.60	1.09	10.26	1.43	11.32	1.42	12.37	1.41	13.61	1.40	15.20	1.44

AFR	8.2
BF	0.10

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	2.95	2.20	0.45	2.70	2.07	0.55	2.46	1.95	0.66	2.34	1.90	0.71	2.21	1.84	0.77	2.07	1.77	0.83
16.0	22.0	3.07	2.15	0.45	2.83	2.04	0.56	2.58	1.93	0.66	2.46	1.87	0.72	2.33	1.82	0.77	2.19	1.75	0.83
18.0	25.0	3.19	2.25	0.45	2.95	2.15	0.56	2.70	2.04	0.67	2.58	1.99	0.72	2.46	1.94	0.77	2.31	1.88	0.84
19.4	26.7	3.25	2.38	0.45	3.01	2.27	0.56	2.76	2.17	0.67	2.64	2.12	0.72	2.52	2.07	0.77	2.37	2.02	0.84
22.0	30.0	3.44	2.29	0.46	3.19	2.19	0.57	2.95	2.11	0.67	2.82	2.06	0.72	2.70	2.02	0.78	2.55	1.97	0.84
24.0	32.0	3.56	2.22	0.57	3.31	2.14	0.57	3.07	2.06	0.67	2.94	2.02	0.73	2.82	1.98	0.78	2.67	1.93	0.85

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	10.07	7.50	0.45	9.23	7.08	0.55	8.39	6.67	0.66	7.97	6.47	0.71	7.55	6.27	0.77	7.05	6.04	0.83
60.8	71.6	10.48	7.35	0.45	9.64	6.96	0.56	8.80	6.57	0.66	8.39	6.39	0.72	7.97	6.20	0.77	7.46	5.98	0.83
64.4	77.0	10.90	7.69	0.45	10.06	7.32	0.56	9.22	6.97	0.67	8.80	6.79	0.72	8.38	6.62	0.77	7.88	6.41	0.84
67.0	80.0	11.10	8.10	0.45	10.27	7.75	0.56	9.43	7.41	0.67	9.00	7.24	0.72	9.00	7.08	0.77	8.08	6.88	0.84
71.6	86.0	11.73	7.80	0.46	10.89	7.49	0.57	10.05	7.19	0.67	9.63	7.04	0.72	9.21	6.89	0.78	8.71	6.72	0.84
75.2	89.6	12.14	7.58	0.57	11.30	7.30	0.57	10.46	7.03	0.67	10.05	6.89	0.73	9.63	6.76	0.78	9.12	6.60	0.85

Heating (60 Hz, 230 V)

AFR 8.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.00	1.29	2.58	1.32	3.14	1.35	3.42	1.34	3.71	1.34	4.00	1.33	4.34	1.33	4.90	1.43
21.1	1.80	1.33	2.38	1.35	2.95	1.38	3.25	1.38	3.55	1.37	3.84	1.36	4.20	1.36	4.77	1.46
22.0	1.71	1.35	2.30	1.37	2.87	1.40	3.18	1.39	3.48	1.38	3.78	1.38	4.14	1.37	4.71	1.47
24.0	1.63	1.36	2.23	1.39	2.71	1.35	3.11	1.41	3.41	1.40	3.72	1.39	4.08	1.38	4.66	1.49
25.0	1.59	1.37	2.07	1.28	2.55	1.26	3.07	1.41	3.38	1.40	3.69	1.40	4.06	1.39	4.63	1.49
27.0	1.35	1.18	1.75	1.07	2.23	1.09	3.00	1.43	3.32	1.42	3.63	1.41	4.00	1.40	4.46	1.44

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATUF	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	ΡI
59.0	6.86	1.29	8.85	1.32	10.76	1.35	11.70	1.34	12.66	1.34	13.62	1.33	14.79	1.33	16.66	1.43
70.0	6.15	1.33	8.16	1.35	10.10	1.38	11.10	1.38	12.10	1.37	13.10	1.36	14.30	1.36	16.20	1.46
71.6	5.86	1.35	7.89	1.37	9.83	1.40	10.86	1.39	11.88	1.38	12.89	1.38	14.10	1.37	16.02	1.47
75.2	5.58	1.36	7.60	1.39	9.23	1.35	10.62	1.41	11.66	1.40	12.68	1.39	13.91	1.38	15.83	1.49
77.0	5.44	1.37	7.06	1.28	8.69	1.26	10.50	1.41	11.54	1.40	12.58	1.40	13.81	1.39	15.74	1.49
80.6	4.62	1.18	5.97	1.07	7.60	1.09	10.26	1.43	11.32	1.42	12.37	1.41	13.61	1.40	15.20	1.44

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FVXS12NVJU + RXL12QMVJU9

Cooling (60 Hz, 208 V)

AFR	8.5
BF	0.11

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.35	2.42	0.53	53 3.07 2.28 0.65				2.14	0.78	2.65	2.07	0.84	2.51	2.00	0.90	2.35	1.92	0.98
16.0	22.0	3.49	2.37	0.53	3.21	2.24	0.66	2.93	2.11	0.78	2.79	2.04	0.84	2.65	1.98	0.91	2.49	1.90	0.98
18.0	25.0	3.63	2.47	0.53	3.35	2.34	0.66	3.07	2.22	0.79	2.93	2.16	0.85	2.79	2.10	0.91	2.62	2.03	0.99
19.4	26.7	3.70	2.59	0.54	3.42	2.47	0.66	3.14	2.35	0.79	3.00	2.29	0.85	2.86	2.24	0.91	2.69	2.17	0.99
22.0	30.0	3.91	2.49	0.54	3.63	2.38	0.67	3.35	2.28	0.79	3.21	2.23	0.86	3.07	2.18	0.92	2.90	2.12	0.99
24.0	32.0	4.04	2.42	0.55	3.76	2.32	0.67	3.49	2.22	0.80	3.35	2.18	0.86	3.21	2.13	0.92	3.04	2.08	1.00

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI
57.2	68.0	11.44	8.26	0.53	10.49	7.77	0.65	9.53	7.29	0.78	9.06	7.06	0.84	8.58	6.83	0.90	8.01	6.56	0.98
60.8	71.6	11.91	8.09	0.53	10.96	7.63	0.66	10.01	7.19	0.78	9.53	6.97	0.84	9.05	6.75	0.91	8.48	6.50	0.98
64.4	77.0	12.38	8.42	0.53	11.43	7.99	0.66	10.48	7.58	0.79	10.00	7.37	0.85	9.52	7.17	0.91	8.95	6.93	0.99
67.0	80.0	12.62	8.84	0.54	11.67	8.43	0.66	10.71	8.03	0.79	10.20	7.83	0.85	9.76	7.64	0.91	9.19	7.41	0.99
71.6	86.0	13.33	8.49	0.54	12.37	8.13	0.67	11.42	7.77	0.79	10.94	7.60	0.86	10.47	7.43	0.92	9.89	7.22	0.99
75.2	89.6	13.80	8.24	0.55	12.84	7.91	0.67	11.89	7.59	0.80	11.41	7.43	0.86	10.94	7.27	0.92	10.37	7.09	1.00

Heating (60 Hz, 208 V)

AFR 9.4

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.58	1.62	3.33	1.65	4.05	1.69	4.31	1.65	4.57	1.61	4.84	1.58	5.17	1.53	5.70	1.65
21.1	2.31	1.67	3.07	1.70	3.80	1.74	4.09	1.70	4.37	1.65	4.66	1.61	5.00	1.56	5.54	1.69
22.0	2.17	1.64	2.95	1.70	3.70	1.76	4.00	1.71	4.29	1.67	4.58	1.63	4.93	1.58	5.48	1.70
24.0	1.83	1.37	2.61	1.49	3.37	1.59	3.91	1.73	4.21	1.69	4.51	1.64	4.86	1.59	5.27	1.64
25.0	1.66	1.24	2.44	1.39	3.20	1.50	3.86	1.74	4.17	1.70	4.47	1.65	4.83	1.60	5.10	1.57
27.0	1.32	0.97	2.10	1.18	2.86	1.33	3.54	1.58	4.09	1.71	4.40	1.67	4.76	1.61	4.76	1.45

INDOOR						O	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	8.82	1.62	11.39	1.65	13.85	1.69	14.73	1.65	15.64	1.61	16.56	1.58	17.69	1.53	19.49	1.65
70.0	7.91	1.67	10.51	1.70	13.00	1.74	13.98	1.70	14.95	1.65	15.93	1.61	17.10	1.56	18.95	1.69
71.6	7.39	1.64	10.05	1.70	12.64	1.76	13.67	1.71	14.68	1.67	15.67	1.63	16.86	1.58	18.74	1.70
75.2	6.23	1.37	8.89	1.49	11.48	1.59	13.37	1.73	14.40	1.69	15.42	1.64	16.63	1.59	17.98	1.64
77.0	5.65	1.24	8.31	1.39	10.90	1.50	13.22	1.74	14.27	1.70	15.29	1.65	16.51	1.60	17.40	1.57
80.6	4.49	0.97	7.15	1.18	9.74	1.33	12.06	1.58	13.99	1.71	15.04	1.67	16.24	1.61	16.24	1.45

AFR	8.5
BF	0.11

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	3.35	2.42	0.53	3.07	2.28	0.65	2.79	2.14	0.78	2.65	2.07	0.84	2.51	2.00	0.90	2.35	1.92	0.98
16.0	22.0	3.49	2.37	0.53	3.21	2.24	0.66	2.93	2.11	0.78	2.79	2.04	0.84	2.65	1.98	0.91	2.49	1.90	0.98
18.0	25.0	3.63	2.47	0.53	3.35	2.34	0.66	3.07	2.22	0.79	2.93	2.16	0.85	2.79	2.10	0.91	2.62	2.03	0.99
19.4	26.7	3.70	2.59	0.54	3.42	2.47	0.66	3.14	2.35	0.79	3.00	2.29	0.85	2.86	2.24	0.91	2.69	2.17	0.99
22.0	30.0	3.91	2.49	0.54	3.63	2.38	0.67	3.35	2.28	0.79	3.21	2.23	0.86	3.07	2.18	0.92	2.90	2.12	0.99
24.0	32.0	4.04	2.42	0.55	3.76	2.32	0.67	3.49	2.22	0.80	3.35	2.18	0.86	3.21	2.13	0.92	3.04	2.08	1.00

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	11.44	8.26	0.53	10.49	7.77	0.65	9.53	7.29	0.78	9.06	7.06	0.84	8.58	6.83	0.90	8.01	6.56	0.98
60.8	71.6	11.91	8.09	0.53	10.96	7.63	0.66	10.01	7.19	0.78	9.53	6.97	0.84	9.05	6.75	0.91	8.48	6.50	0.98
64.4	77.0	12.38	8.42	0.53	11.43	7.99	0.66	10.48	7.58	0.79	10.00	7.37	0.85	9.52	7.17	0.91	8.95	6.93	0.99
67.0	80.0	12.62	8.84	0.54	11.67	8.43	0.66	10.71	8.03	0.79	10.20	7.83	0.85	9.76	7.64	0.91	9.19	7.41	0.99
71.6	86.0	13.33	8.49	0.54	12.37	8.13	0.67	11.42	7.77	0.79	10.94	7.60	0.86	10.47	7.43	0.92	9.89	7.22	0.99
75.2	89.6	13.80	8.24	0.55	12.84	7.91	0.67	11.89	7.59	0.80	11.41	7.43	0.86	10.94	7.27	0.92	10.37	7.09	1.00

Heating (60 Hz, 230 V)

AFR 9.4

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.58	1.62	3.33	1.65	4.05	1.69	4.31	1.65	4.57	1.61	4.84	1.58	5.17	1.53	5.70	1.65
21.1	2.31	1.67	3.07	1.70	3.80	1.74	4.09	1.70	4.37	1.65	4.66	1.61	5.00	1.56	5.54	1.69
22.0	2.17	1.64	2.95	1.70	3.70	1.76	4.00	1.71	4.29	1.67	4.58	1.63	4.93	1.58	5.48	1.70
24.0	1.83	1.37	2.61	1.49	3.37	1.59	3.91	1.73	4.21	1.69	4.51	1.64	4.86	1.59	5.27	1.64
25.0	1.66	1.24	2.44	1.39	3.20	1.50	3.86	1.74	4.17	1.70	4.47	1.65	4.83	1.60	5.10	1.57
27.0	1.32	0.97	2.10	1.18	2.86	1.33	3.54	1.58	4.09	1.71	4.40	1.67	4.76	1.61	4.76	1.45

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3		4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	PI
59.0	8.82	1.62	11.39	1.65	13.85	1.69	14.73	1.65	15.64	1.61	16.56	1.58	17.69	1.53	19.49	1.65
70.0	7.91	1.67	10.51	1.70	13.00	1.74	13.98	1.70	14.95	1.65	15.93	1.61	17.10	1.56	18.95	1.69
71.6	7.39	1.64	10.05	1.70	12.64	1.76	13.67	1.71	14.68	1.67	15.67	1.63	16.86	1.58	18.74	1.70
75.2	6.23	1.37	8.89	1.49	11.48	1.59	13.37	1.73	14.40	1.69	15.42	1.64	16.63	1.59	17.98	1.64
77.0	5.65	1.24	8.31	1.39	10.90	1.50	13.22	1.74	14.27	1.70	15.29	1.65	16.51	1.60	17.40	1.57
80.6	4.49	0.97	7.15	1.18	9.74	1.33	12.06	1.58	13.99	1.71	15.04	1.67	16.24	1.61	16.24	1.45

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
TC	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FVXS15NVJU + RXL15QMVJUA

Cooling (60 Hz, 208 V)

AFR	10.7
BF	0.13

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI TC SHC PI				TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.53	3.19	0.74	4.51	3.18	0.92	4.10	2.96	1.10	3.89	2.86	1.19	3.69	2.75	1.28	3.44	2.63	1.38
16.0	22.0	5.12	3.33	0.75	4.71	3.12	0.93	4.30	2.92	1.10	4.10	2.82	1.19	3.89	2.72	1.28	3.65	2.61	1.39
18.0	25.0	5.32	3.44	0.75	4.91	3.24	0.93	4.50	3.05	1.11	4.30	2.96	1.20	4.09	2.87	1.29	3.85	2.76	1.39
19.4	26.7	5.42	3.58	0.76	5.01	3.39	0.93	4.60	3.21	1.11	4.40	3.12	1.20	4.20	3.03	1.29	3.95	2.93	1.40
22.0	30.0	5.73	3.43	0.76	5.32	3.26	0.94	4.91	3.10	1.12	4.70	3.02	1.21	4.50	2.94	1.30	4.25	2.85	1.40
24.0	32.0	5.93	3.32	0.77	5.52	3.17	0.95	5.11	3.02	1.12	4.91	2.95	1.21	4.70	2.88	1.30	4.46	2.79	1.41

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	15.46	10.89	0.74	15.38	10.85	0.92	13.98	10.11	1.10	13.28	9.75	1.19	12.58	9.40	1.28	11.75	8.98	1.38
60.8	71.6	17.47	11.37	0.75	16.07	10.65	0.93	14.67	9.96	1.10	13.98	9.63	1.19	13.28	9.29	1.28	12.44	8.90	1.39
64.4	77.0	18.16	11.73	0.75	16.76	11.06	0.93	15.37	10.42	1.11	14.67	10.10	1.20	13.97	9.79	1.29	13.13	9.43	1.39
67.0	80.0	18.51	12.22	0.76	17.11	11.58	0.93	15.71	10.96	1.11	15.00	10.65	1.20	15.00	10.35	1.29	13.47	10.00	1.40
71.6	86.0	19.55	11.70	0.76	18.15	11.13	0.94	16.75	10.58	1.12	16.05	10.31	1.21	15.35	10.05	1.30	14.51	9.73	1.40
75.2	89.6	20.24	11.33	0.77	18.84	10.81	0.95	17.44	10.31	1.12	16.74	10.06	1.21	16.04	9.82	1.30	15.20	9.53	1.41

Heating (60 Hz, 208 V)

AFR 11.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	2	2	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.58	2.05	4.63	2.09	5.63	2.14	6.00	2.05	6.38	1.96	6.93	1.84	7.24	1.77	8.32	1.76
21.1	3.21	2.11	4.27	2.15	5.28	2.20	5.69	2.11	6.10	2.01	6.67	1.88	7.00	1.81	7.26	1.50
22.0	3.07	2.14	4.13	2.17	5.14	2.22	5.57	2.13	5.99	2.03	6.57	1.90	6.83	1.79	6.83	1.40
24.0	2.68	1.85	3.98	2.20	5.00	2.25	5.44	2.15	5.87	2.05	6.40	1.88	6.40	1.66	6.40	1.30
25.0	2.46	1.69	3.86	2.16	4.91	2.24	5.38	2.16	5.82	2.06	6.19	1.81	6.19	1.60	6.19	1.25
27.0	2.04	1.38	3.43	1.89	4.48	2.02	5.01	2.00	5.55	1.98	5.76	1.66	5.76	1.47	5.76	1.15

INDOOR						O	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	6	4	3	6	0
°F	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	12.22	2.05	15.77	2.09	19.18	2.14	20.48	2.05	21.82	1.96	23.72	1.84	24.83	1.77	28.40	1.76
70.0	10.96	2.11	14.55	2.15	18.00	2.20	19.43	2.11	20.86	2.01	22.86	1.88	24.00	1.81	24.75	1.50
71.6	10.45	2.14	14.06	2.17	17.53	2.22	19.01	2.13	20.47	2.03	22.51	1.90	23.30	1.79	23.30	1.40
75.2	9.13	1.85	13.58	2.20	17.05	2.25	18.59	2.15	20.09	2.05	21.84	1.88	21.84	1.66	21.84	1.30
77.0	8.40	1.69	13.16	2.16	16.75	2.24	18.38	2.16	19.90	2.06	21.11	1.81	21.11	1.60	21.11	1.25
80.6	6.94	1.38	11.71	1.89	15.29	2.02	17.11	2.00	18.93	1.98	19.66	1.66	19.66	1.47	19.66	1.15

AFR	10.7
BF	0.13

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	4.53	3.19	0.74	4.51	3.18	0.92	4.10	2.96	1.10	3.89	2.86	1.19	3.69	2.75	1.28	3.44	2.63	1.38
16.0	22.0	5.12	3.33	0.75	4.71	3.12	0.93	4.30	2.92	1.10	4.10	2.82	1.19	3.89	2.72	1.28	3.65	2.61	1.39
18.0	25.0	5.32	3.44	0.75	4.91	3.24	0.93	4.50	3.05	1.11	4.30	2.96	1.20	4.09	2.87	1.29	3.85	2.76	1.39
19.4	26.7	5.42	3.58	0.76	5.01	3.39	0.93	4.60	3.21	1.11	4.40	3.12	1.20	4.20	3.03	1.29	3.95	2.93	1.40
22.0	30.0	5.73	3.43	0.76	5.32	3.26	0.94	4.91	3.10	1.12	4.70	3.02	1.21	4.50	2.94	1.30	4.25	2.85	1.40
24.0	32.0	5.93	3.32	0.77	5.52	3.17	0.95	5.11	3.02	1.12	4.91	2.95	1.21	4.70	2.88	1.30	4.46	2.79	1.41

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	15.46	10.89	0.74	15.38	10.85	0.92	13.98	10.11	1.10	13.28	9.75	1.19	12.58	9.40	1.28	11.75	8.98	1.38
60.8	71.6	17.47	11.37	0.75	16.07	10.65	0.93	14.67	9.96	1.10	13.98	9.63	1.19	13.28	9.29	1.28	12.44	8.90	1.39
64.4	77.0	18.16	11.73	0.75	16.76	11.06	0.93	15.37	10.42	1.11	14.67	10.10	1.20	13.97	9.79	1.29	13.13	9.43	1.39
67.0	80.0	18.51	12.22	0.76	17.11	11.58	0.93	15.71	10.96	1.11	15.00	10.65	1.20	15.00	10.35	1.29	13.47	10.00	1.40
71.6	86.0	19.55	11.70	0.76	18.15	11.13	0.94	16.75	10.58	1.12	16.05	10.31	1.21	15.35	10.05	1.30	14.51	9.73	1.40
75.2	89.6	20.24	11.33	0.77	18.84	10.81	0.95	17.44	10.31	1.12	16.74	10.06	1.21	16.04	9.82	1.30	15.20	9.53	1.41

Heating (60 Hz, 230 V)

AFR 11.8

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	-20		5	-1	0	-	5	2	2	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.58	2.05	4.63	2.09	5.63	2.14	6.00	2.05	6.38	1.96	6.93	1.84	7.24	1.77	8.32	1.76
21.1	3.21	2.11	4.27	2.15	5.28	2.20	5.69	2.11	6.10	2.01	6.67	1.88	7.00	1.81	7.26	1.50
22.0	3.07	2.14	4.13	2.17	5.14	2.22	5.57	2.13	5.99	2.03	6.57	1.90	6.83	1.79	6.83	1.40
24.0	2.68	1.85	3.98	2.20	5.00	2.25	5.44	2.15	5.87	2.05	6.40	1.88	6.40	1.66	6.40	1.30
25.0	2.46	1.69	3.86	2.16	4.91	2.24	5.38	2.16	5.82	2.06	6.19	1.81	6.19	1.60	6.19	1.25
27.0	2.04	1.38	3.43	1.89	4.48	2.02	5.01	2.00	5.55	1.98	5.76	1.66	5.76	1.47	5.76	1.15

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	5	5	1	4	2	3	3	6	4	3	6	0
°F	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI	TC	ΡI
59.0	12.22	2.05	15.77	2.09	19.18	2.14	20.48	2.05	21.82	1.96	23.72	1.84	24.83	1.77	28.40	1.76
70.0	10.96	2.11	14.55	2.15	18.00	2.20	19.43	2.11	20.86	2.01	22.86	1.88	24.00	1.81	24.75	1.50
71.6	10.45	2.14	14.06	2.17	17.53	2.22	19.01	2.13	20.47	2.03	22.51	1.90	23.30	1.79	23.30	1.40
75.2	9.13	1.85	13.58	2.20	17.05	2.25	18.59	2.15	20.09	2.05	21.84	1.88	21.84	1.66	21.84	1.30
77.0	8.40	1.69	13.16	2.16	16.75	2.24	18.38	2.16	19.90	2.06	21.11	1.81	21.11	1.60	21.11	1.25
80.6	6.94	1.38	11.71	1.89	15.29	2.02	17.11	2.00	18.93	1.98	19.66	1.66	19.66	1.47	19.66	1.15

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FDMQ12RVJU + RXL12QMVJU9

Cooling (60 Hz, 208 V)

AFR	10.3
BF	0.15

Temp: Celsius / TC, SHC, PI: kW

IND	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI
14.0	20.0	3.54	2.63	0.57	3.24	2.48	0.71	2.95	2.33	0.84	2.80	2.26	0.91	2.65	2.19	0.98	2.48	2.11	1.06
16.0	22.0	3.68	2.57	0.58	3.39	2.44	0.71	3.09	2.30	0.85	2.95	2.23	0.92	2.80	2.17	0.99	2.62	2.09	1.07
18.0	25.0	3.83	2.69	0.58	3.53	2.56	0.72	3.24	2.44	0.85	3.09	2.37	0.92	2.94	2.31	0.99	2.77	2.24	1.07
19.4	26.7	3.90	2.84	0.58	3.61	2.71	0.72	3.31	2.59	0.85	3.18	2.53	0.92	3.02	2.47	0.99	2.84	2.40	1.07
22.0	30.0	4.12	2.73	0.59	3.83	2.62	0.72	3.53	2.51	0.86	3.38	2.46	0.93	3.24	2.41	1.00	3.06	2.35	1.08
24.0	32.0	4.27	2.65	0.73	3.97	2.55	0.73	3.68	2.46	0.87	3.53	2.41	0.93	3.38	2.36	1.00	3.21	2.31	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI
57.2	68.0	12.07	8.96	0.57	11.06	8.45	0.71	10.06	7.96	0.84	9.56	7.72	0.91	9.05	7.49	0.98	8.45	7.20	1.06
60.8	71.6	12.57	8.78	0.58	11.56	8.31	0.71	10.56	7.85	0.85	10.05	7.62	0.92	9.55	7.40	0.99	8.95	7.14	1.07
64.4	77.0	13.07	9.18	0.58	12.06	8.74	0.72	11.05	8.31	0.85	10.55	8.10	0.92	10.05	7.90	0.99	9.44	7.65	1.07
67.0	80.0	13.31	9.67	0.58	12.31	9.25	0.72	11.30	8.84	0.85	10.80	8.64	0.92	10.30	8.44	0.99	9.69	8.20	1.07
71.6	86.0	14.06	9.31	0.59	13.06	8.93	0.72	12.05	8.57	0.86	11.55	8.39	0.93	11.04	8.22	1.00	10.44	8.01	1.08
75.2	89.6	14.56	9.05	0.73	13.55	8.71	0.73	12.55	8.38	0.87	12.04	8.22	0.93	11.54	8.06	1.00	10.94	7.87	1.08

Heating (60 Hz, 208 V)

AFR 12.7

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0		5	()	6	3	15	5.5
°C	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.71	2.06	3.49	2.10	4.25	2.15	4.45	2.12	4.67	2.09	4.89	2.06	5.15	2.02	6.22	2.19
21.1	2.43	2.13	3.22	2.17	3.99	2.21	4.22	2.18	4.46	2.15	4.70	2.11	4.98	2.07	6.05	2.23
22.0	2.31	2.15	3.11	2.19	3.88	2.24	4.13	2.20	4.38	2.17	4.62	2.13	4.91	2.09	5.98	2.25
24.0	2.20	2.18	3.01	2.22	3.78	2.26	4.04	2.23	4.30	2.19	4.55	2.15	4.84	2.11	5.91	2.27
25.0	2.15	2.19	2.95	2.23	3.72	2.27	3.99	2.24	4.26	2.20	4.51	2.16	4.81	2.12	5.88	2.28
27.0	1.82	1.79	2.84	2.25	3.62	2.30	3.90	2.26	4.17	2.22	4.44	2.18	4.74	2.14	5.81	2.30

INDOOR						Ol	JTDOOF	R TEMP	ERATUR	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	9.23	2.06	11.91	2.10	14.49	2.15	15.19	2.12	15.92	2.09	16.67	2.06	17.59	2.02	21.23	2.19
70.0	8.28	2.13	10.99	2.17	13.60	2.21	14.41	2.18	15.22	2.15	16.03	2.11	17.00	2.07	20.65	2.23
71.6	7.90	2.15	10.63	2.19	13.24	2.24	14.10	2.20	14.94	2.17	15.77	2.13	16.77	2.09	20.41	2.25
75.2	7.52	2.18	10.26	2.22	12.89	2.26	13.79	2.23	14.66	2.19	15.52	2.15	16.53	2.11	20.18	2.27
77.0	7.33	2.19	10.07	2.23	12.71	2.27	13.63	2.24	14.52	2.20	15.39	2.16	16.41	2.12	20.06	2.28
80.6	6.21	1.79	9.71	2.25	12.35	2.30	13.32	2.26	14.24	2.22	15.13	2.18	16.18	2.14	19.83	2.30

AFR	10.3
BF	0.15

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	3.54	2.63	0.57	3.24	2.48	0.71	2.95	2.33	0.84	2.80	2.26	0.91	2.65	2.19	0.98	2.48	2.11	1.06
16.0	22.0	3.68	2.57	0.58	3.39	2.44	0.71	3.09	2.30	0.85	2.95	2.23	0.92	2.80	2.17	0.99	2.62	2.09	1.07
18.0	25.0	3.83	2.69	0.58	3.53	2.56	0.72	3.24	2.44	0.85	3.09	2.37	0.92	2.94	2.31	0.99	2.77	2.24	1.07
19.4	26.7	3.90	2.84	0.58	3.61	2.71	0.72	3.31	2.59	0.85	3.18	2.53	0.92	3.02	2.47	0.99	2.84	2.40	1.07
22.0	30.0	4.12	2.73	0.59	3.83	2.62	0.72	3.53	2.51	0.86	3.38	2.46	0.93	3.24	2.41	1.00	3.06	2.35	1.08
24.0	32.0	4.27	2.65	0.73	3.97	2.55	0.73	3.68	2.46	0.87	3.53	2.41	0.93	3.38	2.36	1.00	3.21	2.31	1.08

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI
57.2	68.0	12.07	8.96	0.57	11.06	8.45	0.71	10.06	7.96	0.84	9.56	7.72	0.91	9.05	7.49	0.98	8.45	7.20	1.06
60.8	71.6	12.57	8.78	0.58	11.56	8.31	0.71	10.56	7.85	0.85	10.05	7.62	0.92	9.55	7.40	0.99	8.95	7.14	1.07
64.4	77.0	13.07	9.18	0.58	12.06	8.74	0.72	11.05	8.31	0.85	10.55	8.10	0.92	10.05	7.90	0.99	9.44	7.65	1.07
67.0	80.0	13.31	9.67	0.58	12.31	9.25	0.72	11.30	8.84	0.85	10.80	8.64	0.92	10.30	8.44	0.99	9.69	8.20	1.07
71.6	86.0	14.06	9.31	0.59	13.06	8.93	0.72	12.05	8.57	0.86	11.55	8.39	0.93	11.04	8.22	1.00	10.44	8.01	1.08
75.2	89.6	14.56	9.05	0.73	13.55	8.71	0.73	12.55	8.38	0.87	12.04	8.22	0.93	11.54	8.06	1.00	10.94	7.87	1.08

Heating (60 Hz, 230 V)

AFR 12.7

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.71	2.06	3.49	2.10	4.25	2.15	4.45	2.12	4.67	2.09	4.89	2.06	5.15	2.02	6.22	2.19
21.1	2.43	2.13	3.22	2.17	3.99	2.21	4.22	2.18	4.46	2.15	4.70	2.11	4.98	2.07	6.05	2.23
22.0	2.31	2.15	3.11	2.19	3.88	2.24	4.13	2.20	4.38	2.17	4.62	2.13	4.91	2.09	5.98	2.25
24.0	2.20	2.18	3.01	2.22	3.78	2.26	4.04	2.23	4.30	2.19	4.55	2.15	4.84	2.11	5.91	2.27
25.0	2.15	2.19	2.95	2.23	3.72	2.27	3.99	2.24	4.26	2.20	4.51	2.16	4.81	2.12	5.88	2.28
27.0	1.82	1.79	2.84	2.25	3.62	2.30	3.90	2.26	4.17	2.22	4.44	2.18	4.74	2.14	5.81	2.30

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	PI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	PI	TC	ΡI
59.0	9.23	2.06	11.91	2.10	14.49	2.15	15.19	2.12	15.92	2.09	16.67	2.06	17.59	2.02	21.23	2.19
70.0	8.28	2.13	10.99	2.17	13.60	2.21	14.41	2.18	15.22	2.15	16.03	2.11	17.00	2.07	20.65	2.23
71.6	7.90	2.15	10.63	2.19	13.24	2.24	14.10	2.20	14.94	2.17	15.77	2.13	16.77	2.09	20.41	2.25
75.2	7.52	2.18	10.26	2.22	12.89	2.26	13.79	2.23	14.66	2.19	15.52	2.15	16.53	2.11	20.18	2.27
77.0	7.33	2.19	10.07	2.23	12.71	2.27	13.63	2.24	14.52	2.20	15.39	2.16	16.41	2.12	20.06	2.28
80.6	6.21	1.79	9.71	2.25	12.35	2.30	13.32	2.26	14.24	2.22	15.13	2.18	16.18	2.14	19.83	2.30

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
ΡI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FDMQ18RVJU + RXL18UMVJUA

Cooling (60 Hz, 208 V)

AFR	18.0
BF	0.11

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.77	4.45	0.86	5.28	4.22	1.06	4.80	3.99	1.27	4.56	3.88	1.37	4.32	3.77	1.47	4.04	3.64	1.60
16.0	22.0	6.00	4.36	0.86	5.52	4.15	1.07	5.04	3.93	1.27	4.80	3.83	1.38	4.56	3.72	1.48	4.27	3.60	1.60
18.0	25.0	6.24	4.59	0.87	5.76	4.39	1.08	5.28	4.19	1.28	5.04	4.09	1.38	4.80	4.00	1.49	4.51	3.88	1.61
19.4	26.7	6.36	4.86	0.87	5.88	4.67	1.08	5.40	4.48	1.28	5.16	4.38	1.39	4.92	4.29	1.49	4.63	4.18	1.61
22.0	30.0	6.72	4.69	0.88	6.24	4.52	1.09	5.75	4.35	1.29	5.51	4.27	1.40	5.27	4.18	1.50	4.99	4.09	1.62
24.0	32.0	6.95	4.57	1.09	6.47	4.41	1.09	5.99	4.26	1.30	5.75	4.18	1.40	5.51	4.11	1.50	5.22	4.02	1.63

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	FDOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
57.2	68.0	19.67	15.19	0.86	18.03	14.39	1.06	16.39	13.62	1.27	15.57	13.23	1.37	14.75	12.85	1.47	13.77	12.40	1.60
60.8	71.6	20.48	14.89	0.86	18.84	14.15	1.07	17.20	13.42	1.27	16.38	13.06	1.38	15.56	12.71	1.48	14.58	12.29	1.60
64.4	77.0	21.29	15.66	0.87	19.65	14.97	1.08	18.01	14.29	1.28	17.19	13.96	1.38	16.38	13.63	1.49	15.39	13.24	1.61
67.0	80.0	21.70	16.59	0.87	20.06	15.92	1.08	18.42	15.27	1.28	17.60	14.95	1.39	16.78	14.64	1.49	15.80	14.26	1.61
71.6	86.0	22.91	16.00	0.88	21.27	15.41	1.09	19.64	14.84	1.29	18.82	14.55	1.40	18.00	14.27	1.50	17.01	13.94	1.62
75.2	89.6	23.72	15.58	1.09	22.09	15.05	1.09	20.45	14.53	1.30	19.63	14.27	1.40	18.81	14.02	1.50	17.82	13.71	1.63

Heating (60 Hz, 208 V)

AFR 21.6

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0	-	5	()	6	3	15	5.5
°C	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.94	2.46	5.83	2.77	6.75	3.08	6.92	2.96	7.12	2.84	7.32	2.72	7.58	2.57	9.15	2.77
21.1	4.43	2.53	5.38	2.85	6.33	3.17	6.57	3.04	6.81	2.91	7.04	2.78	7.33	2.63	8.90	2.83
22.0	4.23	2.56	5.20	2.88	6.16	3.20	6.43	3.07	6.68	2.94	6.93	2.81	7.23	2.65	8.80	2.86
24.0	4.02	2.59	5.02	2.91	6.00	3.23	6.28	3.10	6.56	2.97	6.82	2.83	7.12	2.68	8.70	2.88
25.0	3.65	2.32	4.93	2.93	5.91	3.25	6.21	3.12	6.49	2.98	6.76	2.85	7.07	2.69	8.65	2.89
27.0	2.81	1.73	4.72	2.93	5.75	3.29	6.07	3.15	6.37	3.01	6.65	2.87	6.97	2.71	8.54	2.92

INDOOR						O	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	ΡI
59.0	16.86	2.46	19.90	2.77	23.02	3.08	23.62	2.96	24.29	2.84	24.99	2.72	25.86	2.57	31.23	2.77
70.0	15.12	2.53	18.36	2.85	21.60	3.17	22.41	3.04	23.22	2.91	24.03	2.78	25.00	2.63	30.36	2.83
71.6	14.42	2.56	17.75	2.88	21.03	3.20	21.93	3.07	22.79	2.94	23.64	2.81	24.65	2.65	30.02	2.86
75.2	13.73	2.59	17.13	2.91	20.47	3.23	21.44	3.10	22.37	2.97	23.26	2.83	24.31	2.68	29.67	2.88
77.0	12.44	2.32	16.82	2.93	20.18	3.25	21.20	3.12	22.15	2.98	23.07	2.85	24.14	2.69	29.50	2.89
80.6	9.60	1.73	16.11	2.93	19.61	3.29	20.71	3.15	21.73	3.01	22.69	2.87	23.79	2.71	29.16	2.92

AFR	18.0
BF	0.11

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	5.77	4.45	0.86	5.28	4.22	1.06	4.80	3.99	1.27	4.56	3.88	1.37	4.32	3.77	1.47	4.04	3.64	1.60
16.0	22.0	6.00	4.36	0.86	5.52	4.15	1.07	5.04	3.93	1.27	4.80	3.83	1.38	4.56	3.72	1.48	4.27	3.60	1.60
18.0	25.0	6.24	4.59	0.87	5.76	4.39	1.08	5.28	4.19	1.28	5.04	4.09	1.38	4.80	4.00	1.49	4.51	3.88	1.61
19.4	26.7	6.36	4.86	0.87	5.88	4.67	1.08	5.40	4.48	1.28	5.16	4.38	1.39	4.92	4.29	1.49	4.63	4.18	1.61
22.0	30.0	6.72	4.69	0.88	6.24	4.52	1.09	5.75	4.35	1.29	5.51	4.27	1.40	5.27	4.18	1.50	4.99	4.09	1.62
24.0	32.0	6.95	4.57	1.09	6.47	4.41	1.09	5.99	4.26	1.30	5.75	4.18	1.40	5.51	4.11	1.50	5.22	4.02	1.63

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

	OOR		,					OUT		TEMP	FRATI	IRE (°F	DB)						
EWB	EDB		50			68			86			95	00)		104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	19.67	15.19	0.86	18.03	14.39	1.06	16.39	13.62	1.27	15.57	13.23	1.37	14.75	12.85	1.47	13.77	12.40	1.60
60.8	71.6	20.48	14.89	0.86	18.84	14.15	1.07	17.20	13.42	1.27	16.38	13.06	1.38	15.56	12.71	1.48	14.58	12.29	1.60
64.4	77.0	21.29	15.66	0.87	19.65	14.97	1.08	18.01	14.29	1.28	17.19	13.96	1.38	16.38	13.63	1.49	15.39	13.24	1.61
67.0	80.0	21.70	16.59	0.87	20.06	15.92	1.08	18.42	15.27	1.28	17.60	14.95	1.39	16.78	14.64	1.49	15.80	14.26	1.61
71.6	86.0	22.91	16.00	0.88	21.27	15.41	1.09	19.64	14.84	1.29	18.82	14.55	1.40	18.00	14.27	1.50	17.01	13.94	1.62
75.2	89.6	23.72	15.58	1.09	22.09	15.05	1.09	20.45	14.53	1.30	19.63	14.27	1.40	18.81	14.02	1.50	17.82	13.71	1.63

Heating (60 Hz, 230 V)

AFR 21.6

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	′B)					
EDB	-2	25	-2	20	-1	5	-1	0	-	5	()	(3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	4.94	2.46	5.83	2.77	6.75	3.08	6.92	2.96	7.12	2.84	7.32	2.72	7.58	2.57	9.15	2.77
21.1	4.43	2.53	5.38	2.85	6.33	3.17	6.57	3.04	6.81	2.91	7.04	2.78	7.33	2.63	8.90	2.83
22.0	4.23	2.56	5.20	2.88	6.16	3.20	6.43	3.07	6.68	2.94	6.93	2.81	7.23	2.65	8.80	2.86
24.0	4.02	2.59	5.02	2.91	6.00	3.23	6.28	3.10	6.56	2.97	6.82	2.83	7.12	2.68	8.70	2.88
25.0	3.65	2.32	4.93	2.93	5.91	3.25	6.21	3.12	6.49	2.98	6.76	2.85	7.07	2.69	8.65	2.89
27.0	2.81	1.73	4.72	2.93	5.75	3.29	6.07	3.15	6.37	3.01	6.65	2.87	6.97	2.71	8.54	2.92

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI	TC	ΡI
59.0	16.86	2.46	19.90	2.77	23.02	3.08	23.62	2.96	24.29	2.84	24.99	2.72	25.86	2.57	31.23	2.77
70.0	15.12	2.53	18.36	2.85	21.60	3.17	22.41	3.04	23.22	2.91	24.03	2.78	25.00	2.63	30.36	2.83
71.6	14.42	2.56	17.75	2.88	21.03	3.20	21.93	3.07	22.79	2.94	23.64	2.81	24.65	2.65	30.02	2.86
75.2	13.73	2.59	17.13	2.91	20.47	3.23	21.44	3.10	22.37	2.97	23.26	2.83	24.31	2.68	29.67	2.88
77.0	12.44	2.32	16.82	2.93	20.18	3.25	21.20	3.12	22.15	2.98	23.07	2.85	24.14	2.69	29.50	2.89
80.6	9.60	1.73	16.11	2.93	19.61	3.29	20.71	3.15	21.73	3.01	22.69	2.87	23.79	2.71	29.16	2.92

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

(Figures out of the tables should not be used for calculation.)

 Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

FDMQ24RVJU + RXL24UMVJUA

Cooling (60 Hz, 208 V)

AFR	19.9
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20.0	6.94	5.11	1.05	6.37	4.82	1.30	5.79	4.53	1.55	5.50	4.40	1.68	5.21	4.26	1.80	4.86	4.09	1.95
16.0	22.0	7.23	5.01	1.06	6.65	4.74	1.31	6.07	4.47	1.56	5.78	4.34	1.68	5.49	4.21	1.81	5.15	4.06	1.96
18.0	25.0	7.52	5.23	1.07	6.94	4.97	1.32	6.36	4.73	1.57	6.07	4.61	1.69	5.78	4.49	1.82	5.43	4.34	1.97
19.4	26.7	7.66	5.50	1.07	7.08	5.26	1.32	6.50	5.02	1.57	6.21	4.90	1.70	5.92	4.79	1.82	5.58	4.65	1.97
22.0	30.0	8.09	5.29	1.08	7.51	5.08	1.33	6.93	4.87	1.58	6.64	4.76	1.71	6.35	4.66	1.83	6.01	4.54	1.98
24.0	32.0	8.38	5.15	1.34	7.80	4.95	1.34	7.22	4.76	1.59	6.93	4.66	1.71	6.64	4.57	1.84	6.29	4.46	1.99

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	IRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	PI
57.2	68.0	23.69	17.44	1.05	21.72	16.44	1.30	19.75	15.47	1.55	18.76	15.00	1.68	17.77	14.53	1.80	16.59	13.97	1.95
60.8	71.6	24.67	17.09	1.06	22.70	16.16	1.31	20.72	15.25	1.56	19.73	14.80	1.68	18.75	14.36	1.81	17.56	13.84	1.96
64.4	77.0	25.65	17.84	1.07	23.67	16.97	1.32	21.70	16.13	1.57	20.71	15.71	1.69	19.72	15.30	1.82	18.54	14.82	1.97
67.0	80.0	26.14	18.78	1.07	24.16	17.95	1.32	22.19	17.13	1.57	21.20	16.73	1.70	20.21	16.34	1.82	19.03	15.87	1.97
71.6	86.0	27.60	18.06	1.08	25.63	17.32	1.33	23.65	16.61	1.58	22.67	16.25	1.71	21.68	15.90	1.83	20.49	15.49	1.98
75.2	89.6	28.58	17.55	1.34	26.60	16.88	1.34	24.63	16.23	1.59	23.64	15.91	1.71	22.65	15.59	1.84	21.47	15.21	1.99

Heating (60 Hz, 208 V)

AFR 25.6

Temp: Celsius / TC, PI: kW

INDOOR						OL	JTDOOF	R TEMP	ERATU	RE (°CW	/B)					
EDB	-2	25	-2	20	-1	15	-1	0		5	()	6	3	15	5.5
°C	TC	ΡI	TC	PI	TC	PI	TC	ΡI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	5.26	2.91	6.21	3.27	7.18	3.64	7.44	3.49	7.72	3.33	8.01	3.17	8.37	2.98	10.10	3.22
21.1	4.72	3.00	5.73	3.37	6.74	3.74	7.06	3.58	7.38	3.41	7.70	3.25	8.09	3.05	9.82	3.29
22.0	4.50	3.03	5.54	3.41	6.56	3.79	6.91	3.62	7.25	3.45	7.58	3.28	7.98	3.08	9.71	3.32
24.0	4.28	3.07	5.35	3.45	6.39	3.83	6.76	3.65	7.11	3.48	7.46	3.31	7.87	3.11	9.60	3.34
25.0	4.18	3.09	5.25	3.47	6.30	3.85	6.68	3.67	7.04	3.50	7.40	3.33	7.81	3.12	9.55	3.36
27.0	3.26	2.30	5.06	3.51	6.12	3.89	6.53	3.71	6.91	3.53	7.27	3.36	7.70	3.15	9.43	3.38

INDOOR						Ol	JTDOOF	R TEMP	ERATU	RE (°FW	/B)					
EDB	-1	<u>-13</u> <u>-4</u> <u>5</u> <u>14</u> <u>23</u> <u>32</u> <u>43</u>														0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI
59.0	17.95	2.91	21.18	3.27	24.51	3.64	25.40	3.49	26.35	3.33	27.34	3.17	28.55	2.98	34.47	3.22
70.0	16.10	3.00	19.55	3.37	23.00	3.74	24.10	3.58	25.19	3.41	26.29	3.25	27.60	3.05	33.52	3.29
71.6	15.36	3.03	18.90	3.41	22.40	3.79	23.57	3.62	24.73	3.45	25.87	3.28	27.22	3.08	33.14	3.32
75.2	14.62	3.07	18.24	3.45	21.79	3.83	23.05	3.65	24.26	3.48	25.45	3.31	26.84	3.11	32.76	3.34
77.0	14.25	3.09	17.92	3.47	21.49	3.85	22.79	3.67	24.03	3.50	25.24	3.33	26.65	3.12	32.57	3.36
80.6	11.14	2.30	17.26	3.51	20.89	3.89	22.27	3.71	23.57	3.53	24.82	3.36	26.27	3.15	32.19	3.38

AFR	19.9
BF	0.16

Temp: Celsius / TC, SHC, PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	RE (°C	DB)						
EWB	EDB		10			20			30			35			40			46	
°C	°C	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI
14.0	20.0	6.94	5.11	1.05	6.37	4.82	1.30	5.79	4.53	1.55	5.50	4.40	1.68	5.21	4.26	1.80	4.86	4.09	1.95
16.0	22.0	7.23	5.01	1.06	6.65	4.74	1.31	6.07	4.47	1.56	5.78	4.34	1.68	5.49	4.21	1.81	5.15	4.06	1.96
18.0	25.0	7.52	5.23	1.07	6.94	4.97	1.32	6.36	4.73	1.57	6.07	4.61	1.69	5.78	4.49	1.82	5.43	4.34	1.97
19.4	26.7	7.66	5.50	1.07	7.08	5.26	1.32	6.50	5.02	1.57	6.21	4.90	1.70	5.92	4.79	1.82	5.58	4.65	1.97
22.0	30.0	8.09	5.29	1.08	7.51	5.08	1.33	6.93	4.87	1.58	6.64	4.76	1.71	6.35	4.66	1.83	6.01	4.54	1.98
24.0	32.0	8.38	5.15	1.34	7.80	4.95	1.34	7.22	4.76	1.59	6.93	4.66	1.71	6.64	4.57	1.84	6.29	4.46	1.99

Temp: Fahrenheit / TC, SHC: kBtu/h / PI: kW

INDO	DOR							OUT	DOOR	TEMP	ERATU	JRE (°F	DB)						
EWB	EDB		50			68			86			95			104			115	
°F	°F	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	PI	TC	SHC	ΡI	TC	SHC	ΡI	TC	SHC	PI
57.2	68.0	23.69	17.44	1.05	21.72	16.44	1.30	19.75	15.47	1.55	18.76	15.00	1.68	17.77	14.53	1.80	16.59	13.97	1.95
60.8	71.6	24.67	17.09	1.06	22.70	16.16	1.31	20.72	15.25	1.56	19.73	14.80	1.68	18.75	14.36	1.81	17.56	13.84	1.96
64.4	77.0	25.65	17.84	1.07	23.67	16.97	1.32	21.70	16.13	1.57	20.71	15.71	1.69	19.72	15.30	1.82	18.54	14.82	1.97
67.0	80.0	26.14	18.78	1.07	24.16	17.95	1.32	22.19	17.13	1.57	21.20	16.73	1.70	20.21	16.34	1.82	19.03	15.87	1.97
71.6	86.0	27.60	18.06	1.08	25.63	17.32	1.33	23.65	16.61	1.58	22.67	16.25	1.71	21.68	15.90	1.83	20.49	15.49	1.98
75.2	89.6	28.58	17.55	1.34	26.60	16.88	1.34	24.63	16.23	1.59	23.64	15.91	1.71	22.65	15.59	1.84	21.47	15.21	1.99

Heating (60 Hz, 230 V)

AFR 25.6

Temp: Celsius / TC, PI: kW

INDOOR	OUTDOOR TEMPERATURE (°CWB)															
EDB	-2	25	-2	20	-1	5	-1	0		5	()	6	3	15	5.5
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	5.26	2.91	6.21	3.27	7.18	3.64	7.44	3.49	7.72	3.33	8.01	3.17	8.37	2.98	10.10	3.22
21.1	4.72	3.00	5.73	3.37	6.74	3.74	7.06	3.58	7.38	3.41	7.70	3.25	8.09	3.05	9.82	3.29
22.0	4.50	3.03	5.54	3.41	6.56	3.79	6.91	3.62	7.25	3.45	7.58	3.28	7.98	3.08	9.71	3.32
24.0	4.28	3.07	5.35	3.45	6.39	3.83	6.76	3.65	7.11	3.48	7.46	3.31	7.87	3.11	9.60	3.34
25.0	4.18	3.09	5.25	3.47	6.30	3.85	6.68	3.67	7.04	3.50	7.40	3.33	7.81	3.12	9.55	3.36
27.0	3.26	2.30	5.06	3.51	6.12	3.89	6.53	3.71	6.91	3.53	7.27	3.36	7.70	3.15	9.43	3.38

Temp: Fahrenheit / TC: kBtu/h / PI: kW

INDOOR	OUTDOOR TEMPERATURE (°FWB)															
EDB	-1	3	-4	4	Ę	5	1	4	2	3	3	2	4	3	6	0
°F	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	ΡI	TC	PI
59.0	17.95	2.91	21.18	3.27	24.51	3.64	25.40	3.49	26.35	3.33	27.34	3.17	28.55	2.98	34.47	3.22
70.0	16.10	3.00	19.55	3.37	23.00	3.74	24.10	3.58	25.19	3.41	26.29	3.25	27.60	3.05	33.52	3.29
71.6	15.36	3.03	18.90	3.41	22.40	3.79	23.57	3.62	24.73	3.45	25.87	3.28	27.22	3.08	33.14	3.32
75.2	14.62	3.07	18.24	3.45	21.79	3.83	23.05	3.65	24.26	3.48	25.45	3.31	26.84	3.11	32.76	3.34
77.0	14.25	3.09	17.92	3.47	21.49	3.85	22.79	3.67	24.03	3.50	25.24	3.33	26.65	3.12	32.57	3.36
80.6	11.14	2.30	17.26	3.51	20.89	3.89	22.27	3.71	23.57	3.53	24.82	3.36	26.27	3.15	32.19	3.38

Symbols:

AFR	: Airflow rate	(m³/min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C) / (°F)
EDB	: Entering dry bulb temp.	(°C) / (°F)
тс	: Total capacity	(kW) / (kBtu/h)
SHC	: Sensible heat capacity	(kW) / (kBtu/h)
PI	: Power input	(kW)

Notes:

1. shows nominal (rated) capacities and power input (Cooling) and MAX capacities and power input (Heating).

2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.

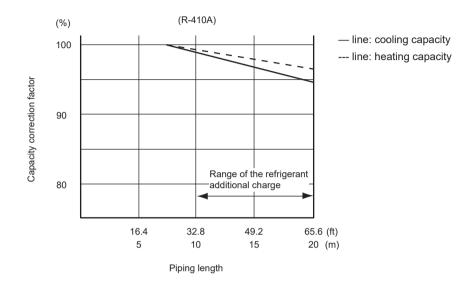
(Figures out of the tables should not be used for calculation.)

3. Capacities are based on the following conditions. Corresponding refrigerant piping length : 25 ft (7.5 m) Level difference : 0 ft (0 m)

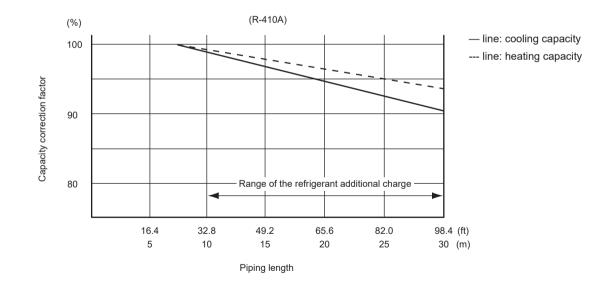
7.1 Capacity Correction Factor by the Length of Refrigerant Piping (Reference)

The cooling capacity and the heating capacity of the unit have to be corrected in accordance with the length of refrigerant piping — the distance between the indoor unit and the outdoor unit.

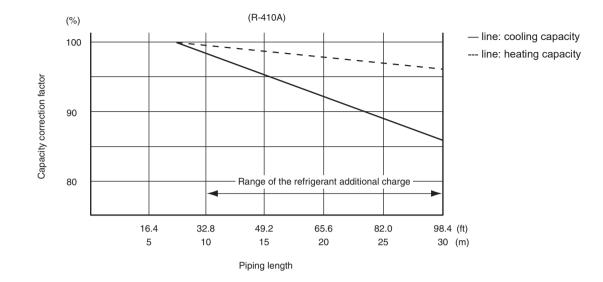
7.1.1 09/12 Class



7.1.2 15/18 Class



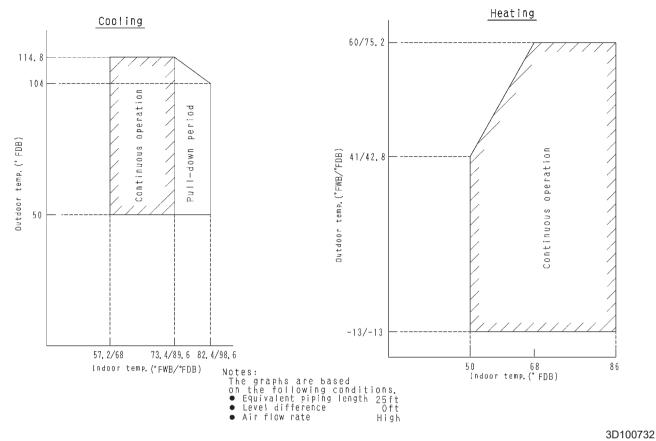
7.1.3 24 Class



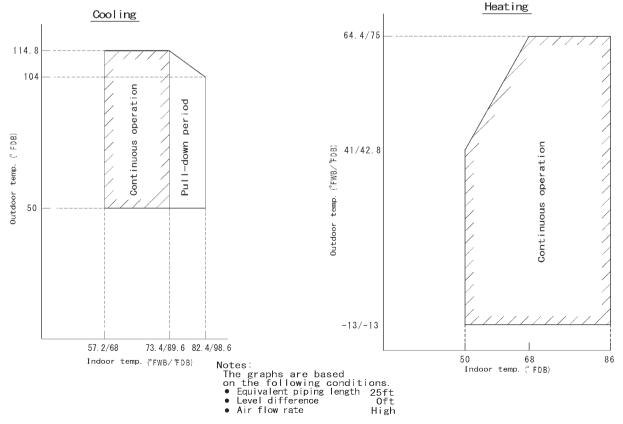
Note: The graphs show the factor when additional refrigerant of the proper quantity is charged.

8. Operation Limit

RXL09QMVJU, RXL15QMVJUA

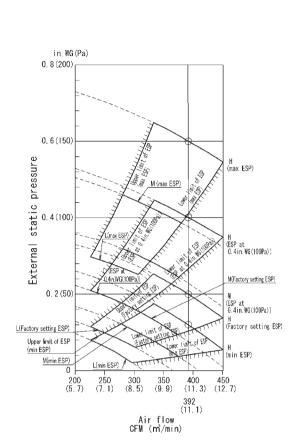


RXL12QMVJU9, RXL18/24UMVJUA



9. Fan Characteristics

9.1 External Static Pressure FDMQ12RVJU



Fan characteristics ①

(For field setting of remote controller) Range of available air flow rate in [H] in.WG(Pa) 0.8(200) 0.6(150) pressure 0.60in.WG(150Pa) max ESP 0.56 in WG (140Pa) External static 0.4(100) 0. 52 in. WG (130Pa) 0.48in WG(120Pa) 44 in. WG (110Pa) .40in.WG(100Pa) . 36 i n. WG (90Pa) 0.2(50) 0. 32 in. WG (80 Pa)). 28 in. WG (70Pa) 0. 24 in. WG (60Pa) 0.20in.WG(50Pa) Factory setting ESP 0. 16 in. WG (40Pa) 0 0. 12 in. WG (30Pa) 400 (11.3) 300 (8, 5) 350 (9, 9) 450 (12, 7) 500 (14, 2) **392** (11. 1) 333 (9.4) 451 (12.8) Air flow CFM (m²/min)

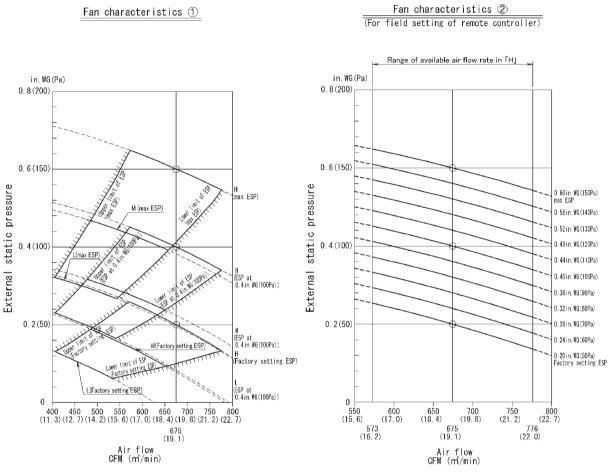
Fan characteristics ②

Notes:

- Notes:
 1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
 2. Fan characteristics(D)shows a representative of fan characteristics at the time of "Maximum ESP". "ESP at 0.4 in, WG(100Pa)" "Factory setting ESP"and" Winnum ESP".
 3. A remote controller can be used to change airflow rate of "H". "M" and "L".
 4. Set the ESP on suction side to 0.4 in, WG(100Pa) or less.
 5. Fan characteristics(2) (for field setting of remote controller) shows atting can be charged in the field

- am characteristics of airflow "H which can be changed in the field setting by a remote controller.
 6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics() and (2) (Factory setting ESP is 0.2in.WG(50Pa).
- (Factory setting ESP is 0.2in.WG(SOPa See installation manual for ESP setting procedure.)
 7. The ESP setting of this unit can be changed into 13 levels.
 8. The value of Far characteristics? mentioned in this drawing shows the ESP of rated airflow.

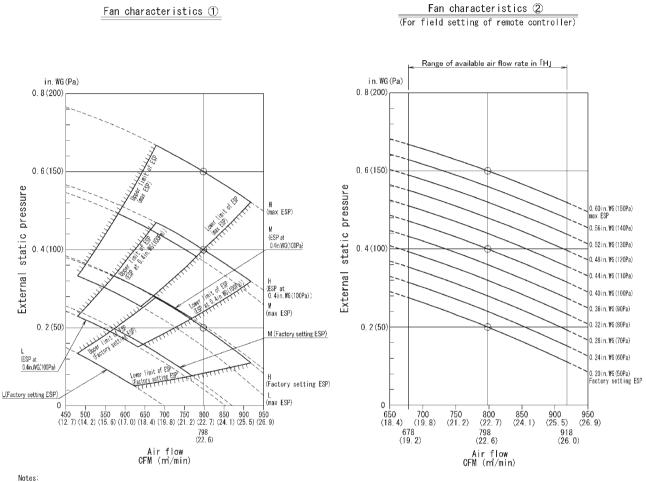
FDMQ18RVJU



- Notes:
 1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
 2. Fan characteristics of shows a representative of fan characteristics at the time of "Maximum ESP". "ESP at 0.4in, WG(100Pa)" and "Factory setting ESP".
 3. A remote controller can be used to change airflow rate of "H". "M" and "L".
 4. Set the ESP on suction side to 0.4in, WG(100Pa) or less.
 5. Fan characteristics of airflow "H"

- fan characteristics of airflow "H" which can be changed in the field
- which can be changed in the field setting by a remote controller.
 6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics ① and ② (Factory setting ESP is 0.2 in, WG(50Pa). See installation manual for ESP actting preadure)
- 7. The ESP setting of this unit can be changed into 11 levels.
 8. The value of Fan characteristics mentioned in this drawing shows the ESP of rated airflow.

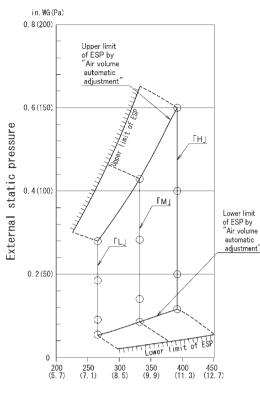
FDMQ24RVJU



- Notes:
 1. Fan characteristics at the time of rear suction and bottom suction are similar to each other.
 2. Fan characteristics(D)shows a representative of fan characteristics at the time of "Maximum ESP", "ESP at 0.4 in, WG(100Pa)" and "Factory setting ESP".
 3. A remote controller can be used to change airflow rate of "H", "W" and "L".
 4. Set the ESP on suction side to 0.4 in, WG(100Pa) or less.
 5. Fan characteristics(2) (for field setting of remote controller) shows fan characteristics of airflow "H" which can be changed in the field

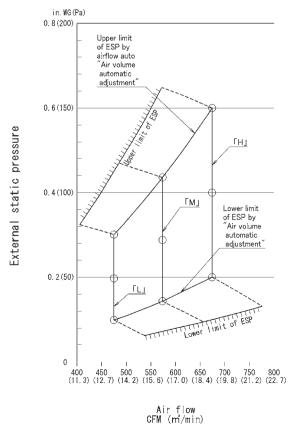
- fan characteristics of airflow "H" which can be changed in the field setting by a remote controller.
 6. Select ESP setting in accordance with resistance of the connected duct by using Fan characteristics ① and ② (Factory setting ESP is 0.2in.WG(50Pa). See installation manual for ESP setting procedure)
- setting procedure.) 7. The ESP setting of this unit can be changed into 11 levels. 8. The value of Fan characteristics (2)
- mentioned in this drawing shows the ESP of rated airflow.

9.2 Airflow Auto Adjustment FDMQ12RVJU





FDMQ18RVJU



- Notes :
 1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
 2. After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
 3. About the field setting method of the "Air volume automatic digustment", look at the installation manual which is attached to an indoor unit.
- an indoor unit.
 4. ESP that can adjust by "Air volume automatic adjustment" function is 0.12in.WG (30Pa) 0.6in.WG(150Pa) (When air flow is "H").
 5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the reduct under the set of under
- operate with the air flow rate different from the rated value.
 6. This figure shows a fan characteristics at the time of "H" "M" and "L".
 7. The remote controller can be used to change "H" "M" and "L".

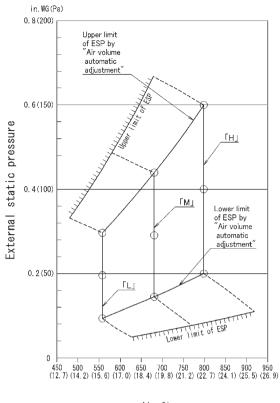
ESP : external static pressure.

3D113122

- Notes : 1. This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value, at the time of installation.
- at the time of installation.
 After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
 About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to on index units.

- installation manual which is attached to an indoor unit.
 4. ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG (50Pa) 0.6in.WG(150Pa) (When air flow is "H").
 5. If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value the rated value.
- This figure shows a fan characteristics at the time of "H" "M" and "L".
 The remote controller can be used to change "H" "M" and "L".

FDMQ24RVJU



Air flow CFM (m³/min)

- Notes :

 This indoor unit has the "Air volume automatic adjustment" function, which automatically adjusts the air flow rate so as to be approximately in the range of ±10% of the rated value. at the time of installation.
 After duct construction completion, please perform field setting "Air volume automatic adjustment" by remote controller.
 About the field setting method of the "Air volume automatic adjustment", look at the installation manual which is attached to an indoor unit.
 ESP that can adjust by "Air volume automatic adjustment" function is 0.2in.WG (50Pa) 0.6in.WG(150Pa) (When air flow is "H").
 If the unit is used beyond the range of the above-mentioned ESP, the air flow rate can not be well-adjusted automatically, and the unit will operate with the air flow rate different from the rated value.

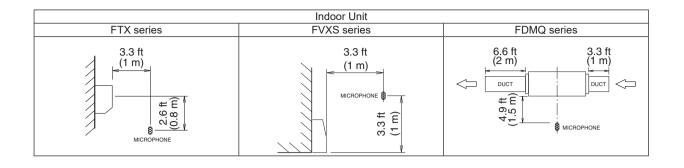
 The inverse form observe for personations.

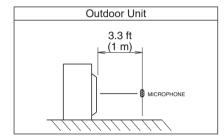
- 6. This figure shows a fan characteristics at the time of "H" "M" and "L".
 7. The remote controller can be used to change "H" "M" and "L".

ESP : external static pressure.

3D113129

10.1 Measuring Location



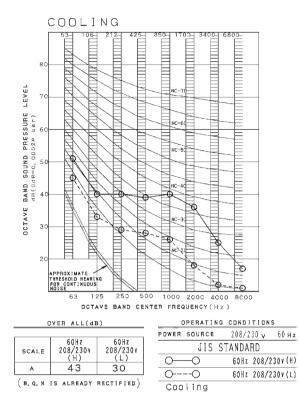


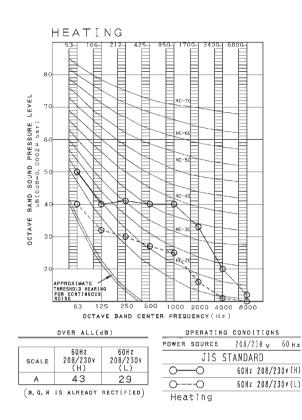
Notes: 1. Operation sound is measured in an anechoic chamber.

2. The data are based on the conditions shown in the table below.

Cooling	Heating	Piping Length
Indoor ; 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB) Outdoor ; 95°FDB (35°CDB) / 75°FWB (24°CWB)	Indoor ; 70°FDB (21°CDB) / 60°FWB (15.6°CWB) Outdoor ; 47°FDB (8.3°CDB) / 43°FWB (6°CWB)	16.4 ft (5 m)

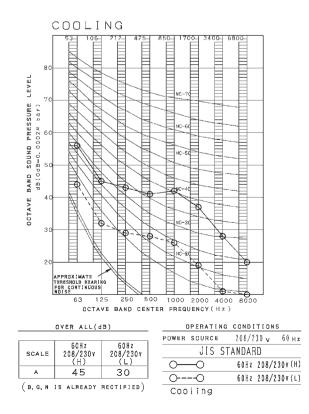
10.2 Indoor Unit FTX09NMVJU

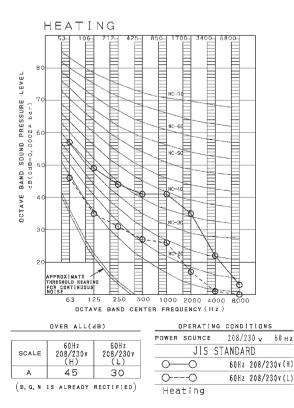




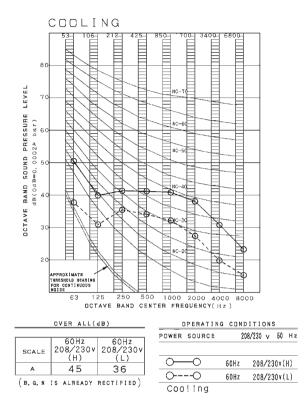


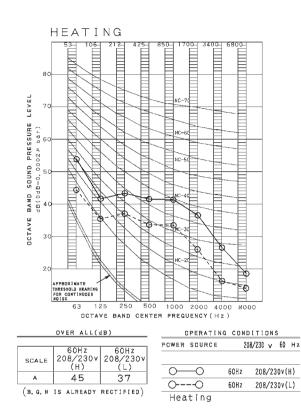
FTX12NMVJU





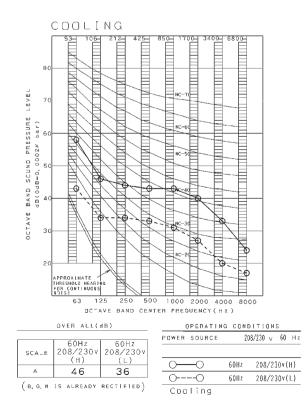
FTX15NMVJU

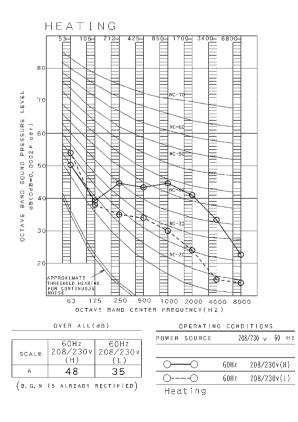




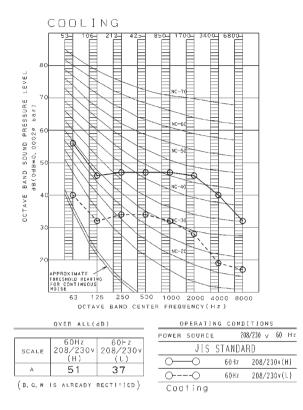


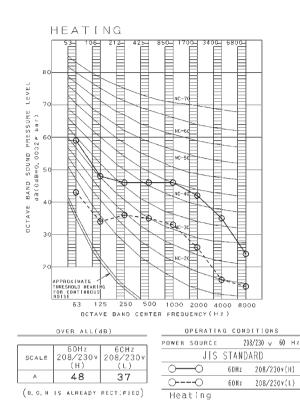
FTX18UVJU





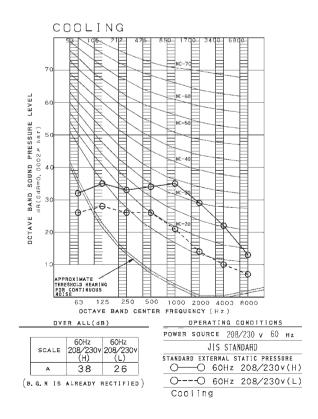
FTX24UVJU

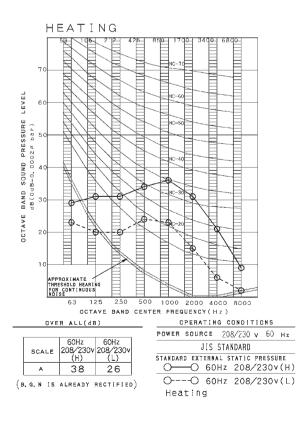




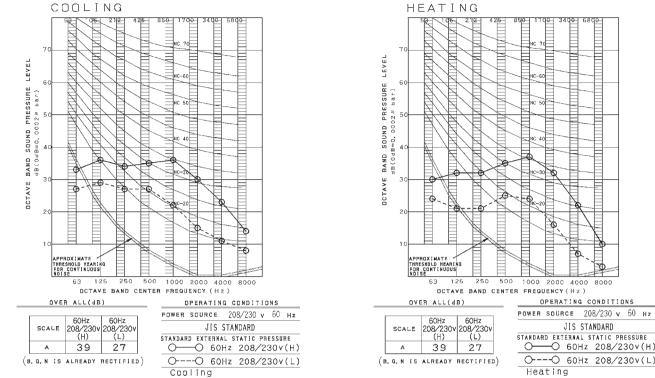
3D074866A

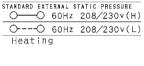
FVXS09NVJU





FVXS12NVJU





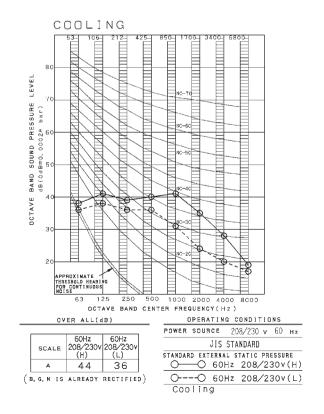
JIS STANDARD

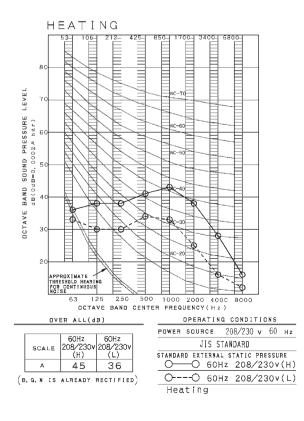
9

ð

3D094766

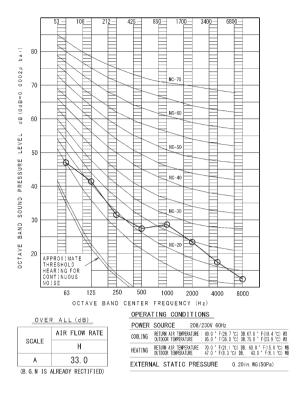
FVXS15NVJU



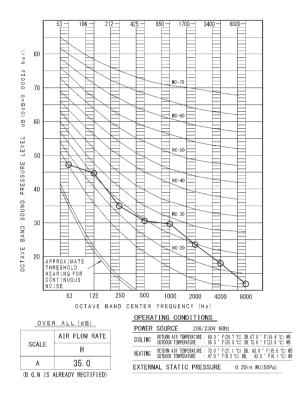


FDMQ12RVJU

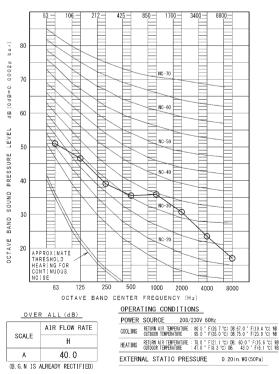
FDMQ24RVJU



FDMQ18RVJU



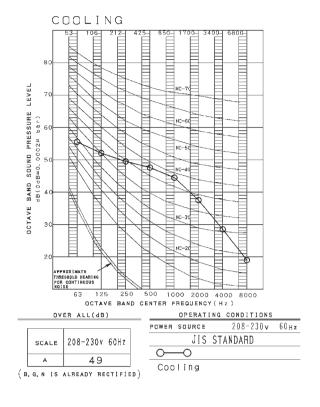
4D113012

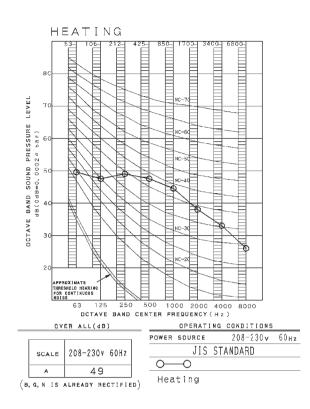


4D113010A

4D113013

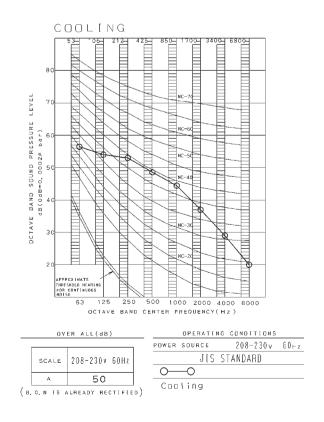
10.3 Outdoor Unit RXL09QMVJU

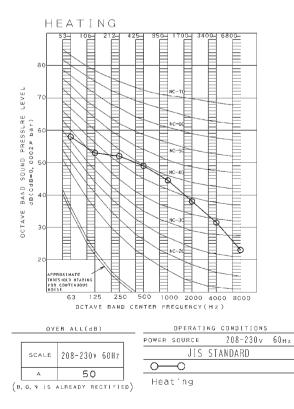




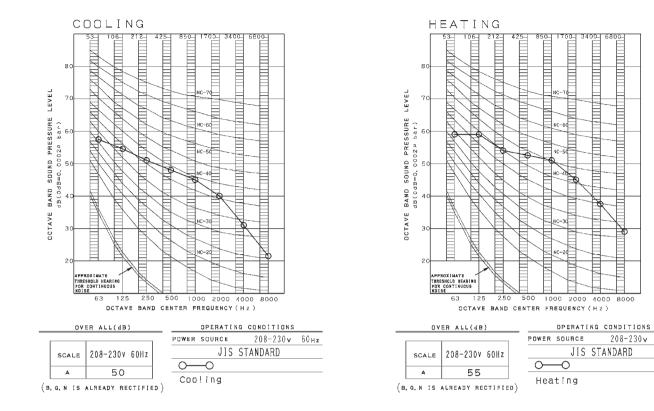
3D100630

RXL12QMVJU9





RXL15QMVJUA

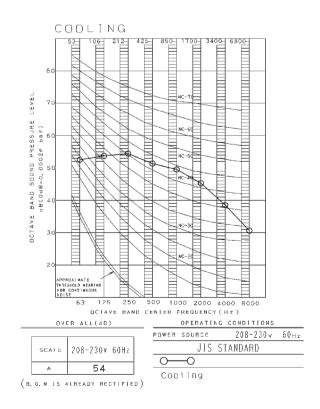


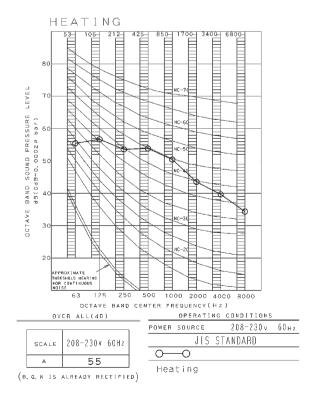


208-230v 60Hz

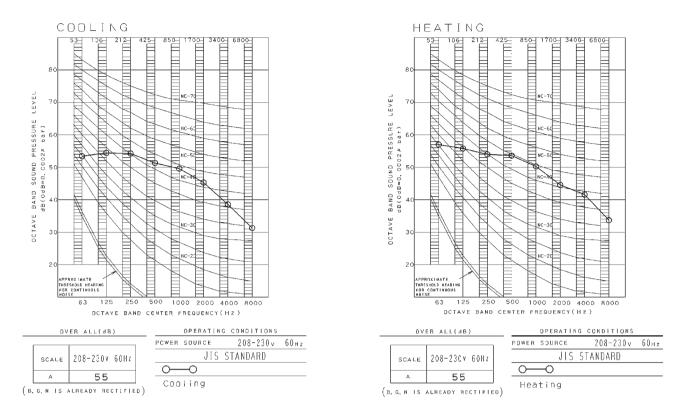
4000 8000

RXL18UMVJUA





RXL24UMVJUA



3D123454

11. Electric Characteristics

lu de en Lluit	Outdoor Unit		Power Supply			Compressor	O	-M	IF	M
Indoor Unit	Outdoor Unit	Hz - Volts	Voltage Range	MCA	MFA	RLA	W	FLA	W	FLA
FTX09NMVJU	RXL09QMVJU	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	9.5	15	8.5	18	0.15	21	0.20
FTX12NMVJU	RXL12QMVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	13.0	15	12.0	20	0.17	28	0.23
FTX15NMVJU	RXL15QMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	13.0	15	11.8	71	0.47	33	0.23
FTX18UVJU	RXL18UMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	18.7	20	18.25	76	0.47	48	0.37
FTX24UVJU	RXL24UMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	18.9	20	18.25	76	0.47	48	0.57
FVXS09NVJU	RXL09QMVJU	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	9.5	15	8.5	18	0.15	12	0.21
FVXS12NVJU	RXL12QMVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	13.0	15	12.0	20	0.17	13	0.22
FVXS15NVJU	RXL15QMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	13.0	15	11.8	71	0.47	23	0.29
FDMQ12RVJU	RXL12QMVJU9	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	13.0	15	12.0	20	0.17	130	0.73
FDMQ18RVJU	RXL18UMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	19.5	20	18.25	76	0.47	230	1.22
FDMQ24RVJU	RXL24UMVJUA	60 Hz - 208 V 60 Hz - 230 V	Max. 60 Hz, 253 V Min. 60 Hz, 187 V	19.8	20	18.25	76	0.47	230	1.54

Symbols:

Notes:

1. RLA is the max current that comes in cooling operation and heating operaton.

2. Maximum allowable voltage variation between phases is 2%.

- 3. Select wire size based on the larger value of MCA.
- 4. Instead of fuse, use circuit breaker.

 Be sure to install an earth leak detector. (This unit uses an inverter, which means that an earth leak detector capable of handling high harmonics must be used in order to prevent malfunctioning of the earth leak detector.)

> C: 3D101519 C: 3D123799

MCA	: Min. circuit amps	(A)
MFA	: Max. fuse amps	(A)
RLA	: Rated load amps	(A)
OFM	: Outdoor fan motor	
IFM	: Indoor fan motor	
FLA	: Full load amps	(A)
W	: Fan motor rated output	(W)

12. Installation Manual

12.1 FTX09/12/15NMVJU

Contents

Safety Considerations	1
Accessories	3
Choosing an Installation Site	3
 Indoor unit Wireless remote controller 	
Indoor Unit Installation Diagram	4
Indoor Unit Installation	5
 Installing the mounting plate Drilling a wall hole and installing wall embedded pipe Installing the indoor unit	6 6 8

Refrigerant Piping Work 9	
1. Flaring the pipe end	
Installation Tips 10	
1. Removing and installing the front panel	
Trial Operation and Testing 12	
1. Trial operation and testing	

Safety Considerations

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

A DANGER ·······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

1

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
 Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- It is recommended to install a ground fault circuit interrupter if one is not already available. This helps prevent electric shock or fire.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

A CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to proper drainage. Improper drain
 piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for indoor use.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
 Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in
- Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

- Install the power supply and inter-unit wires for the indoor and outdoor units at least 3.5ft away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5ft may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 478 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

Accessories

Mounting plate	1	B Mounting plate fixing screw 3/16" × 1" (M4 × 25mm)	7	© Titanium apatite deodorizing filter *1*2	2
D Wireless remote controller	1	E Remote controller holder	1	Fixing screw for remote controller holder 1/8" × 13/16" (M3 × 20mm)	2
G Dry battery AAA. LR03(alkaline)	2	Hodoor unit fixing screw 3/16" × 1/2" (M4 × 12mm)	2	(J) Insulation tape	1
K Operation manual	1	Installation manual	1	M Warranty	1

1 Only for FTX(K)09/12/15/18/24 *2 09/12 class: without frame

15/18/24 class: with frame

Choosing an Installation Site

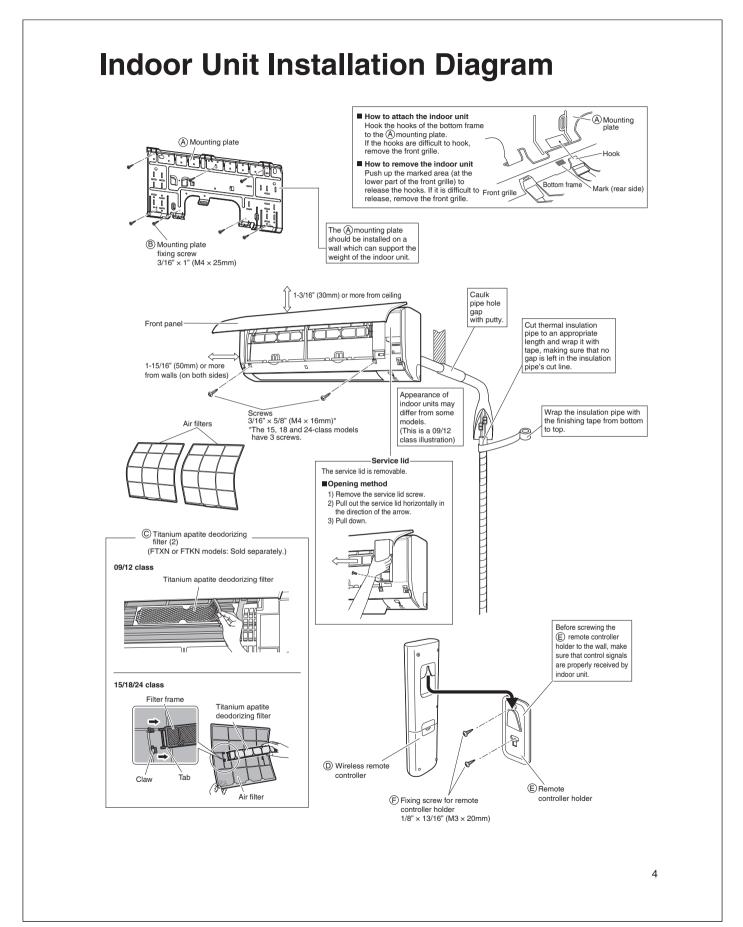
Before choosing the installation site, obtain user approval.

1. Indoor unit

- The indoor unit should be positioned in a place where:
- 1) the restrictions on the installation requirements specified in "Indoor Unit Installation Diagram" on page 4 are met,
- 2) both the air inlet and air outlet are unobstructed,
- 3) the unit is not exposed to direct sunlight,
- 4) the unit is away from sources of heat or steam,
- 5) there is no source of machine oil vapour (this may shorten the indoor unit service life),
- 6) cool/warm air is circulated throughout the room,
- 7) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
- the unit is at least 3.3ft (1m) away from any television or radio set (the unit may cause interference with the picture or sound),
- 9) no laundry equipment is nearby.

2. Wireless remote controller

Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).



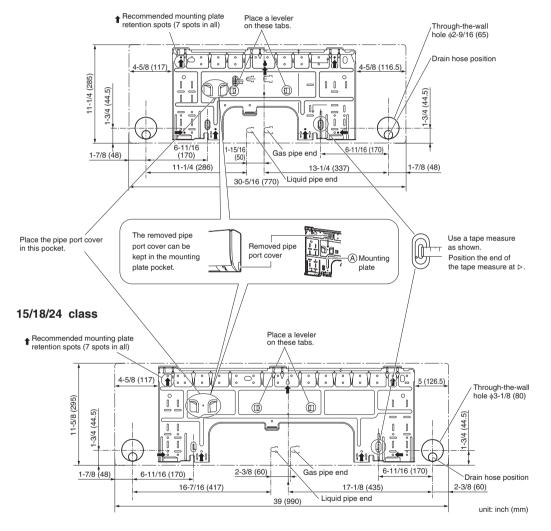
Indoor Unit Installation

1. Installing the mounting plate

- The mounting plate should be installed on a wall which can support the weight of the indoor unit.
 - 1) Temporarily secure the mounting plate to the wall, make sure that the panel is completely level, and mark the drilling points on the wall.
 - 2) Secure the mounting plate to the wall with screws.

Recommended mounting plate retention spots and dimensions

09/12 class



2. Drilling a wall hole and installing wall embedded pipe

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material to prevent condensation.
 - 1) Drill a feed-through hole with a ϕ 2-9/16 inch (65mm) (for 09/12 class), ϕ 3-1/8 inch (80mm) (for 15/18/24 class) diameter through the wall at a downward angle toward the outside.
- 2) Insert a wall embedded pipe into the hole.
- 3) Insert a wall hole cover into wall pipe.
- 4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.

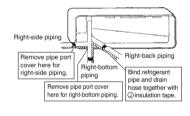
3. Installing the indoor unit

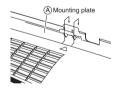
In the case of bending or curing refrigerant pipes, keep the following precautions in mind. Abnormal sound may be generated if improper work is conducted.

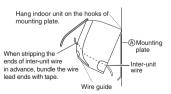
- Do not strongly press the refrigerant pipes onto the bottom frame.
- Do not strongly press the refrigerant pipes on the front grille, either.

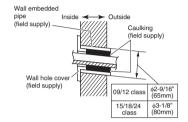
3-1. Right-side, right-back, or right-bottom piping

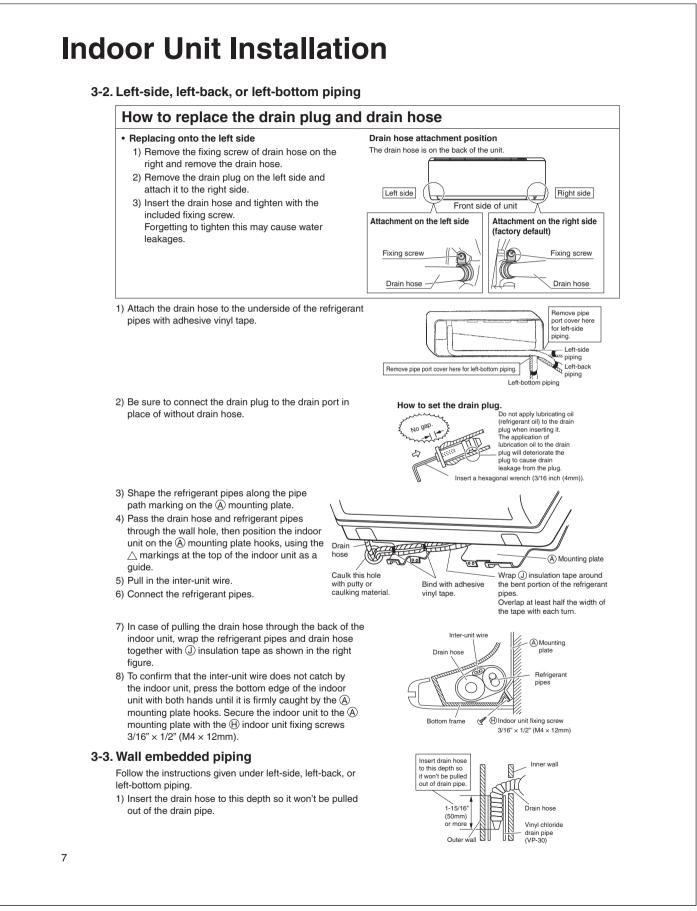
- 1) Attach the drain hose to the underside of the refrigerant pipes with adhesive vinyl tape.
- 2) Wrap the refrigerant pipes and drain hose together with $\ensuremath{\bigcirc}$ insulation tape.
- 3) Pass the drain hose and refrigerant pipes through the wall hole, then set the indoor unit on the A mounting plate hooks by using the △ markings at the top of the indoor unit as a guide.
- 4) Open the front panel (Refer to "Installation Tips" on page 10), then open the service lid (Refer to "Indoor Unit Installation Diagram" on page 4).
- 5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and pass to the front of indoor unit from the back. Then pull them at front side. Bend the ends of cable tie wires upward for easier work in advance.





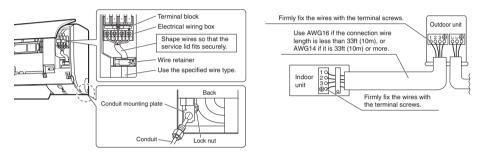






4. Wiring

- 1) As shown in the illustration, insert the wires including the ground wire into the conduit and secure them with lock nut onto the conduit mounting plate.
- 2) Strip wire ends (3/4 inch (20mm)).
- 3) Match wire colours with terminal numbers on the terminal block of indoor and outdoor unit and firmly secure the wires in the corresponding terminals with screws.
- 4) Connect the ground wire to the corresponding terminals.
- 5) Pull the wires lightly to make sure they are securely connected.
- 6) While close the service lid, shape the wires so that the service lid fits securely, then close the service lid.



- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

5. Drain piping

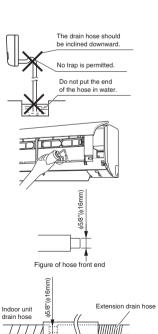
1) Connect the drain hose, as described on the right.

2) Remove the air filters and pour some water into the drain pan to check the water flows smoothly.

3) If drain hose extension or embedded drain piping is required, use appropriate parts that match the hose front end.

 4) When extending the drain hose, use a commercially available extension hose with an inner diameter of 5/8 inch (16mm).
 Be sure to thermally insulate the indoor section of the extension hose.



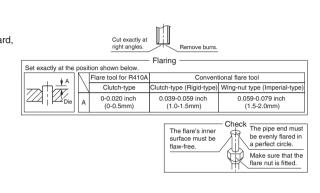


Heat insulation tube (field supply)

Refrigerant Piping Work

1. Flaring the pipe end

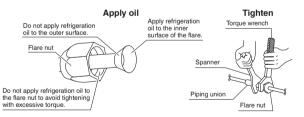
- 1) Cut the pipe end with a pipe cutter.
- 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- so that the filings do not enter the p
- 3) Put the flare nut on the pipe.4) Flare the pipe.
- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.



- Do not apply mineral oil to the flare.
- · Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

2. Refrigerant piping

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



	Piping size	Flare nut tightening torque
Gas side	O.D. 3/8 inch (9.5mm)	24-1/8-29-1/2ft • lbf (32.7-39.9N • m)
	O.D. 1/2 inch (12.7mm)	36-1/2−44-1/2ft • lbf (49.5-60.3N • m)
	O.D. 5/8 inch (15.9mm)	45-5/8-55-5/8ft • lbf (61.8-75.4N • m)
Liquid side	O.D. 1/4 inch (6.4mm)	10-1/2-12-3/4ft • lbf (14.2-17.2 N • m)

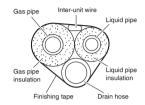
2-1. Caution on piping handling

- Protect the open end of the pipe against dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.



2-2. Selection of copper and heat insulation materials

- When using commercial copper pipes and fittings, observe the following:
- Insulation material: Polyethylene foam
- Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
- Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.



 Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
	O.D. 3/8 inch (9.5mm)			I.D. 15/32-19/32 inch (12-15mm)	
Gas side	O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	(C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	13/32 inch
	O.D. 5/8 inch (15.9mm)	1-15/16 inch (50mm) 0.039 inch (1.0mm) or more (C1220T-O)		I.D. 5/8-13/16 inch (16-20mm)	(10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

Installation Tips

1. Removing and installing the front panel

· Removal method

1) Place your fingers in the indentations on the main unit (one each on the left and right sides), and open the front panel until it stops.

2) While pushing the left side front panel shaft outward, push up the

3) After removing both front panel shafts, pull the front panel toward

front panel and remove it. (Remove the right side front panel shaft in







the same manner.)

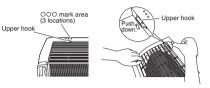
yourself and remove it.

Align the shaft of the front panel with the grooves of grill, and push all the way in, then close slowly. Push the center of the lower panel surface firmly to engage the hooks.

2. Removing and installing the front grille

· Removal method

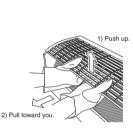
- Remove the front panel to remove the air filter.
 Remove the 2 screws from the front grille.
- (The 15, 18 and 24-class models have 3 screws.)
- 3) In front of the OOO mark on the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.



When there is insufficient work space because the unit is close to ceiling

Be sure to wear protection gloves.

Place both hands under the center of the front grille, and while pushing up, pull it toward you.



Installation method

Install the front grille and firmly engage the upper hooks (3 locations).
 Install 2 screws of the front grille.

(The 15, 18 and 24-class models have 3 screws.)

3) Install the air filter and then mount the front panel.

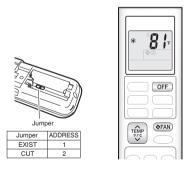
3. How to set the different addresses

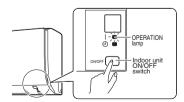
When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the two units. When cutting the jumper be careful not to damage any of the surrounding parts.

- 1) Remove the battery cover on the remote controller and cut the address jumper.
- 3) Press THEP, then select **R**, press FAN.

(The indoor unit OPERATION lamp will blink for about 1 minute.)4) Press the indoor unit ON/OFF switch while the OPERATION lamp is blinking.

- If setting could not be carried out completely while the OPERATION lamp was blinking, carry out the setting process once again from the beginning.
- After setting is complete, pressing (PFAN) for about 5 seconds will cause the remote controller to return to the previous display.





Trial Operation and Testing

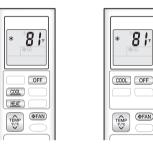
1. Trial operation and testing

• Trial operation should be carried out in either COOL or HEAT operation.

- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.
 - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).

 When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.

- 1) Press $\overrightarrow{F_{F/C}^{PP}}$, $\overrightarrow{F_{F/C}^{PP}}$ and \overrightarrow{OFF} at the same time.
- 2) Press (), then select ? , press (FAN) .
- 3) Press <u>COOL</u> or <u>HEAT</u> to turn on the system.
- Trial operation will stop automatically after about 30 minutes. To stop the operation, press OFF.
- Some of the functions cannot be used in the trial operation mode.



HEAT PUMP model

COOLING ONLY model

- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed properly on solid bases.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
The specified wires are used for inter-unit wiring.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

12.2 FTX18/24UVJU

Contents

Safety Considerations	
Accessories	3
Choosing an Installation Site	3
1. Indoor unit	. 3
2. Wireless remote controller	. 3
Indoor Unit Installation Diagram	4
Indoor Unit Installation	5
Indoor Unit Installation 1. Installing the mounting plate	-
	. 5
1. Installing the mounting plate	. 5 . 5
 Installing the mounting plate Drilling a wall hole and installing wall embedded pipe 	. 5 . 5 . 5

Refrigerant Piping Work8
1. Flaring the pipe end
Installation Tips9
 Removing and installing the front panel
4. When connecting to an HA system
1. Trial operation and testing

Safety Considerations

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

~~~	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	Indicates situations that may result in equipment or property-damage accidents only.

#### 

1

- Refrigerant gas is heavier than air and replaces oxygen.
   A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
   Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

#### 🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

### 

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- · Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
  - Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in

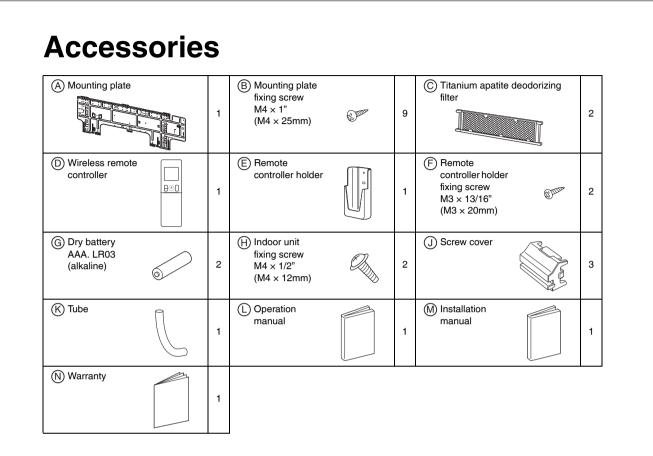
refrigerant leakage.

- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

### 

- The indoor unit should be positioned where the unit and interunit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN003-U



# **Choosing an Installation Site**

· Before choosing the installation site, obtain user approval.

## **1.** Indoor unit

- The indoor unit should be positioned in a place where:
- 1) the restrictions on the installation requirements specified in "Indoor Unit Installation Diagram" on page 4 are met,
- 2) both the air inlet and air outlet are unobstructed,
- 3) the unit is not exposed to direct sunlight,
- 4) Install so that drainage occurs easily,
- 5) the unit is away from sources of heat or steam,
- 6) there is no source of machine oil vapor (this may shorten the indoor unit service life),
- 7) cool/warm air is circulated throughout the room,
- 8) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
- 9) no laundry equipment is nearby.

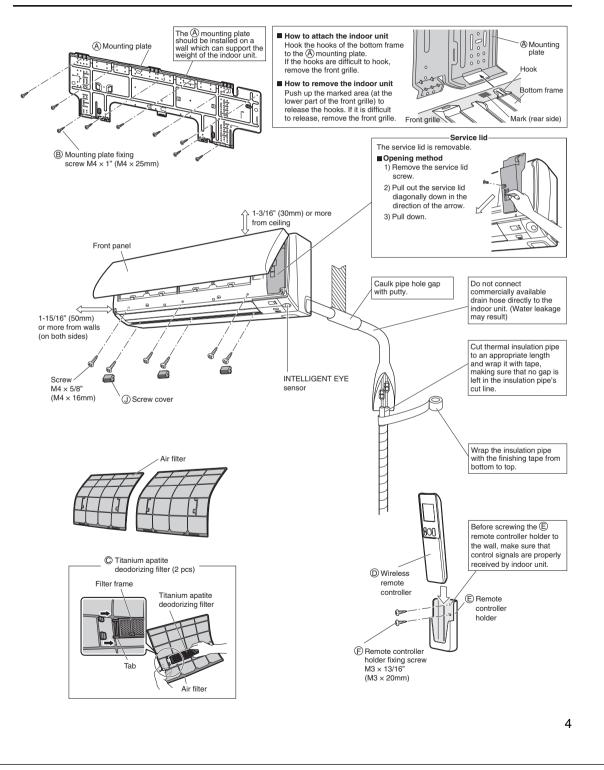
## 2. Wireless remote controller

• Turn on all the fluorescent lamps in the room, if any, and find a location where the remote controller signals are properly received by the indoor unit (within 23ft (7m)).

# **Indoor Unit Installation Diagram**

### CAUTION -

- Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.
- Do not place large objects near the INTELLIGENT EYE sensor. Also keep heating units or humidifiers outside the sensor's detection area.



# Indoor Unit Installation

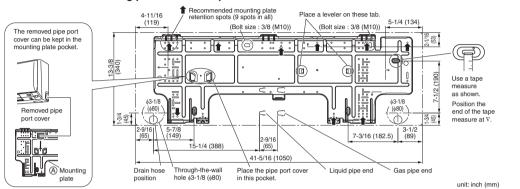
### 1. Installing the mounting plate

The mounting plate should be installed on a wall which can support the weight of the indoor unit.

1)Temporarily secure the mounting plate to the wall, make sure that the plate is completely level, and mark the drilling points on the wall

2)Secure the mounting plate to the wall with screws.

Recommended mounting plate retention spots and dimensions

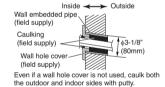


## 2. Drilling a wall hole and installing wall embedded pipe

### 

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material.
  - (to prevent condensation caused by intrusion of air from outside or within the wall) 1) Drill a feed-through hole with a \$3-1/8 inch (80mm) diameter through the wall at a downward angle toward the outside. (to prevent water leakage) 2) Insert a wall embedded pipe into the hole.
  - 3) Insert a wall hole cover into wall pipe.
  - 4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.

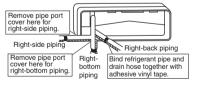


**3.** Installing the indoor unit

In the case of bending or curing refrigerant pipes, keep the following precautions in mind. Abnormal sound may be generated if improper work is conducted.

- Do not strongly press the refrigerant pipes onto the bottom frame.
- Do not strongly press the refrigerant pipes on the front grille, either.
- 3-1. Right-side, right-back, or right-bottom piping 1) Attach the drain hose to the underside of the refrigerant

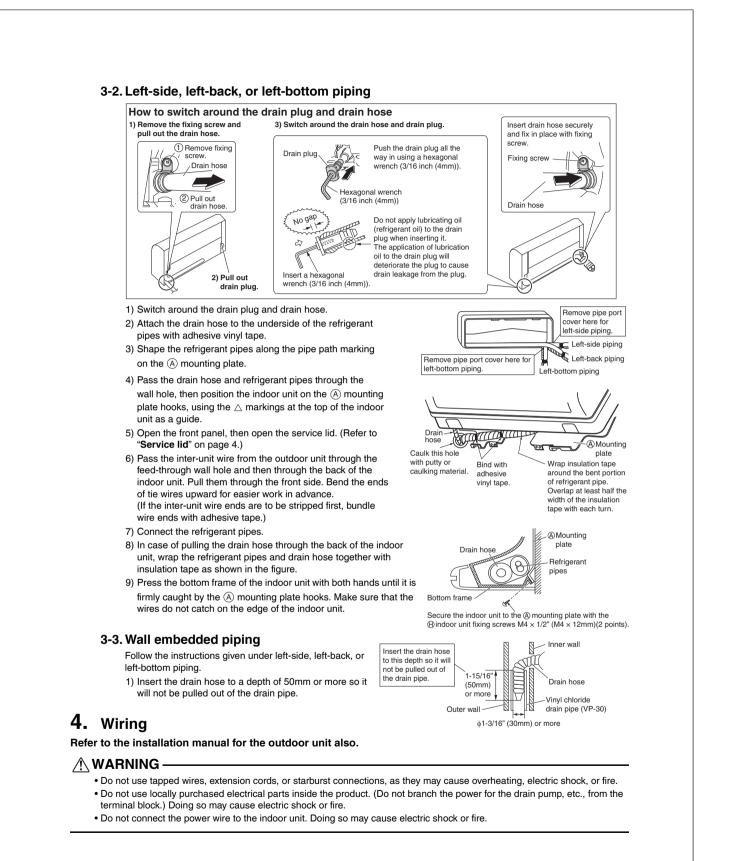
  - pipes with adhesive vinyl tape. 2) Wrap the refrigerant pipes and drain hose together with an insulation tape.
  - 3) Pass the drain hose and refrigerant pipes through the wall hole, then position the indoor unit on the (A) mounting plate hooks, using the  $\triangle$ markings at the top of the indoor unit as a guide.
  - 4) Open the front panel, then open the service lid. (Refer to "Service lid" on page 4.)
  - 5) Pass the inter-unit wire from the outdoor unit through the feed-through wall hole and then through the back of the indoor unit. Pull them through the front side. Bend the ends of cable tie wires upward for easier work in advance. (If the inter-unit wire ends are to be stripped first, bundle wire ends with adhesive tape.)
  - 6) Press the bottom frame of the indoor unit with both hands until it is firmly caught by the (A) mounting plate hooks. Make sure that the wires do not catch on the edge of the indoor unit.

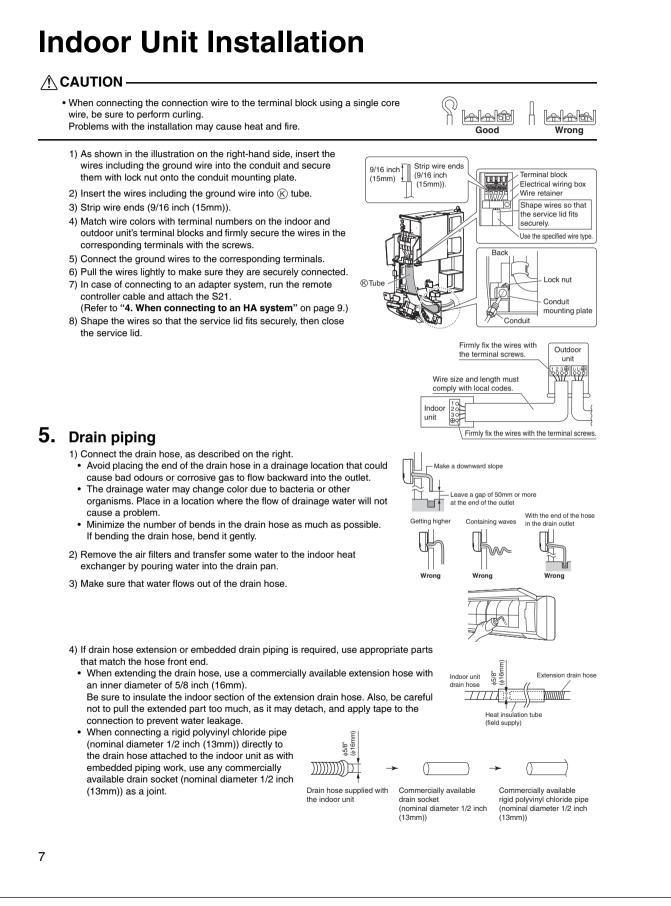






3P572321-1A





# **Refrigerant Piping Work**

### WARNING

- · Do not apply mineral oil on flared part.
- · Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.

Flaring

Check

Conventional flare tool

The pipe end must be evenly flared

Make sure that the flare nut is fitted

Wing-nut type (Imperial-type)

0.059-0.079 inch

(1.5-2.0mm)

Clutch-type (Rigid-type)

0.039-0.059 inch

(1.0-1.5mm)

in a perfect circle.

place a cap

If no flare cap is available, cover th flare mouth with tape to keep dirt

and water out.

Gas pipe

Gas pipe

insulation

Finishing tape

17/

Liquid pipe

Liquid pipe

insulation

Drain hose

Flare tool for

R410A

Clutch-type

0-0.020 inch

(0-0.5mm)

Set exactly at the position shown below

The flare's inner surface must be

When flaring, do not over-tighten

X

Die

flaw-free

and crack

- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

## **1.** Flaring the pipe end

- 1) Cut the pipe end with a pipe cutter.
- 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.



3) Put the flare nut on the pipe.

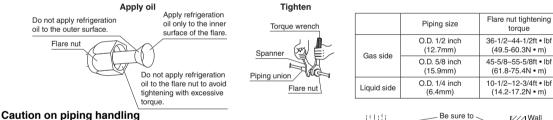
- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.

# 2. Refrigerant piping

## A CAUTION -

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.

### • Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



- Protect the open end of the pipe against dust and moisture.
- · All pipe bends should be as gentle as possible. Use a pipe bender for bending

#### Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:



- Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 1/2 inch (12.7mm)	1-15/16 inch (50mm)	0.039 inch (1.0mm)	I.D. 9/16-5/8 inch (14-16mm)	
Gas side	O.D. 5/8 inch (15.9mm)	or more (C1220T-O)		I.D. 5/8-13/16 inch (16-20mm)	13/32 inch (10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

- · Use separate thermal insulation pipes for gas and liquid refrigerant pipes.
- Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.

# **Installation Tips**

### 1. Removing and installing the front panel

#### Removal method

Hook fingers on the tabs on the left and right of the main body, and open until the panel stops. Slide the front panel sideways to disengage the front panel shaft. Then pull the front panel toward you to remove it.

#### · Installation method

Align the front panel shaft of the front panel with the grooves of grille, and push all the way in, then close slowly.

Push the center of the lower panel surface firmly to engage the tabs.

### 2. Removing and installing the front grille

#### Removal method

- 1) Remove the front panel and air filters.
- 2) Remove 6 screws from the front grille.
- 3) In front of the OOO mark on the front grille, there are 3 upper hooks. Lightly pull the front grille toward you with one hand, and push down on the hooks with the fingers of your other hand.

## When there is insufficient work space because the unit is close to ceiling

Place both hands under the center of the front grille, and while pushing up, pull it toward you.

- Installation method
  - 1) Install the front grille and firmly engage the upper hooks (3 locations).
- 2) Install 6 screws of the front grille.
- 3) Install the air filters and then mount the front panel.

### **3.** How to set the different addresses

When 2 indoor units are installed in one room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units. When cutting the jumper, be careful not to damage any of the surrounding parts.

- 1) Remove the front grille. (6 screws)
- Remove the metal plate electrical wiring box cover. (4 tabs) (See Fig.1)
- 3) Cut the address jumper (JA) on the printed circuit board. (See Fig.2)
- 4) Cut the address jumper (J4) in the remote controller. (See Fig.3)
- Do not cut jumper (J8).
- 5) Replace the metal electrical wiring box cover.
- Replace the front grille.

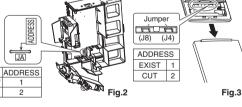


Fig.1

1) Push up.

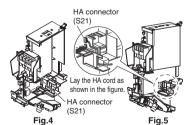
2) Pull toward

you.

### 4. When connecting to an HA system

1) Remove the front grille. (6 screws)

- 2) Remove the metal plate electrical wiring box cover. (4 tabs) (See Fig.1)
- 3) Attach the connection cord to the S21 connector and pull the harness out through the notched part in the figure. (See Fig.4)
- 4) Replace the electrical wiring box cover as it was, and pull the harness around, as shown in the figure. (See Fig.5)
- 5) Replace the front grille.



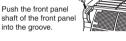


JA

EXIST

CUT





000 mark area



Be sure to wear protection gloves.

Slide

67)

Main body

electrica

Metal plate

wiring box cover

# **Trial Operation and Testing**

### **1.** Trial operation and testing

• Trial operation should be carried out in either COOL or HEAT operation.

- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flaps, are working properly.

• To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.

- 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).
- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.

1) Press 🕐 to turn on the system.

2) Press both of  $\begin{bmatrix} 1 & 1 \\ 1 & 1 \\ 1 & 2 \end{bmatrix}$  and  $\boxed{1}$  and  $\boxed{1}$  at the same time.

- 3) Press , select "?", and press more for confirmation.
- Trial operation will stop automatically after about 30 minutes. To stop the operation, press 0.
- Some of the functions cannot be used in the trial operation mode.
- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is turned on again.

### 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
Only specified wires are used for all wiring, and all wires are connected correctly.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

# Contents

Safety Considerations	1
Accessories	3
Choosing an Installation Site	3
1. Indoor unit	3
2. Wireless remote controller	3
Indoor Unit Installation Diagram	4
Indoor Unit Installation	5
1. Refrigerant piping	5
<ol> <li>Drilling a wall hole and installing wall embedded pipe.</li> </ol>	
3. Drain piping	7

4. Installing indoor unit 8
4-1. Preparation 8
4-2. Installation
5. Flaring the pipe end12
6. Connecting the refrigerant pipe12
6-1. Caution on piping handling13
6-2. Selection of copper and heat insulation
materials13
7. Checking for gas leakage13
8. Attaching the connection pipe13
9. Wiring 14
10.When connecting to an HA system 15
11.How to set the different addresses16
Trial Operation and Testing17
1. Trial operation and testing17

# **Safety Considerations**

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

/!\ DANGER ······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

### 

1

٨

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

 If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.

- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

### 🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- It is recommended to install a ground fault circuit interrupter if one is not already available. This helps prevent electric shock or fire.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

### A CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- · Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
  - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for indoor use.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen.
   Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in
- Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

- Install the power supply and inter-unit wires for the indoor and outdoor units at least 3.5ft away from televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5ft may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 478 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

# Accessories

Mounting plate	1	B Titanium apatite deodorizing filter	2	© Drain hose	1
D Insulation tape	2	E Wireless remote controller	1	F Remote controller holder	1
Fixing screw for remote G controller holder 1/8" × 13/16" (M3 × 20mm)	2	H H H H H H H H H H H H H H H H H	9	Dry battery AAA. LR03 (alkaline)	2
K Operation manual	1	() Installation manual	1	M Warranty	1

# **Choosing an Installation Site**

• Before choosing the installation site, obtain user approval.

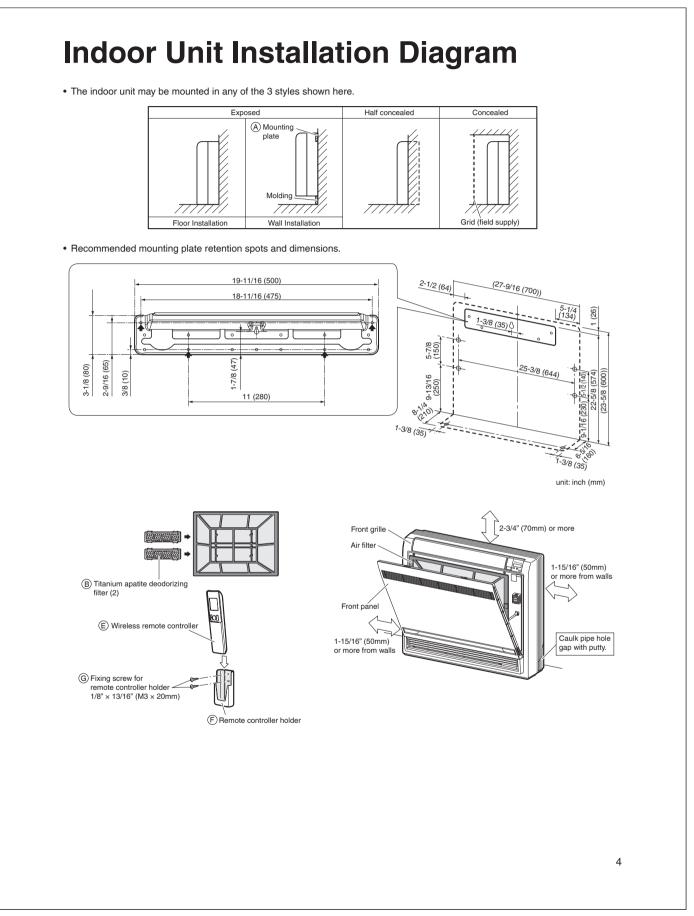
### **1.** Indoor unit

The indoor unit should be positioned in a place where:

- 1) the restrictions on installation requirements specified in "Indoor Unit Installation Diagram" on page 4 are met,
- 2) both the air inlet and air outlet are unobstructed,
- 3) the unit is not exposed to direct sunlight,
- 4) the unit is away from the source of heat or steam,
- 5) there is no source of machine oil vapour (this may shorten the indoor unit service life),
- 6) cool/warm air is circulated throughout the room,
- 7) the unit is away from electronic ignition type fluorescent lamps (inverter or rapid start type) as they may affect the remote controller range,
- the unit is at least 3.3ft (1m) away from any television or radio set (the unit may cause interference with the picture or sound),
- 9) no laundry equipment is nearby.

## 2. Wireless remote controller

Turn on all the fluorescent lamps in the room, if any, and find a location where remote controller signals are properly received by the indoor unit (within 23ft (7m)).



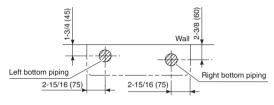
# **Indoor Unit Installation**

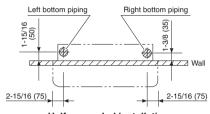
## **1.** Refrigerant piping

1) Drill a hole ( $\phi$ 2-9/16 inch (65mm) in diameter) in the spot indicated by the 🖉 symbol in the illustration as below.

- 2) The location of the hole is different depending on which side of the pipe is taken out.
- 3) For piping, refer to "6. Connecting the refrigerant pipe" on page12.
- 4) Allow space around the pipe for a easier indoor unit pipe connection.

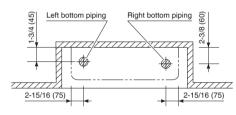
### [Bottom piping]







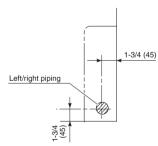
Exposed installation



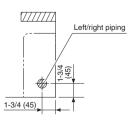
Concealed installation

unit: inch (mm)

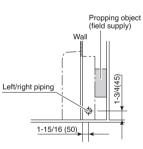
### [Left/Right -side piping]



Exposed installation

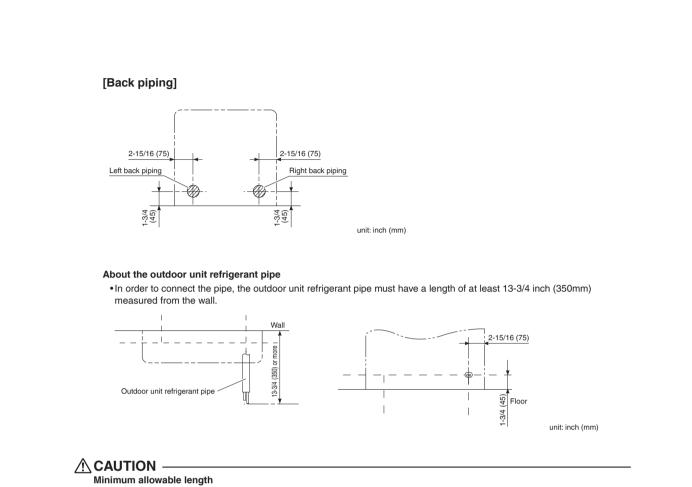


Concealed installation



Half concealed installation

unit: inch (mm)



- The suggested shortest pipe length is 8.2ft (2.5m), in order to avoid noise from the outdoor unit and vibration.
- (Mechanical noise and vibration may occur depending on how the unit is installed and the environment in which it is used.) • Refer to the installation manual for the outdoor unit for the maximum pipe length.
- For multi-connections, refer to the installation manual for the multi outdoor unit.

# **Indoor Unit Installation**

### 2. Drilling a wall hole and installing wall embedded pipe

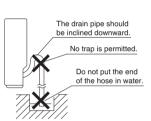
#### 

For metal frame or metal board walls, be sure to use a wall embedded pipe and wall hole cover in the feed-through hole to prevent possible heat, electric shock, or fire.

- Be sure to caulk the gaps around the pipes with caulking material to prevent condensation.
  - 1) Drill a feed-through hole with a  $\phi 2\text{-}9/16$  inch (65mm) diameter through the wall at a downward angle toward the outside.
  - 2) Insert a wall embedded pipe into the hole.
  - 3) Insert a wall hole cover into wall pipe.
  - 4) After completing refrigerant piping, wiring, and drain piping, caulk the pipe hole gap with putty.

## **3.** Drain piping

• The drain pipe should be **inclined downward** so that water will flow smoothly without any accumulation. (Should not be trap.)



Wall embedded

(field supply)

Wall hole cov

(field supply)

Inside

Outside

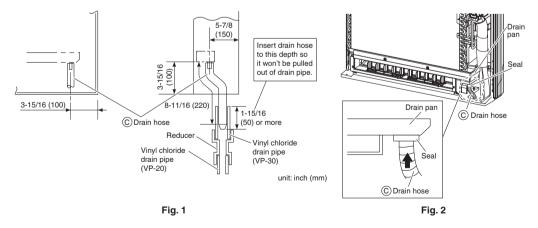
Caulking

field supply)

φ2-9/16³

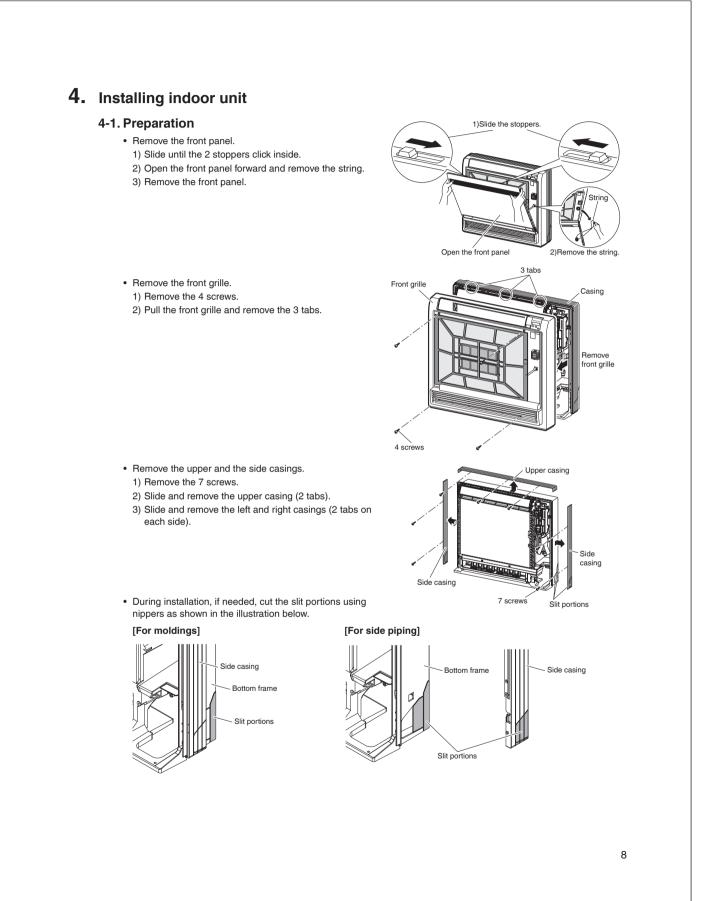
- Use commercial rigid polyvinyl chloride pipe (general VP 20 pipe, outer diameter 1 inch (26mm), inner diameter 13/16 inch (20mm)) for the drain pipe.
- 1) Perform drain piping work as outlined in the figure. (See Fig. 1)
  - Insert the  ${\rm \bigodot}$  drain hose into the socket of the drain pan. (See Fig. 2)
  - Fully insert the drain hose until it adheres to a seal of the socket.

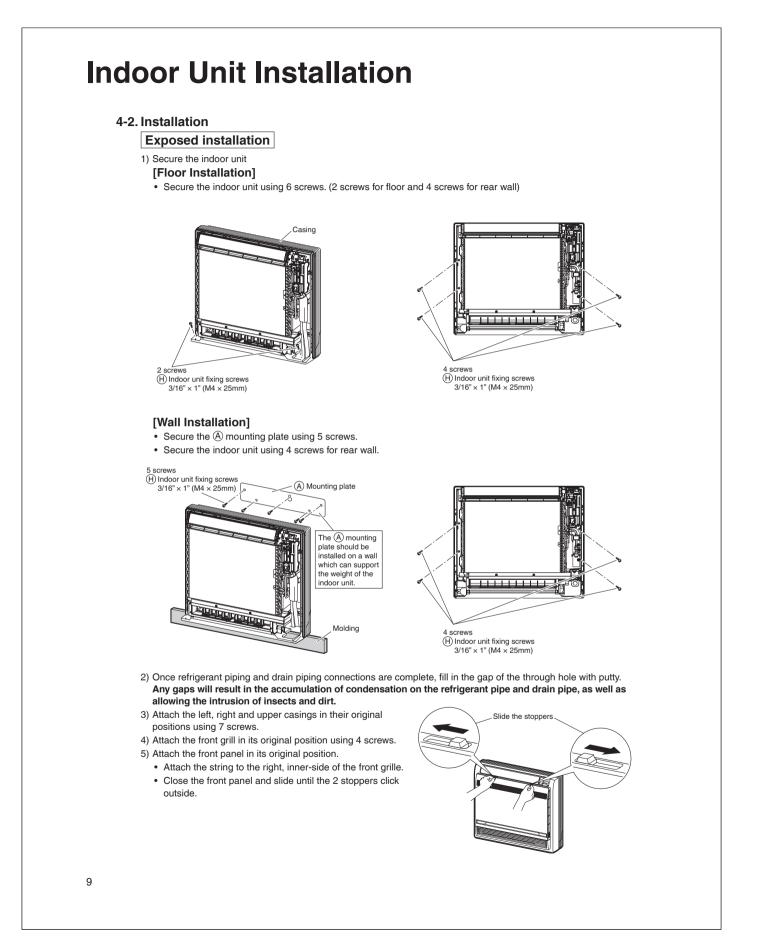
2) Insulate the indoor drain pipe with 3/8 inch (10mm) or more of insulation material to prevent condensation.3) Remove the air filters and pour some water into the drain pan to check the water flows smoothly.

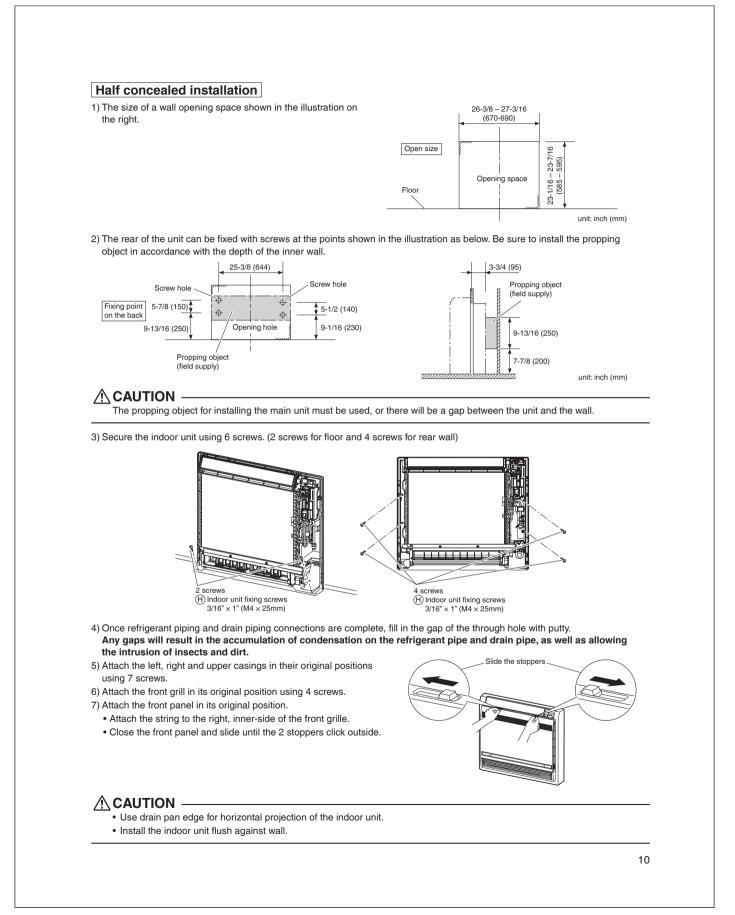


### 

Use polyvinyl chloride adhesive agent for gluing. Failure to do so may cause water leakage.



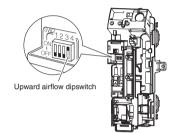




# **Indoor Unit Installation**

### Concealed installation

- Install the unit according to the instructions below. Failure to do so may cause lead to both cooling and heating failure and the condensation inside the house.
  - 1) Allow enough space between the main unit and ceiling not to obstruct the flow of cool/warm air.
  - 2) Place a partition plate between outlet and inlet sections.
  - 3) Place a partition plate on the right side.
  - 4) Change the upward airflow dipswitch (SW2-4) to ON to limit the upward airflow. (Factory default: OFF)
    - Remove the front grille.
    - Switch the dipswitch (SW2-4) on the PCB in the electrical equipment box to ON.

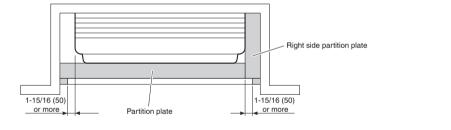


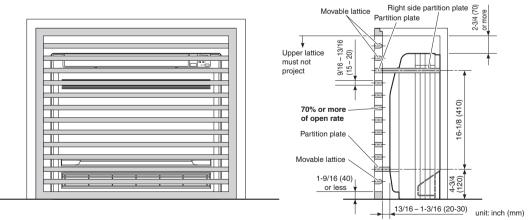
### 

Be sure to turn on the upward airflow switch. Failure to do so may cause incomplete cooling/heating and formation of condensation inside the house.

5) Use a movable lattice at the air outlet to allow the adjustment of cool/warm airflow direction.

6) Lattice size should be 70% or more of open rate.





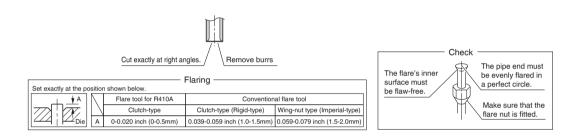
• For the installation process refer to "Exposed installation" on page 9.

## 5. Flaring the pipe end

- 1) Cut the pipe end with a pipe cutter.
- 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- 3) Put the flare nut on the pipe.
- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.

### MARNING ·

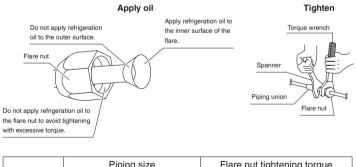
- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- · Incomplete flaring may result in refrigerant gas leakage.



## 6. Connecting the refrigerant pipe

### 

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the center of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



	Piping size	Flare nut tightening torque
Gas side	O.D. 3/8 inch (9.5mm)	24.1-29.4ft • lbf (32.7-39.9N • m)
	O.D. 1/2 inch (12.7mm)	36.5-44.5ft • lbf (49.5-60.3N • m)
Liquid side	O.D. 1/4 inch (6.4mm)	10.5-12.7ft • lbf (14.2-17.2 N • m)

#### **Indoor Unit Installation** 6-1. Caution on piping handling 1) Protect the open end of the pipe against dust and moisture. Be sure to 2) All pipe bends should be as gentle as possible. Use a pipe place a cap bender for bending. If no flare cap is available, cove the flare mouth with tape to keep dirt or water out. 6-2. Selection of copper and heat insulation materials When using commercial copper pipes and fittings, observe the following: Inter-unit wiring Gas nine Liquid pipe Insulation material: Polvethylene foam Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C)) Be sure to use insulation that is designed for use with HVAC Systems. · ACR Copper only. Gas pipe Liquid pipe insulation Finishing tape insulation · Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below. Thermal insulation Piping size Minimum bend radius Piping thickness Thermal insulation size thickness 1-3/16 inch (30mm) O.D. 3/8 inch I.D. 15/32-19/32 inch (12-15mm) (9.5mm) or more Gas side O.D. 1/2 inch 1-9/16 inch (40mm) 0.031 inch (0.8mm) I.D. 9/16-5/8 inch 13/32 inch (12.7mm) or more (C1220T-O) (14-16mm) (10mm) Min O.D. 1/4 inch (6.4mm) 1-3/16 inch (30mm) I.D. 5/16-13/32 inch Liquid side (8-10mm) or more

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

## 7. Checking for gas leakage

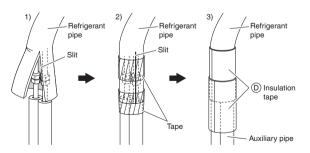
- Check for leakage of gas after air purging.
   Refer to the section on pressure test and
- evacuating system in the installation manual for the outdoor unit.



## 8. Attaching the connection pipe

- Attach the pipe after checking for gas leakage, described above.
- Cut the insulated portion of the on-site piping, matching it up with the connecting portion.
- Secure the slit on the refrigerant piping side with the butt joint on the auxiliary piping using the tape, making sure there are no gaps.
- Wrap the slit and the butt joint with the

   insulation tape, making sure there are no gaps.



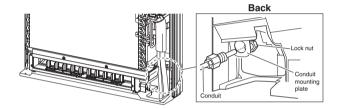
### 

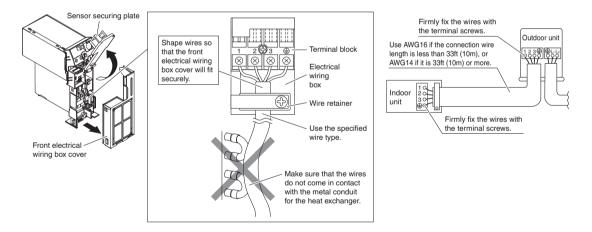
- Insulate the joint of the pipes securely.
- Incomplete insulation may lead to water leakage.
- Push the pipe inside so it does not place undue force on the front grille.

## 9. Wiring

#### With a multi indoor unit, install as described in the installation manual supplied with the multi outdoor unit.

- Live the sensor securing plate, remove the front electrical wiring box cover, and connect the branch wiring to the terminal block.
  - 1) As shown in the illustration, insert the wires including the ground wire into the conduit and secure them with lock nut onto the conduit mounting plate.
  - 2) Strip wire ends (3/4 inch (20mm)).
  - 3) Match wire colours with terminal numbers on indoor and outdoor unit's terminal blocks and firmly secure the wires in the corresponding terminals with the screws.
- 4) Connect the ground wires to the corresponding terminals.
- 5) Pull the wires lightly to make sure they are securely connected.
- 6) Make sure that the wires do not come in contact with the metal conduit for the heat exchanger.
- 7) In case of connecting to an adapter system, run the remote controller cable and attach the S21. (Refer to "10. When connecting to an HA system" on page 15.)





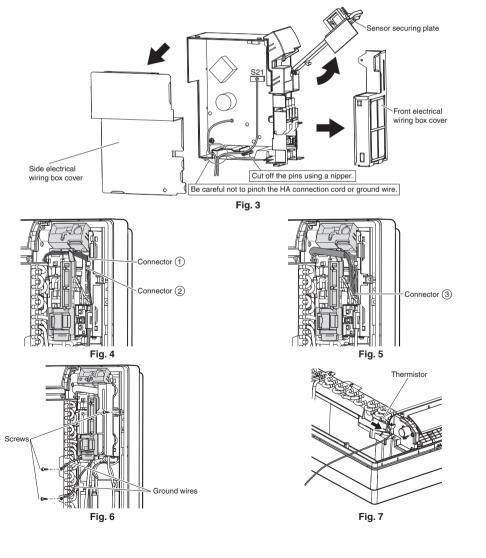
- Do not use tapped wires, stranded wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

15

# **Indoor Unit Installation**

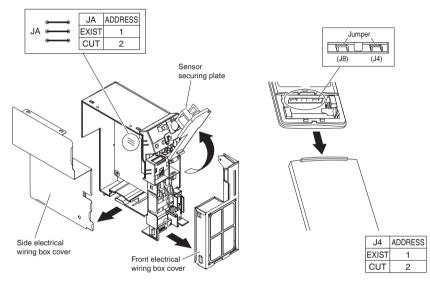
# 10. When connecting to an HA system

- 1) Remove the front panel and the front grille. (Refer to "4-1. Preparation" on page 8.)
- 2) Open up the sensor securing plate. (See Fig. 3)
- 3) Remove the front electrical wiring box cover (4 tabs). (See Fig. 3)
- 4) Remove connectors (1) (2) (3). (See Fig. 4 and Fig. 5)
- 5) After removing the ground wires (2 screws), remove the electrical wiring box (1 screw). (See Fig. 6)
- 6) Remove the thermistor. (See Fig. 7)
- 7) Remove the side electrical wiring box cover (7 tabs). (See Fig. 3)
- 8) Cut off the pins using a nipper. (See Fig. 3)
- 9) Wire and connect the HA connection cord to the S21 connector. (See Fig. 3)
- 10) Install the side electrical wiring box cover while being careful not to pinch the HA connection cord or ground wires (7 tabs).
- 11) Attach the thermistor.
- 12) Install the ground wires (2 screws) and the electrical wiring box (1 screw).
- 13) Install the connectors ① ② and guide the cord as shown in the figure. (See Fig. 4)
- 14) Install connector ③ and guide the cord as shown in the figure. (See Fig. 5)
- 15) Attach the front electrical wiring box cover (4 tabs), and close the sensor securing plate.
- 16) Attach the front panel and the front grille as they were.



# **11.** How to set the different addresses

- When 2 indoor units are installed in 1 room, the 2 wireless remote controllers can be set for different addresses. Change the address setting of one of the 2 units.
- When cutting the jumper be careful not to damage any of the surrounding parts.
- 1) Remove the electrical wiring box. (Refer to "10. When connecting to an HA system" on page 15 steps 1)-7).)
- 2) Cut the address jumper (JA) on the printed circuit board.
- 3) Cut the address jumper (J4) in the remote controller.
- 4) Attach the electrical wiring box as they were. (Refer to "10. When connecting to an HA system" on page 15 steps 10)-15).)
- 5) Attach the front panel and the front grille as they were.



# **Trial Operation and Testing**

# 1. Trial operation and testing

• Trial operation should be carried out in either COOL or HEAT operation.

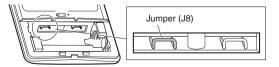
- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.
  - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
  - When connecting to a multi outdoor unit, if trial operation is conducted in HEAT operation directly after the circuit breaker is turned on, in some cases no air will be output for about 3 to 20 minutes in order to protect the air conditioner.
- 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).
- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method.
  - 1) Press () to turn on the system.

  - 3) Press [1, then select " ; ", and press [1, down for confirmation.
  - Trial operation will stop automatically after about 30 minutes.
    - To stop the operation, press ()
  - Some of the functions cannot be used in the trial operation mode.
- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

# 2. Test items

Test Items	Symptom	Check
Indoor and outdoor units are installed properly on solid bases.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
The specified wires are used for inter-unit wiring connections.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	
₩ will be displayed when the MODE button is pressed.*	No heating	

*Check that the jumper (J8) has not been cut. If it has been cut, contact your dealer.



# 12.4 FDMQ12/18/24RVJU

# CONTENTS

1.	SAFETY CONSIDERATIONS	1
2.	BEFORE INSTALLATION	3
З.	CHOOSING AN INSTALLATION SITE	4
4.	PREPARATION BEFORE INSTALLATION	5
5.	INDOOR UNIT INSTALLATION	6
6.	REFRIGERANT PIPING WORK	7
7.	DRAIN PIPING WORK	9
8.	DUCT WORK	11
9.	ELECTRIC WIRING WORK	11
10.	FIELD SETTING	14
11.	TRIAL OPERATION AND TESTING	15

# 1. SAFETY CONSIDERATIONS

Read these **SAFETY CONSIDERATIONS for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product.

Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING ······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
CAUTION	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

## A DANGER -

- Refrigerant gas is heavier than air and replaces oxygen.
   A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
   Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.
- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.

 Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

# MARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.
- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

# CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.
- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors. This unit is for indoor use.
- Do not install the air conditioner or heat pump in the following locations:
  - (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
  - (b) Where corrosive gas, such as sulfurous acid gas, is produced.
  - Corroding copper pipes or soldered parts may result in refrigerant leakage.
- (c) Near machinery emitting electromagnetic waves. Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.

- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

# 

- The indoor unit should be positioned where the unit and inter-unit wires (outdoor to indoor) are at least 3.3ft (1m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 3.3ft (1m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

FTN002-U

### 2. BEFORE INSTALLATION

When unpacking the indoor unit or moving the unit after unpacked, hold the hangers (4 places) and do not apply force to other parts (particularly refrigerant piping, drain piping).

- For installation of the outdoor unit, refer to the installation manual attached to the outdoor unit.
- Do not throw away the accessories until the installation work is completed.
- After the indoor unit is carried into the room, to avoid the indoor unit from getting damaged, take measures to protect the indoor unit with packing materials.
  - (1) Determine the route to carry the unit into the room.
  - (2) Do not unpack the unit until it is carried to the installation location. Where unpacking is unavoidable, use a sling of soft
- material or protective plates together with a rope when lifting, to avoid damage or scratches to the indoor unit. • Have the user actually operate the air conditioner while
- looking at the operation manual. Instruct the user how to operate the air conditioner (particularly operation procedures, and temperature adjustment).
- Do not use the air conditioner in a salty atmosphere such as coastal areas, vehicles, vessels or where voltage fluctuation is frequent such as factories.
- Take off static electricity from the body when carrying out wiring and the electrical wiring box cover is removed. The electric parts may be damaged.

#### (3) Duct flange connection (1) Clamp (2) Drain screw Name metal hose 09/12 class 15/18/24 class Quantity 10 18 Shape 6 Fittina (6) Sealing (7) Sealing Name (8) Clamp insulation pad pad Quantity 1 each 1 2 8 Ē Thin (4) For liquid pipe Shape Medium Large Thic (Dark gray) (Dark gray) (5) For gas pipe (10) Wire sealing (11) Washer for (9) Washer fixing Name pad hanger bracket plate Quantity 2 8 4 6 Shape Small (Gray) Name (12) Conduit mounting plate Others Quantity 1 Operation manual Ŀ Installation manual 0 Shape Warranty

#### 2-1 ACCESSORIES

#### 2-2 OPTIONAL ACCESSORIES

A remote controller is required for the indoor unit.
Select a remote controller from the table below according to user request and install is an appropriate place.

user request and install in an appropriate place.			
Remote controller type			
Wired type BRC1E73			
Wireless type	BRC082A43		

• The indoor unit can be switched to lower suction. (Refer to 4. PREPARATION BEFORE INSTALLATION.) The side cover plate (KDBD63A160) is required in the case of wiring from the bottom for underside suction. For installation work, refer to the instruction sheet provided with the side cover plate.

## CARRY OUT THE WORK GIVING CAUTION TO THE FOLLOWING ITEMS AND AFTER THE WORK IS COMPLETED CHECK THESE AGAIN.

# 1. Items to be checked after the installation work is completed

Items to be checked	Symptom	Check
Are the indoor and outdoor units rigidly fixed?	Drop · vibration · noise	
Are the installation works of the outdoor and indoor units completed?	Does not operate · burnout	
Is the insulation of refrigerant piping and drain piping completely carried out?	Water leakage	
Does the drain flow out smoothly?	Water leakage	
Is the power supply voltage identical to that stated in the manufacturer's label on the air conditioner?	Does not operate · burnout	
Are you sure that there is no wrong wiring or piping or no loose wiring?	Does not operate · burnout	
Is grounding completed?	Danger in case of leakage	
Are the sizes of electric wiring according to the specification?	Does not operate - burnout	
Are any of air outlets or inlets of the indoor and outdoor units blocked with obstacles? (It may lead to capacity drop due to fan speed drop or malfunction of equipment.)	Does not cool / Does not heat	
Is the external static pressure set correctly?	Does not cool / Does not heat	

Also review the "SAFETY CONSIDERATIONS".

#### 2. Items to be checked at time of delivery

	-
Items to be checked	Check
Have you carried out field setting? (if necessary)	
Are the electrical wiring box cover, air filter, suction grille attached?	
Does the cool air discharge during the COOL operation and the warm air discharge during the HEAT operation? Does the indoor unit makes unpleasant sound of air discharge?	
Did you explain about operations while showing the operation manual to your user?	
Have you explained the description of COOL, HEAT, DRY and AUTOMATIC (cooling/heating) given in the operation manual to the user?	
If you set the fan speed at thermostat OFF, did you explain the set fan speed to the user.	
Did you hand the operation manual over to the user?	
Have you checked that there is no generation of abnormal noise (i.e., noise resulting from contamination or missing parts)?	
Is the printed circuit board switch not on the emergency (EMG.) side? The switch is factory set to the normal (NORM.) side.	
If an optional accessory is in use, did you check the operation of the optional accessory and make field settings as needed?	
Have you explained failure examples of 3. CHOOSING AN INSTALLATION SITE?	

#### Items to be checked at time of delivery

Test items         C           Did you explain about operations while showing the operation manual to the user?         Did you hand the operation manual over to the	
the operation manual to the user?	heck
Did you hand the operation manual over to the	
user?	

#### Points for explanation about operations

The items with  $\triangle$  WARNING and  $\triangle$  CAUTION marks in the operation manual are the items pertaining to possibilities for bodily injury and material damage in addition to the general usage of the product. Accordingly, it is necessary that you make a full explanation about the described contents and also ask the users to read the operation manual.

#### Note to the installer

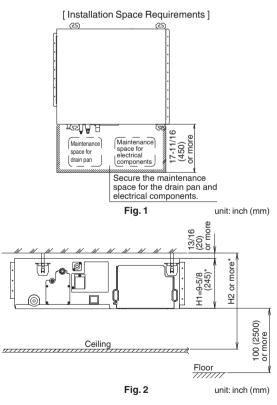
Be sure to instruct customers how to properly operate the unit (especially operating different functions, and adjusting the temperature) by having them carry out operations while looking at the manual.

### 3. CHOOSING AN INSTALLATION SITE

Hold the hangers at 4 locations to move the indoor unit when unpacking or after unpacked, and do not apply force to the piping (refrigerant and drain) and air outlet flange. If the temperature and humidity in the ceiling is likely to exceed 86°F ( $30^{\circ}$ C), RH80%, use the additional insulation stick to the indoor unit.

Use the insulation such as glass wool or polyethylene that has thickness of 3/8 inch (10mm) or more. However, keep the insulated outside dimension smaller than the ceiling opening so that the unit may go through the opening at installation.

- (1) Select the installation location that meets the following conditions and get approval of the user.
  - · Where the cool and warm air spreads evenly in the room.
  - Where there are no obstacles in the air passage.
  - Where drainage can be ensured.
  - Where the ceiling's lower surface is not remarkably inclined.
  - Where there is sufficient strength to withstand the mass of the indoor unit. (If the strength is insufficient, the indoor unit may vibrate and get in contact with the ceiling and generate unpleasant chattering noise.)
  - Where a space sufficient for installation and service can be ensured. (Refer to Fig. 1 and Fig. 2)
  - Where the piping length between the indoor and the outdoor units is ensured within the allowable length. (Refer to the installation manual attached to the outdoor unit.)
  - Where there is no risk of flammable gas leak.



- * Dimension H1 indicates the product height.
- * Secure a downward slope of at least 1/100 specified in 7. DRAIN PIPING WORK and determine dimension H2.

#### <Failure example>

If there is an obstacle in the airflow path or proper installation space is not provided, the indoor unit will cause air volume reduction and take in air blown out of the indoor unit, thus resulting in performance degradation or turning the thermostat OFF frequently.

### 

 Install the indoor and outdoor units, power supply wiring, remote controller wiring and transmission wiring at least 1 meter away from televisions or radios to prevent image interference or noise.

(Depending on the radio waves, a distance of 1 meter may not be sufficient to eliminate the noise.)

• Install the indoor unit as far as possible from fluorescent lamps.

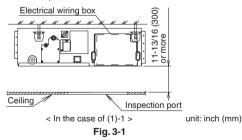
If a wireless remote controller kit is installed, the transmission distance may be shorter in a room where an electronic lighting type (inverter or rapid start type) fluorescent lamp is installed.

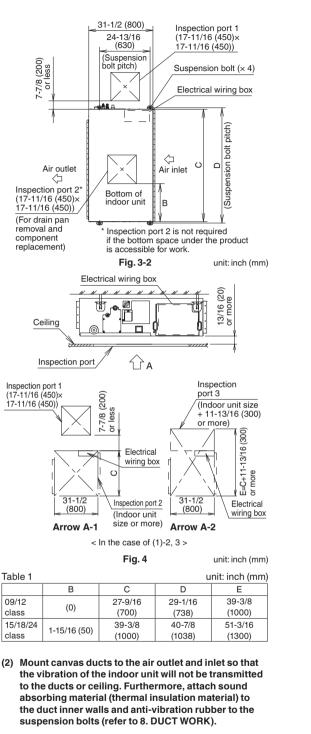
(2) Use suspension bolts to install the unit.

Check whether or not the ceiling is strong enough to support the weight of the unit. If there is a risk that the ceiling is not strong enough, reinforce the ceiling before installing the unit.

#### 4. PREPARATION BEFORE INSTALLATION

- Check the relation of location between the ceiling opening and the indoor unit suspension bolts. (unit: inch (mm))
  - Provide one of the following service spaces for the maintenance and inspection of the electrical wiring box and drain pump or for other services.
  - 1. Inspection ports 1 and 2 (17-11/16 inch (450mm)  $\times$  17-11/16 inch (450mm)) (Fig. 3-2) and a minimum space of 11-13/16 inch (300mm) at the bottom of the product (Fig. 3-1).
  - Inspection port 1 (17-11/16 inch (450mm) × 17-11/16 inch (450mm)) on the electrical wiring box side and inspection port 2 on the bottom of the product. (Fig. 4, arrow A-1)
  - Inspection port 3 on the bottom of the product and on the bottom side of the electrical wiring box. (Fig. 4, arrow A-2)





- (3) The indoor unit is set to standard external static pressure.
  - If external static pressure is higher or lower than the standard set value, the remote controller may be used to make on-site setting change in the external static pressure.

Refer to 10. FIELD SETTING.

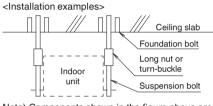
#### (4) Open installation holes (in the case of installation onto the existing ceiling).

- Open the installation holes on the ceiling of the installation location, and work on the refrigerant piping, drain piping, remote controller wiring, and wiring between the indoor and outdoor units to the piping connection port and wiring connection port of the indoor unit (refer to each piping and wiring procedure items).
- Ceiling framework reinforcement may be required in order to keep the ceiling horizontal and prevent ceiling vibration after opening the ceiling holes. For details, consult your building and upholstery work contractors.

#### (5) Install the suspension bolts.

• Use M8 or M10 bolts for hanging the indoor unit. Use hole-in-anchors for the existing bolts and embedded inserts or foundation bolts for new bolts, and fix the indoor unit firmly to the building so that it may withstand the mass of the unit.

In addition, adjust clearance (1-15/16 inch (50mm) -3-15/16 inch (100mm)) from the ceiling in advance.

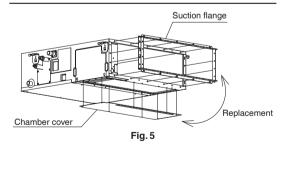


Note) Components shown in the figure above are all local procurement.

#### (6) In the case of changing the preset suction to

- underside suction, replace the chamber cover and the suction flange. (Refer to Fig. 5)
- 1. Remove the suction flange and chamber cover.
- 2. Replace the suction flange and the chamber cover.

- Secure a sufficient maintenance space for the drain pan and electrical components before installing the indoor unit.
- Secure a sufficient maintenance space for the filter chamber, and peripheral components before installing the indoor unit.

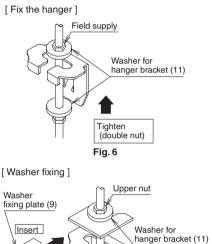


### 5. INDOOR UNIT INSTALLATION

Depending on the optional parts, it may be easier to attach them before installing the indoor unit. Refer to also the installation manual attached to the optional parts. As for the parts to be used for installation work, be sure to use the provided accessories and specified parts designated by our company.

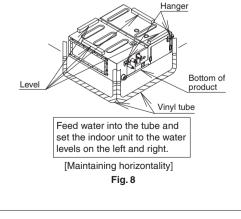
- (1) Install the indoor unit temporarily.
  - Fix the hanger to the suspension bolt.
     Make sure to securely fix the hanger with the nut and the washer for hanger bracket (11) from the upper and lower side. (Refer to Fig. 6)

If the washer fixing plate (9) is used, the upper side washer for hanger bracket (11) may be protected from falling off. (Refer to Fig. 7)





- Keep the air outlet covered with a protective sheet to prevent weld spatter and other foreign materials from entering the indoor unit and damaging the resin drain pan. (If holes or cracks are generated in the resin drain pan, water can leak.)
- (2) Adjust the height of the unit.
- (3) Check the unit is horizontally level. (Refer to Fig. 8)
- (4) Remove the washer fixing plate (9) used for preventing the washer for hanger bracket (11) from dropping and tighten the upper side nut.



# $-\cancel{N}$ CAUTION -

- Install the indoor unit leveled.
   If the indoor unit is inclined and the drain piping side gets high, it may cause malfunction of float switch and result in
- water leakage.
  Attach nuts on the upper and lower side of hanger. If there is no upper nut and the lower nut is over-tightened, the hanger and the top plate will deform and cause abnormal sound.
- Do not insert materials other than that specified into the clearance between the hanger and the washer for hanger bracket (11).

Unless the washers are properly attached, the suspension bolts may come off from the hanger.

## 

The indoor unit must be securely installed on a place that can withstand the mass.

If the strength is insufficient, the indoor unit may fall down and cause injuries.

# 6. REFRIGERANT PIPING WORK

Refer to the installation manual for the outdoor unit also.

 Carry out insulation of both gas and liquid refrigerant piping securely. If not insulated, it may cause water leakage. For gas piping, use insulation material of which heat resistant temperature is not less than 230°F (110°C).
 For use under high humidity, strengthen the insulation material for refrigerant piping. If not strengthened, the surface of insulation material may sweat.

#### (1) Flaring the pipe end

- 1. Cut the pipe end with a pipe cutter.
- 2. Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- 3. Put the flare nut on the pipe.
- 4. Flare the pipe.
- 5. Check that the flaring has been done correctly.

Cut exactly at right angles. Remove burrs Flaring Set exactly at the position shown below. ♦ A Flare tool for R410A Conventional flare tool Clutch-type Wing-nut type Clutch-type (Imperial-type) (Rigid-type) 0-0.02in 0.04-0.06in 0.06-0.08in A (0-0.5mm) (1.0-1.5mm) (1.5-2.0mm) Check The pipe end must The flare's inner surface be evenly flared in a perfect circle must be flaw-free Make sure that the flare nut is fitted

## 

- Do not apply mineral oil to the flare.
  Prevent mineral oil from getting into the system as
- this would reduce the service life of the units. Never use piping which has been used for previous
- installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

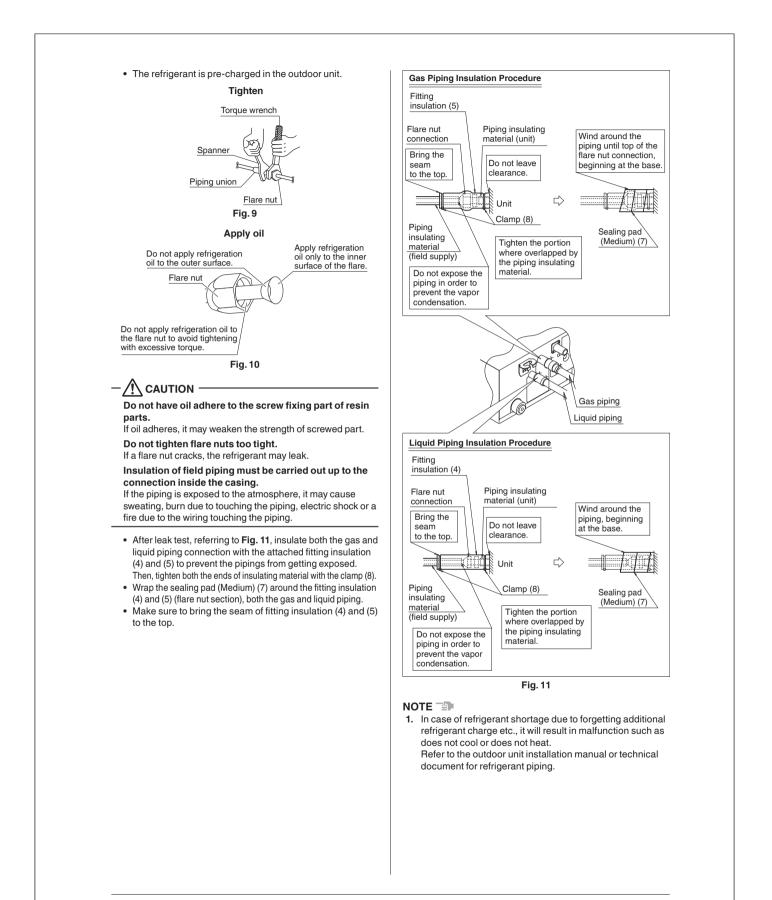
# 

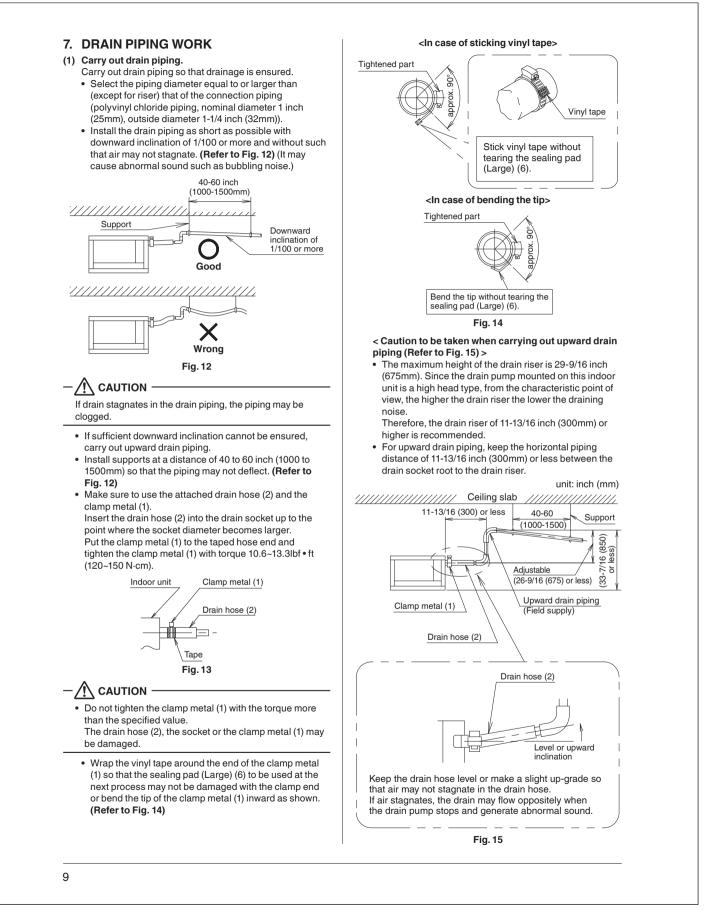
- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- Use a pipe cutter and flare suitable for the type of refrigerant.
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.) (Refer to Fig. 10)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Protect the open end of the pipe against dust and moisture.
  Do not allow anything other than the designated
- refrigerant to get mixed into the refrigerant circuit, such as air, etc. If any refrigerant gas leaks while working on the unit, ventilate the room thoroughly right away.
- Use only the flare nuts attached to the air conditioner. If other flare nuts are used, it may cause refrigerant leakage.

#### (2) Refrigerant piping

- To prevent gas leakage, apply refrigeration machine oil only to the inner surface of the flare. (Use refrigeration oil for R410A)
- 2. Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.
  - Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage. (Refer to Fig. 9)

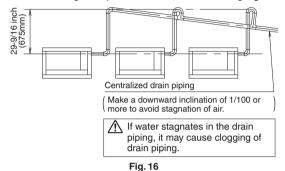
Flare nut tightening torque				
Gas side Liquid side				
3/8 inch	1/2 inch	5/8 inch	1/4 inch	
(9.5mm)	(12.7mm)	(15.9mm)	(6.4mm)	
24.1-29.4ft•lbf	36.5-44.5ft•lbf	45.6-55.6ft•lbf	10.4-12.7ft•lbf	
(32.7-39.9N•m)	(49.5-60.3N•m)	(61.8-75.4N•m)	(14.2-17.2N•m)	





## - 🕂 CAUTION -

- To avoid the attached drain hose (2) getting excessive force, do not bend nor twist it.
   It may cause water leakage.
- As for drain piping connection, do not connect the drain hose directly to a sewage that gives off ammonia odor.
   (The ammonia in the sewage may go through the drain piping and corrode the heat exchanger of the indoor unit.)
- In case of centralized drain piping, carry out piping work according to the procedure shown in the following Fig. 16.

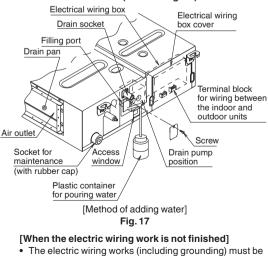


- As for the size of centralized drain piping, select the size that meets the capacity of indoor units to be connected. (Refer to the technical document)
- Positioning the upward drain piping at an angle may cause float switch malfunction and lead to water leakage.
- While replacing with new indoor unit, use the attached new drain hose (2) and the clamp metal (1).
   If an old drain hose or a clamp metal is used, it may cause water leakage.

# (2) After piping work is finished, check if drainage flows smoothly.

#### [When the electric wiring work is finished]

 Gradually pour 1/4 gal of water from the inspection port at the bottom of the drain socket on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump and confirm drainage by operating the indoor unit under cooling mode according to 10. FIELD SETTING. (Refer to Fig. 17)

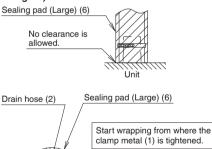


carried out by a qualified electrician.

- If a qualified person is not present, after the electric wiring work is finished, check the drainage according to the method specified in [When the electric wiring work is finished].
  - 1. Open the electrical wiring box cover and connect the ground wiring to the ground terminal.
  - 2. Make sure the electrical wiring box cover is closed before turning on the power supply.
    - Throughout the whole process, carry out the work giving caution to the wiring around the electrical wiring box so that the connectors may not come off.
  - Gradually pour 1 litre of water from the air outlet on the left side of the drain socket into the drain pan giving caution to avoid splashing water on the electric components such as drain pump. (Refer to Fig. 17)
  - When the power supply is turned on, the drain pump will operate. Drainage can be checked at the transparent part of the drain socket. (The drain pump will automatically stop after 10 minutes.)

The drainage of water can be confirmed with water level change in the drain pan through the access window.

- Do not connect the drain piping directly to the sewage that gives off ammonia odor.
   The ammonia in the sewage may go through the drain piping and corrode the heat exchanger of the indoor unit.
- Do not apply external force to the float switch. (It may result in malfunction)
- Do not touch the drain pump. Touching the drain pump may cause electric shock.
- 5. Turn off the power supply after checking drainage, and remove the power supply wiring.
- 6. Attach the electrical wiring box cover as before.
- (3) Sweating may occur and result in water leakage. Therefore, make sure to insulate the following 2 locations (drain piping that laid indoors and drain sockets).
  - Use the provided sealing pad (large) (6), and perform the thermal insulation of the clamp metal (1) and drain hose (2) after checking the drainage of water. (Refer to Fig. 18)





doubled.

Fig. 18

#### 8. DUCT WORK

Pay the utmost attention to the following items and conduct the duct work.

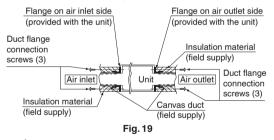
- Check that the duct is not in excess of the setting range of external static pressure for the unit. (Refer to the technical datasheet for the setting range.)
- Attach a canvas duct each to the air outlet and air inlet so that the vibration of the equipment will not be transmitted to the duct or ceiling.

Use a sound-absorbing material (insulation material) for the lining of the duct and apply vibration insulation rubber to the suspension bolts.

- At the time of duct welding, perform the curing of the duct so that the sputter will not come in contact with the drain pan for the filter.
- If the metal duct passes through a metal lath, wire lath, or plate of a wooden structure, separate the duct and wall electrically.
- Be sure to heat insulate the duct for the prevention of dew condensation. (Material: Glass wool or styrene foam; Thickness: 1 inch (25mm))
- Be sure to attach the field supply air filter to the air inlet of the unit or field supply inlet in the air passage on the air suction side. (Be sure to select an air filter with a duct collection efficiency of 50 weight percent.)
- Explain the operation and washing methods of the locally procured components (i.e., the air filter, air inlet grille, and air outlet grille) to the user.
- Locate the air outlet grille on the indoor side for the prevention of drafts in a position where indirect contact with people.
- The air conditioner incorporates a function to adjust the fan to rated speed automatically. (10. FIELD SETTING) Therefore, do not use booster fans midway in the duct.

#### Connection method of ducts on air inlet and outlet sides.

- Connect the field supply duct in alignment with the inner side of the flange.
- Connect the flange and unit with the duct flange connection screw (3).
- Wrap aluminium tape around the flange and duct joint in order to prevent air leakage.



# 

Connect the flange and unit with the flange connection screw (3) regardless of whether the duct is connected to the air inlet side.

#### 9. ELECTRIC WIRING WORK

#### 9-1 GENERAL INSTRUCTIONS

- Make certain that all electric wiring work is carried out by qualified personnel according to the applicable legislation and this installation manual, using a separate dedicated circuit.
- Insufficient capacity of the power supply circuit or improper electrical construction may lead to electric shock or a fire.
- Make sure to install a ground fault circuit interrupter. Failure to do so may cause electric shock and a fire.
- Do not turn on the power supply (branch switch, branch overcurrent circuit breaker) until all the works are finished.
- Multiple number of indoor units are connected to one outdoor unit. Name each indoor unit as A-unit, B-unit ..... and the like. When these indoor units are wired to the outdoor unit, always wire the indoor unit to the terminal indicated with the same symbol on the terminal block. If the wiring and the piping are connected to the different indoor units and operated, it will result in malfunction.
- Make sure to ground the air conditioner. Grounding resistance should be according to applicable legislation.
- Do not connect the ground wiring to gas or water pipings, lightning conductor or telephone ground wiring.
- Gas piping .....Ignition or explosion may occur if the gas leaks.
- Water piping ......Hard vinyl tubes are not effective grounds.
- Lightning conductor or telephone ground wiring ..... Electric potential may rise abnormally if struck by a lightning bolt.
- For electric wiring work, refer to also the "WIRING DIAGRAM" attached to the electrical wiring box cover.
- Carry out wiring between the outdoor units, indoor units and the remote controllers according to the wiring diagram.
- Carry out installation and wiring of the remote controller according to the "installation manual" attached to the remote controller.
- Do not touch the Printed Circuit Board assembly. It may cause malfunction.

# 

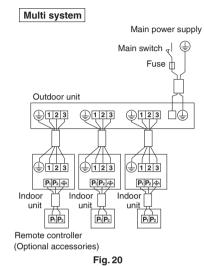
- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

- When clamping wiring, use the included clamping material to prevent outside pressure being exerted on the wiring connections and clamp firmly. When doing the wiring, make sure the wiring is neat and does not cause the electrical wiring box cover to stick up, then close the cover firmly.
- Outside the unit, separate the low voltage wiring (remote controller wiring) and high voltage wiring (wiring between units, ground, and other power wiring) at least 2 in. so that they do not pass through the same place together. Proximity may cause electrical interference, malfunctions, and breakage.

#### 9-2 WIRING EXAMPLE

For the wiring of outdoor units, refer to the installation manual attached to the outdoor units.

- Confirm the system type.
- Multi system: 2 through 6 (The number of connectable units will vary according to model) indoor units connect to 1 outdoor unit. The indoor unit is controlled by remote controller connected to each indoor unit.



#### NOTE -

- 1. All transmission wiring except for the remote controller wires is polarized and must match the terminal symbol.
- 2. In case a shielding wire is to be used, connect a shielded portion with the  $\triangle$  of a remote controller terminal block. (Also, connect the ground for the remote control to a grounded metal part.)

#### 9-3 SPECIFICATION FOR FIELD WIRE

#### Table 2

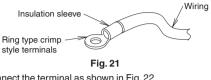
	Wire	Size	Length (ft.)
Wiring between units	Wire size and length must comply with local codes.	-	_
Remote controller wiring	Sheathed (2 wire)	AWG 18 - 16	Max.1640*
Wiring to ground terminal	Wire size and length must comply with local codes.	_	_

* This will be the total extended length in the system when doing group control.

### 9-4 WIRING CONNECTION METHOD

#### **CAUTION FOR WIRING -**

• For connection to the terminal block, use ring type crimp style terminals with insulation sleeve or insulate the wirings properly.



- Connect the terminal as shown in Fig. 22. When installing a single core wire.
- · Do not carry out soldering finish when stranded wirings are used. (Otherwise, the loosening of wiring may result in abnormal heat radiation.)

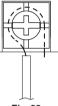


Fig. 22

(Abnormal heating may occur if the wirings are not tightened securely.)

- Use the required wirings, connect them securely and fix these wirings securely so that external force may not apply to the terminals.
- Use a proper screw driver for tightening the terminal screws. If an improper screw driver is used, it may damage the screw head and a proper tightening cannot be carried out.
- If a terminal is over tightened, it may be damaged. Refer to the table shown below for tightening torque of terminals

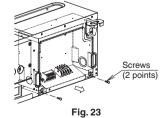
unit: lbf • ft (N • m)
Tightening torque
0.58 - 0.72 (0.79 - 0.98)
0.87 - 1.06 (1.18 - 1.44)

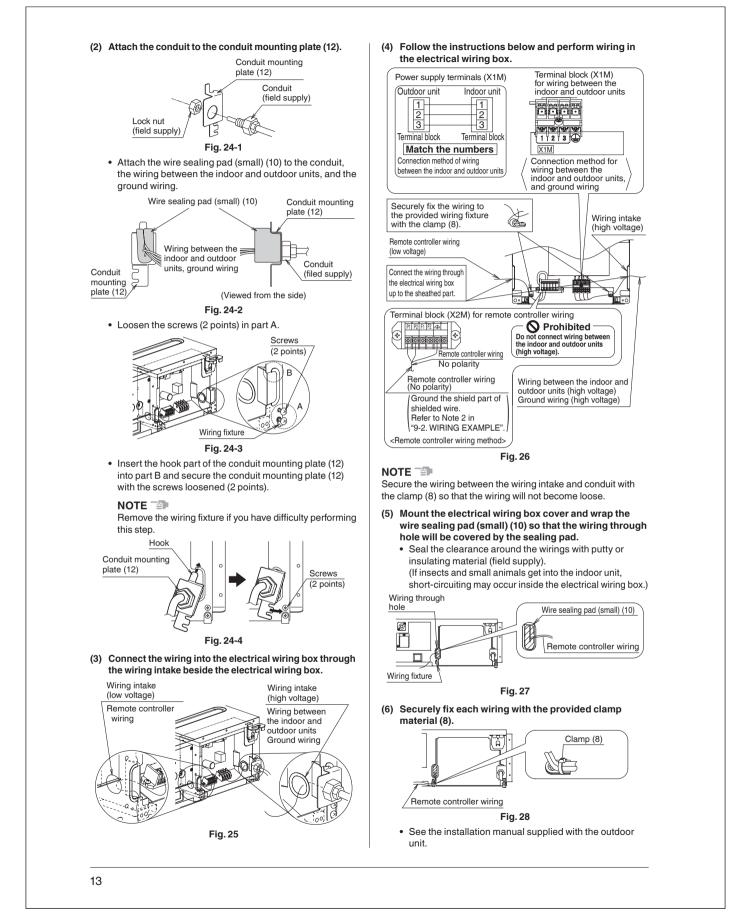
· Do not carry out soldering finish when stranded wirings are used.

### /!\ WARNING -

When wiring, form the wirings orderly so that the electrical wiring box cover can be securely fastened. If the electrical wiring box cover is not in place, the wirings may come out or be sandwiched by the box and the lid and cause electric shock or a fire.

#### (1) Remove the electrical wiring box cover.





## **10.FIELD SETTINGS**

#### -/! CAUTION -

Before carrying out field setting, check the items mentioned in 1. Items to be checked after the installation work is completed on page 3.

- Check if all the installation and piping works for the air conditioner are completed.
- Check that the outside panel and piping cover of the indoor and outdoor units are closed.

#### < FIELD SETTINGS >

After turning on the power supply, carry out field setting from the remote controller according to the installation state.

 Carry out setting at 3 places, "Mode No.", "FIRST CODE No." and "SECOND CODE No.".

The settings shown by _____ in the following tables indicate those when shipped from the factory.

• The method of setting procedure and operation is shown in the installation manual attached to the remote controller.

#### NOTE

- Though setting of "Mode No." is carried out as a group, if you intend to carry out individual setting by each indoor unit or confirmation after setting, carry out setting with the Mode No. shown in the parenthesis().
- Ask the user to keep the manual attached to the remote controller together with the operation manual.
- Do not carry out settings other than those shown in the table.
  Settings are performed by selecting "Mode No.", "FIRST
- CODE No.", and "SECOND CODE No.".

#### **10-1 SETTINGS FOR EXTERNAL STATIC PRESSURE** • Make settings in either method (a) or method (b).

(a) Make settings with Air volume automatic adjustment function.

"Air volume automatic adjustment" function: The air volume is adjusted to the rated air volume automatically.



 Be sure to check that the external static pressure is within the specification range before making settings. The external static pressure will not be automatically adjusted and air volume insufficiency or water leakage may result if the external static pressure is outside the range. (Refer to the technical document for the setting range of external static pressure.) (1) Check that the electrical wiring and duct work have been completed.

(If the closing damper is set midway, be sure to check that the damper is opened. Furthermore, check that the air passage on the suction side is provided with an air filter (field supply)).

(2) If air conditioner has more than one air outlet and air inlet, be sure to make adjustments so that the air volume ratio of each air outlet and the corresponding air inlet will conform to the designed air volume ratio.

In that case, set the operating mode to "Fan". (In the case of changing the air volume, press the fan speed button on the remote controller and change the current selection to "High", "Medium", or "Low".)

(3) Make settings to adjust the air volume automatically. After setting the operating mode to "Fan", set the air conditioner to field setting mode with the operation of the air conditioner stopped. Select Mode No. [21] (11 in the case of batch settings), select FIRST CODE No. "7", and set the SECOND CODE No. to "03".

Return to the "Basic screen" ("Normal mode" if a wireless remote controller is used), and press the ON/OFF button. The operation lamp is lit, and the indoor unit will go into fan operation for air volume automatic adjustments (at which time, do not adjust the opening of the air outlet or inlet). The air volume adjustments will automatically terminate approximately 1 to 15 minutes after the indoor unit comes into operation, and the operation lamp will be OFF and the indoor unit will come to a stop.

Table 4

Table 4					
Mode	FIRST	Setting	SEC	COND CODE	No.
No.	CODE No.	content	01	02	03
11(21)	7	Air volume adjustment	OFF	Air volume adjustment completion	Air volume adjustment start

## $-\underline{/!}$ caution -

- If airflow pathway changes, such as duct and air outlet changes, are made after air volume adjustments, be sure to make "Air volume automatic adjustment" again.
- If airflow pathway changes, such as duct and air outlet changes, are made after 11.TRIAL OPERATION AND TESTING or air conditioner relocation, contact your dealer.

(b) Select external static pressure with the remote controller. Check with Mode No. [21] per indoor unit that the SECOND CODE No. for the above "Air volume adjustment" is set to "01" (OFF). (The SECOND CODE No. is factory set to "01" (OFF).) Change the SECOND CODE No. by referring to the table below according to the external static pressure of the duct to be connected.

Table 5 09/12	class		
External static	Mode No.	FIRST	SECOND
pressure	wode wo.	CODE No.	CODE No.
30Pa			03
40Pa			04
50Pa			05
60Pa			06
70Pa	13(23)	6	07
80Pa			08
90Pa			09
100Pa			10
110Pa			11
120Pa			12
130Pa			13
140Pa			14
150Pa			15

Table 5 15/18/24 class

Table 5 15/16/24 class						
External static pressure	Mode No.	FIRST CODE No.	SECOND CODE No.			
50Pa			05			
60Pa			06			
70Pa			07			
80Pa			08			
90Pa			09			
100Pa	13(23)	6	10			
110Pa			11			
120Pa			12			
130Pa			13			
140Pa			14			
150Pa			15			

#### **10-2 SETTING WHEN AN OPTIONAL ACCESSORY IS** ATTACHED

· For setting when attaching an optional accessory, refer to the installation manual attached to the optional accessory.

#### **10-3 SETTING FILTER SIGN**

- A message to inform the air filter cleaning time will be indicated on the remote controller.
- Set the SECOND CODE No. shown in the Table 6 according to the amount of dust or pollution in the room.
- The periodical filter cleaning time can be shortened depending on the environment.

### Table 6

Contamination	Hours until indication	Mode No. FIRST CODE No.		SECOND CODE No.
Normal	Approx. 2500 hrs		0	01
More contaminated	Approx. 1250 hrs	10(20)		02
With indication			3	01
No indication*			3	02

* Use "No indication" setting when cleaning indication is not necessary such as the case of periodical cleaning being carried out.

#### **10-4 REMOTE CONTROL SETTINGS**

- <In the case of using a wireless remote controller>
- In the case of using a wireless remote controller, address settings for the wireless remote controller are required. For settings, refer to the installation manual provided with the wireless receiver kit.

#### **11. TRIAL OPERATION AND TESTING**

#### 11-1 TRIAL OPERATION AND TESTING

- Trial operation should be carried out in either COOL or HEAT operation.
- 1. Measure the supply voltage and make sure that it is within the specified range.
- 2. In COOL operation, select the lowest programmable temperature: in HEAT operation, select the highest programmable temperature.
- 3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, are working properly.
  - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- 4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).
  - When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, set it to the trial operation mode using the following method. Refer to For wired remote controller on page 16.

Refer to For wireless remote controller on page 17.

#### For wired remote controller

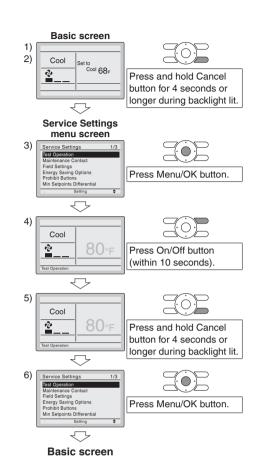
- 1) Set to COOL or HEAT operation using the remote controller.
- 2) Press and hold Cancel button for 4 seconds or longer. Service settings menu is displayed.
- Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
- 4) Press On/Off button within 10 seconds, and the test operation starts.

Monitor the operation of the indoor unit for a minimum of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature setpoint and room temperature.

- In the case of above-mentioned procedures 3) and 4) in reverse order, test operation can start as well.
- 5) Press and hold Cancel button for 4 seconds or longer in the basic screen.

Service settings menu is displayed.

- 6) Select Test Operation in the service settings menu, and press Menu/OK button. Basic screen returns and normal operation is conducted.
  - Test operation will stop automatically after 15-30
    minutes. To stop the operation, press On/Off button.



#### Diagnose with the display on the liquid crystal display For wireless remote controller remote controller. 1) Press ( and select the COOL or HEAT operation. With the wired remote controller 2) Press twice. "Test" is displayed. When the operation stops due to a malfunction, operation lamp blinks, and the malfunction code is indicated on the liquid () ON/OFF crystal display. In such a case, diagnose the fault contents by 3) Press ( III) within 10 seconds, and the test operation referring to Error History in the service settings menu. starts. In the case of group control, the unit No, is displayed so that Monitor the operation of the indoor unit for a minimum the indoor unit with the trouble can be identified. of 10 minutes. During test operation, the indoor unit will continue to cool/heat regardless of the temperature With the wireless remote controller setpoint and room temperature. (Refer also to the operation manual attached to the wireless • In the case of above-mentioned procedures 1) and 2) remote controller) in reverse order, test operation can start as well. When the operation stops due to a malfunction the display • Test operation will stop automatically after 15 - 30 on the indoor unit blinks. In such a case, diagnose the fault ()ON/OFI minutes. contents with the error code which can be found by following To stop the operation, press procedures. · Some of the functions cannot be used in the test operation mode. 1) Press the INSPECTION/TEST OPERATION button, " is displayed and "0" blinks. Precautions 2) Press the TEMPERATURE SETTING button and find the 1) Refer to "11-2 HOW TO DIAGNOSE FOR MALFUNCTION" unit No. which stopped due to trouble. if the unit does not operate properly. Number of beens **11-2 HOW TO DIAGNOSE FOR MALFUNCTION** 3 short beeps..... Perform all the following If the air conditioner does not operate normally after operations installing the air conditioner, a malfunction shown in the table 1 short beep ..... Perform (3) and (6) below may happen. 1 long beep..... No trouble

	l remote er display	Description
No c	lisplay	<ul> <li>Power outage, power voltage error or open-phase</li> <li>Incorrect wiring (between indoor and outdoor units)</li> <li>Indoor PC-board assembly failure</li> <li>Remote controller wiring not connected</li> <li>Remote controller failure</li> <li>Open fuse or tripped circuit breaker (outdoor unit)</li> </ul>
conn Pleas	king the lection. le stand y." *	<ul> <li>Indoor PC-board assembly failure</li> <li>Wrong wiring (between indoor and outdoor units)</li> </ul>

* "Checking the connection. Please stand by" will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

- 3) Press the OPERATION MODE SELECTOR button and upper figure of the error code blinks.
- 4) Continue pressing the TEMPERATURE SETTING button until it makes 2 short beeps and find the upper code.
- 5) Press the OPERATION MODE SELECTOR button and lower figure of the error code blinks.
- 6) Continue pressing the TEMPERATURE SETTING button until it makes a long beep and find the lower code.
  • A long beep indicate the error code.

### 11-3 MALFUNCTION CODE

- For places where the malfunction code is written in white, the " or indication is not displayed. Though the system continues operating, be sure to inspect the system and make repairs as necessary.
- Depending on the type of indoor or outdoor unit, the malfunction code may or may not be displayed.

Malfunction code	Descriptions and measures	Remarks
A1	Indoor Printed Circuit Board failure	
A3	Drain level abnormal	
A5	High pressure control or freeze-up protector	
A6	Indoor fan motor overload, over current, lock	
AU	Indoor Printed Circuit Board connection failure	
A8	Indoor unit power supply voltage abnormal	
ΑJ	Capacity setting failure	Capacity setting adapter or capacity data error, or disconnection of the capacity setting adapter, failure to connect the adapter, or the capacity is not set to the data-retention IC.
C1	Transmission error between indoor Printed Circuit Board (Master) and indoor Printed Circuit Board (Slave)	
C4	Indoor heat exchanger liquid pipe temperature sensor malfunction	Abnormal stop is applied depending on the model or condition.
C5	Indoor heat exchanger condenser / evaporator temperature sensor malfunction	Abnormal stop is applied depending on the model or condition.
C9	Suction air thermistor malfunction	Abnormal stop is applied depending on the model or condition.
CJ	Remote controller air thermistor malfunction	Remote controller thermo does not function, but body thermo operation is enabled.

E0	Action of safety device (Outdoor unit)	
E1	Outdoor Printed Circuit Board failure (Outdoor unit)	
E5	Compressor motor lock malfunction (Outdoor unit)	
E6	Compressor motor lock by over current (Outdoor unit)	
	Outdoor fan motor lock malfunction (Outdoor unit)	
E7	Outdoor fan instant overcurrent malfunction (Outdoor unit)	
E8	Input overcurrent (Outdoor unit)	
EA	Cooling/heating switch malfunction (Outdoor unit)	
F3	Discharge piping temperature malfunction (Outdoor unit)	
F6	High pressure control (in cooling) (Outdoor unit)	
F8	Operation halt due to compressor internal temperature abnormality	
H0	Sensor fault for inverter (Outdoor unit)	
H6	Operation halt due to faulty position detection sensor	
H8	CT abnormality (Outdoor unit)	
H9	Outdoor air thermistor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J3	Discharge piping thermistor system malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
J6	Outdoor heat exchanger distributor liquid piping thermistor malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
L3	Reactor thermistor malfunction (Outdoor unit)	
L4	Overheated heat-radiating fin (Outdoor unit)	Inverter cooling failure.
L5	Instantaneous overcurrent (Outdoor unit)	The compressor engines and turbines may be experiencing a ground fault or short circuit.

P4	Heat-radiating fin thermistor malfunction (Outdoor unit)	Abnormal stop is applied depending on the model or condition.
UO	Suction piping temperature abnormal (Outdoor unit)	The refrigerant may be insufficient. Abnormal stop is applied depending on the model or condition.
U2	Power voltage malfunction (Outdoor unit)	The inverter open-phase or main circuit condenser may be malfunctioning. Abnormal stop is applied depending on the model or condition.
U4 UF	Transmission error (between indoor and outdoor units)	Wiring error between indoor and outdoor unit. Or Indoor and outdoor Printed Circuit Board failure.
U5	Transmission error (between indoor and remote controller units)	Transmission between indoor unit and remote controller is not performed properly.
U7	Transmission error of the inverter module	
UA	Field setting error	System setting error of the simultaneous on/off multi- split type.
UE	Transmission error (between indoor unit and centralized remote controller)	
UC	Remote controller address setting error	

# - A CAUTION -

After test operation is completed, check the items mentioned in the clause 2 **2. Items to be checked at time of delivery** on page 4.

If the interior finish work is not completed when the test operation is finished, for protection of the air conditioner, ask the user not operate the air conditioner until the interior finish work is completed.

If the air conditioner is operated, the inside of the indoor units may be polluted by substances generated from the coating and adhesives used for the interior finish work and cause water splash and leakage.

### 

After test operation is completed, before delivering the air conditioner to the user, confirm that the electrical wiring box cover is closed.

In addition, explain the power supply status (power supply ON/  $\ensuremath{\mathsf{OFF}}$  ) to the user.

# 12.5 <BRC1E73> Wired Remote Controller

# 1. Safety Considerations

The original instructions are written in English. All other languages are translations of the original instructions.

All phases of the field-installation, including, but not limited to, electrical, piping, safety, etc. must be in accordance with manufacturer's instructions and must comply with national, state, provincial and local codes.

Read these SAFETY CONSIDERATIONS carefully before installing the remote controller.

After completing the installation, ensure that the remote controller operates properly during the startup operation.

Train the customer to operate and maintain the remote controller. Inform customers that they should store this Installation Manual with the Operation Manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in electrical shock, fire, or explosion.

Meanings of WARNING, CAUTION, and NOTE Symbols.

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
Indicates situations that may result in equipment or property-damage accidents only.

# 

Only qualified personnel must carry out the installation work.

Consult your Daikin dealer regarding relocation and reinstallation of the remote controller. Improper installation work may result in electric shocks or fire.

Electrical work must be performed in accordance with relevant local and national regulations and with instructions in this installation manual.

Improper installation may cause electrical shocks or fire.

Use only specified accessories and parts for installation work.

Failure to use specified parts may result in electric shocks, fire, or the unit falling.

Do not disassemble, reconstruct, or repair.

Electric shock or fire may occur.

Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires.

Improper connections or installation may result in fire.

Before touching electrical parts, confirm the power-off to the unit.

Keep water out of the remote	controller.
To avoid electric shock due to	entry of water or insects, fill the wiring through-hole with putty.
Do not wash the remote contr	oller with water as it may result in electrical shocks or fire.
Do not touch the remote contr	oller buttons with wet fingers.
Touching the buttons with wet	fingers can cause an electric shock.
Do not install the remote conti	oller in the following locations:
<ul> <li>Where a mineral oil mist of Plastic parts may deterior</li> </ul>	r oil spray or vapor is produced, for example, in a kitchen. ate.
(b) Where corrosive gas, suc	n as sulfurous acid gas, is produced.
(c) Near machinery emitting e	ectromagnetic waves.
Electromagnetic waves m malfunction.	ay disturb the operation of the control system and cause the unit to
(d) Where flammable gas ma	y leak, where there is carbon fiber or ignitable dust suspensions in the
	nables such as thinner or gasoline are handled.
	conditions can cause a fire.
(e) High temperature area or	
Overheating and/or fire ca	
	exposure to water. If water enters the inside of the remote controller,
It may cause electric shoc	k and electrical components may fail.
Install the control wires for the	indoor and the remote controller at least 3.5 feet (1 meter) away from
	t image interference or noise. Depending on the radio waves, a

televisions or radios to prevent image interference or noise. Depending on the radio waves, a distance of 3.5 feet (1 meter) may not be sufficient to eliminate the noise.

When remote controller's temperature sensor is used, select the installation location as per the following:

- A place where average temperature in the room can be detected.
- A place where it is not exposed to direct sunlight.
- A place where it is far away from any heat source.
- A place where it is not affected directly by outside air.

# 2. Accessories

The following accessories are included.

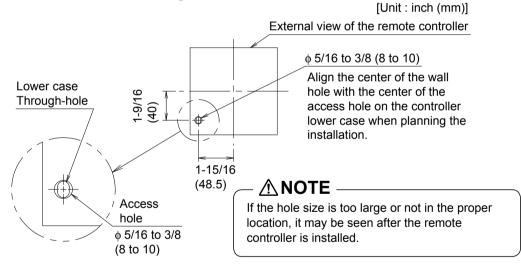
Drywall screw	Drywall anchor	Wire tie	Operation manual	Installation manual	Wiring retainer
Q					
(2 pcs.)	(2 pcs.)	(1 pc.)	(1 pc.)	(1 pc.)	(1 pc.)

# 3. Remote Controller Installation Procedure

# 3-1 Determine where to install the remote controller.

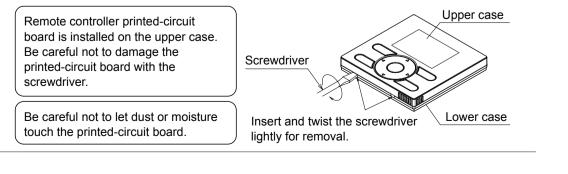
Make sure to follow the **Safety Considerations** when determining the location.

3-2 If the control wire for the remote controller is to be routed from the rear, consider the location of the access hole in the lower case for making a hole in the wall.



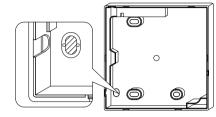
# 3-3 Remove upper case.

Insert a screwdriver in the recess of lower case to remove the upper case (2 points).



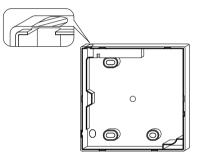
# 3-4 Determine the location where the wiring will enter the remote controller (back, left side, top left, top center).

3-4-1 Back outlet



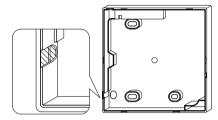
Cut off resin area (notched area).

# 3-4-3 Top left outlet



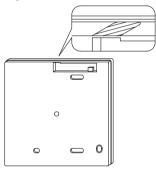
Cut the plastic at the notched area and remove any remaining burrs.

3-4-2 Left outlet



Cut the plastic at the notched area and remove any remaining burrs.

# 3-4-4 Top center outlet



Cut the plastic at the notched area and remove any remaining burrs.

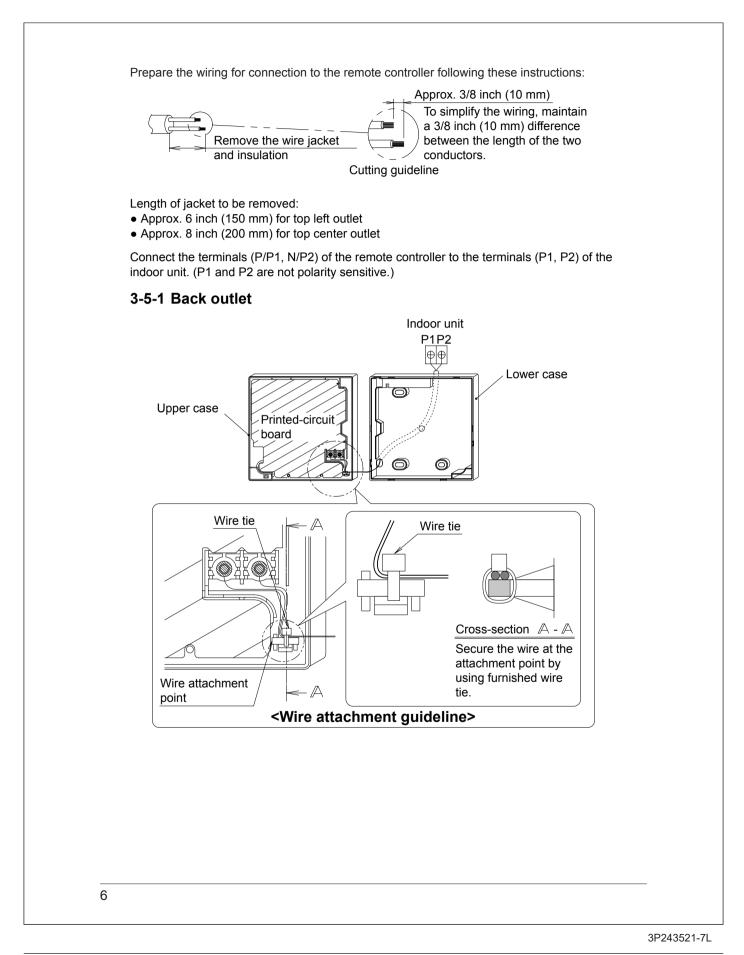
# 3-5 Install wiring.

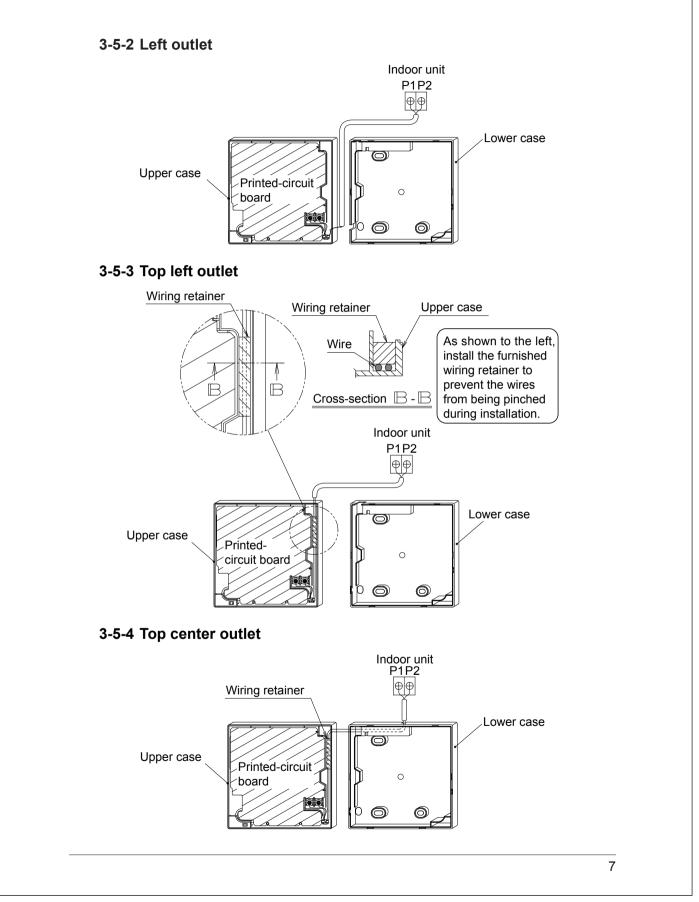
# 

- 1. Switch box and control wiring are filed supplied.
- 2. Do not touch the remote controller printed-circuit board.

### Wiring Specifications

Wiring Type	Non-shielded, 2-conductor, stranded copper wire
Wiring Size	AWG-18
Wiring Length	Maximum 1640 feet (500 m)





# - 🗥 NOTE -

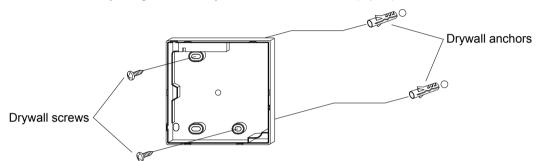
• To prevent electrical noise and possible communication errors, avoid installing the remote controller wiring parallel to or in the vicinity of line voltage circuits.

# **3-6 Installation procedure for the lower case.**

When wiring the remote controller through the top center or rear access points, attachment of the wire to the lower case is required before it is wall mounted. Closely follow the wiring procedures.

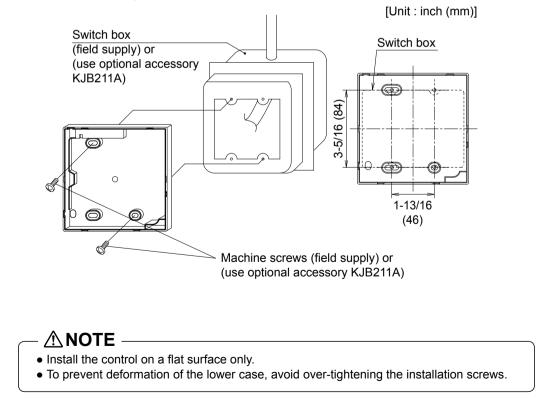
# 3-6-1 Wall installation

Secure by using furnished drywall anchors and screws (2 pcs.).



# 3-6-2 Switch box installation

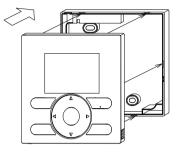
Secure by using field supplied machine screws (2 pcs.).





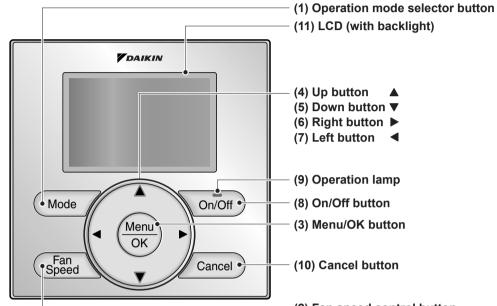
# 3-7 Install the upper case.

- Align the upper case with tabs of the lower case (6 points), insert and install the upper case.
- Install the wiring with care to prevent pinching.
- Peel off the protective membrane which overlays the upper case.



# 4. Functions and Menu Items of Remote Controller Buttons

# 4-1 Functions and menu items



- (1) Operation mode selector button Used to change the mode.
- (2) Fan speed control button
  - Used to change the fan control.
- (3) Menu/OK button
  - Used to access the main menu. (For details of the main menu, see the operation manual.)
  - Used to enter the item selected.

### Main Menu

*Airflow Direction *Individual Airflow Direction *Ventilation Schedule Off Timer Celsius / Fahrenheit Filter Auto Clean Maintenance Information Configuration Current Settings Clock & Calendar Daylight Saving Time Language

*Depending on connected model

10

(2) Fan speed control button

# (4) Up button **▲**

- Used to raise the setpoint temperature.
- The previous menu items will be highlighted.
  - (The highlighted items will be scrolled continuously when the button is pressed continuously.)
- Used to change the selected item.

# (5) Down button ▼

- Used to lower the setpoint temperature.
- Items below the currently selected item will be highlighted.
  (The highlighted items will be scrolled
  - continuously when the button is pressed continuously.)
- Used to change the selected item.

### (6) Right button ►

- Used to highlight items to the right of the currently selected item.
- Display contents are changed to next screen per page.

### (7) Left button ◀

- Used to highlight items to the left of the currently selected item.
- Display contents are changed to previous screen per page.

# (8) On/Off button

Press once to operate, and press once again to stop.

### (9) Operation lamp

Green lamp lights up during operation. The lamp will flash if a malfunction occurs.

### (10) Cancel button

- Used to return to the previous screen.
- Press and hold this button for 4 seconds or longer to display service settings menu.

### (11) LCD (with backlight)

The backlight will illuminate for approximately 30 seconds by pressing any operation button.

### Service Settings menu

Test Operation Maintenance Contact Field Settings *Energy Saving Options Prohibit Function Min Setpoints Differential *Outdoor unit AirNet Address Error History *Indoor Unit Status *Outdoor Unit Status Forced Fan ON Switch Main Sub Controller Filter Indicator *Brush/Filter Ind. *Disable Filter Auto Clean

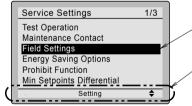
*Depending on connected model

# – 🗥 NOTE -

- Operate the button while the backlight is illuminated.
- When one indoor unit is controlled by two remote controllers (main / sub) only the first controller to be accessed by the user will illuminate it's backlight.

# 4-2 Button menu display descriptions

### <Service settings menu screen>



Highlighted display (selected items)

In the highlighted display (selected items) setting screen, button operation descriptions are displayed.

# 5. Power-on

- Check for completion of indoor/outdoor unit wiring.
- Ensure that covers have been replaced on electrical component boxes for both indoor and outdoor units prior to restoring power.
- 5-1 The following message is <Main remote controller> <Sub remote controller> displayed after power-on. 5-1 5-1 Checking the connection. Checking the connection Please stand by. Checking the connection Please stand by. Please stand by. When the above message is displayed, the backlight will not be Main RC Main RC ON In the case that 1 indoor Error Code U5 Error Code U5 unit is controlled by Checking the connection. Please stand by. Checking the connection Please stand by 2 remote controllers: Make sure to set the sub remote Main R Main R controller when the above l, message is displayed. Hold Mode button for 4 seconds or longer to <Basic screen> set. 5-2 Press and hold 4 seconds When the display is changed from or longer Mode button of "Main RC" to "Sub RC" the setting Fan sub remote controller side. is completed. や Checking the connection Please stand by 5-2 Basic screen is displayed. Sub RC - NOTE -If sub remote controller is not set at power-on in the case of one indoor unit controlled by two remote controllers, <Basic screen> Error Code: U5 is displayed in the connection checking 5-2 screen. Fan Select the sub remote controller by pressing Mode button of either one of the remote controllers for 4 や seconds or longer. If the basic screen is not displayed in 2 minutes after the "Sub RC" is displayed, shut off the power supply and check the wiring. NOTE -When selecting a different language, refer to Chapter 12. Language. (See page 21.)

#### 6. Field Settings 6-1 Press and hold Cancel button for <Basic screen> 4 seconds or longer. 6-1 Service settings menu is Fan displayed. や 6-2 Select Field Settings in the Service Settings menu, and press Menu/OK button. Field settings screen is displayed. Press and hold Cancel button for 4 seconds or **6-3** Highlight the mode, and select longer during backlight lit. desired "Mode No." by using ▲▼ (Up/Down) button. <Service settings menu screen> **6-4** In the case of setting per indoor 6-2 Service Settings 1/3 unit during group control (When Test Operation Mode No. such as 20, 21, Field Settings Energy Saving Option Prohibit Function 22, 23, 25 are selected), highlight the unit No. and select Min Setpoints Differentia "Indoor unit No." to be set by using $\blacktriangle \nabla$ (Up/Down) button. (In the case of group setting, this operation is not needed.) Press Menu/OK button. In the case of individual setting per indoor unit, current settings are displayed. And, SECOND <Service settings screen> CODE NO. " - " means no In the case of individual In the case of group total function. setting per indoor unit setting 6-3 6-3 Field Settings Field Setting 6-5 Highlight SECOND CODE NO. of Unit No Mod Mode 6-4 6-5 the FIRST CODE NO. to be 20 0 2-02 1-01 3-01 0-01 6-5 changed, and select desired 10 "SECOND CODE NO." by using 13 14 15-▲▼ (Up/Down) button. Multiple **(\$) 4**\$} identical mode number settings SECOND CODE NO. are available. FIRST CODE (SW) NO. In the case of setting for all indoor units in the remote control group, available Press Menu/OK button. SECOND CODE NO. is displayed as " * " which means it can be changed. When SECOND CODE NO. is displayed as " - ", there is no function.

- **6-6** Press **Menu/OK** button. Setting confirmation screen is displayed.
- **6-7** Select Yes and press Menu/OK button. Setting details are determined and field settings screen returns.
- **6-8** In the case of multiple setting changes, repeat "**6-3**" to "**6-7**".
- **6-9** After all setting changes are completed, press **Cancel** button twice.
- 6-10 Backlight goes out, and [Checking the connection. Please stand by.] is displayed for initialization. After the initialization, the basic screen returns.

# <Setting confirmation screen> 6-6 6-7 Field Settings? Field Settings? Field Settings? Field Settings? Field Setting No Setting confirmation

# - NOTE

- Installation of optional accessories on the indoor unit may require changes to field settings. See the manual of the optional accessory.
- For field setting details related to the indoor unit, see installation manual shipped with the indoor unit.

Mode No.	First Code	Description	Second Code No. (Note 2) (Items in bold are factory default settings)				
(Note 1)	No.		01	02	03	04	
2 10 (20)		Priority of thermistor sensors for space temperature control	The return air thermistor is primary and the remote controller thermistor is secondary.	The remote controller thermistor is not utilized. Only the return air thermistor will be utilized.	Only the remote controller thermistor will be utilized.		
	5	Room temperature value reported to multizone controllers	Return air thermistor	Thermistor designated by 10-2 above (Note 3)			
12 (22)	2	Thermo-on/off deadband (Note 4)	2F (1C)	1F (0.5C)			
1c	1	Thermistor sensor for auto changeover and setback control by the remote controller	Utilize the return air thermistor	Utilize the remote controller thermistor			
	3	Access permission level setting	Level 2	Level 3			
1e	2	Setback availability	N/A	Heat only	Cool only	Cool/Heat	

- Notes) 1. Field settings are normally applied to the entire remote control group, however if individual indoor units in the remote control group require specific settings or for confirmation that settings have been established, utilize the mode number in parenthesis.
  - 2. Any features not supported by the connected indoor unit will not be displayed.
  - 3. When mode 10-2-01 is selected, only the return air temperature value is reported to the multizone controller.
  - 4. The actual default deadband value will depend upon the indoor unit model.

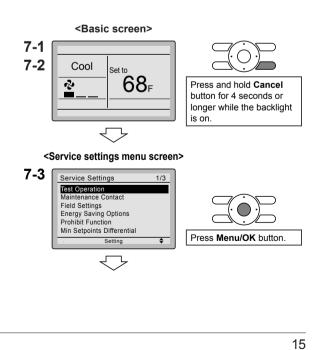
# 7. Test Operation

# Also see installation manuals furnished with the indoor unit and the outdoor unit.

- Verify that the wiring of the indoor unit and the outdoor unit is completed.
- Ensure that covers have been replaced on electrical component boxes for both indoor and outdoor units prior to restoring power.
- After refrigerant piping, drain piping and electric wiring are completed, clean inside of the indoor unit and decorative panel.
- Perform the test operation according to following procedure.
- To protect the compressor, apply power to the outdoor unit at least 6 hours prior to test operation.
- Set the remote controller display mode to standard or detailed display mode. Refer to Operation Manual for the setting method.

# - Notes for backlight

- The backlight will be ON for 30 seconds by pressing any button.
- The initial push of the button will only turn on the backlight. While the backlight is turned on, the buttons assigned functionality will be available.
- **7-1** Set the operation mode to cooling by using the remote controller.
- **7-2** Press and hold **Cancel** button for 4 seconds or longer. Service settings menu is displayed.
- **7-3** Select **Test Operation** in the service settings menu, and press **Menu/OK** button. Basic screen returns and message "Test Operation" is displayed at the bottom.



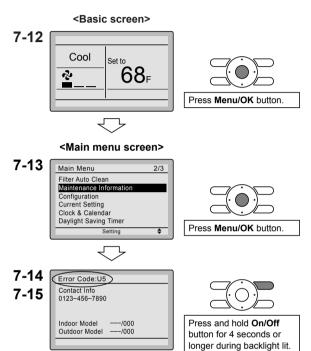
- 7-4 Press On/Off button within 10 sec-7-4 onds, and the test operation starts. 7-5 Cool Monitor the operation of the indoor unit Press On/Off button for a minimum of 10 minutes. During de la (within 10 seconds) test operation, the indoor unit will Test Operatio continue to cool regardless of the temperature setpoint and room temperature. Press Menu/OK button. * Note) In the case of above-men-<Main menu screen> tioned procedures 7-3 and 7-6 Main Menu 7-4 in reverse order, test 1/3 Airflow Direction Individual Airflow Direction operation can start as well. Ventilation Schedule Off Timer 7-5 Press Menu/OK button in the basic Celsius / Eahrenheit screen. Main menu is displayed. Press Menu/OK button Setting 7-6 In the case of a model having airflow direction function, select 7-7 Airflow Directio Airflow Direction in the main menu Swing and check that airflow direction is Change the airflow actuated according to the setting. direction by using For operation of airflow direction (Up/Down) button. setting, see the operation manual. **7-7** After the operation of airflow direction is confirmed, press Menu/OK button. Press Menu/OK button. Basic screen returns. 7-8 7-8 Press and hold Cancel button for Cool 4 seconds or longer in the basic や screen. Press and hold Cancel button for 4 seconds or Service settings menu is displayed. Test Operat longer while the backlight is on **7-9** Select Test Operation in the service settings menu, and press Menu/OK 7-9 Service Settings 1/3 button. Basic screen returns and Test Operation normal operation is conducted. Maintenance C Field Settings * Note) The test operation will automat-Energy Saving Options Prohibit Function Min Setpoints Differential ically finish in 30 minutes. Press Menu/OK button. 7-10 Check the functions according to the operation manual. <Basic screen> 7-11 When the decorative panel is not installed, shut off the power supply after the test operation finishes.
- If construction activities are planned within the space following the test operation procedure, recommend to the customer that the indoor unit is not operated to prevent contamination from paints, drywall dust and other airborne materials.

## 

- If operation is not possible due to a malfunction, refer to following Failure diagnosis method
- After the test operation finishes, check whether the error code history is displayed on the maintenance information screen of the main menu according to the following procedure.
- 7-12 Press Menu/OK button in the basic screen. Main menu screen is displayed.
- 7-13 Select Maintenance Information in the main menu, and press Menu/OK button.
- **7-14** Maintenance information screen is displayed. Check whether the error code history is displayed on the screen.
  - * If no error code history is displayed following this procedure the system has normally completed the test operation mode.
- 7-15 If the error code history is displayed, conduct the failure diagnosis referring to <Error code list> in the installation manual of the indoor unit. After the failure diagnosis finishes, press and hold On/Off button for 4 seconds or longer in the maintenance information screen to erase the error code history.

## Failure diagnosis method

- Whenever the remote controller display is blank or displays [Checking the connection. Please stand by.], troubleshoot the system with the items in the Description column of the following table.
- If an error occurs, CODE is displayed on the LCD as shown to the right. Conduct the failure analysis referring to <Error code list> in the installation manual of the indoor unit. When the unit No. which detected the error during group control is confirmed, refer to Chapter 8: Procedure for Checking Error History.



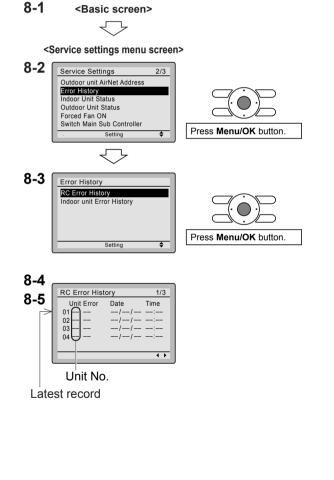


Remote controller display	Description
No display	<ul> <li>Power outage, power voltage error or open-phase</li> <li>Incorrect wiring (between indoor and outdoor units)</li> <li>Indoor printed-circuit board assembly failure</li> <li>Remote controller wiring not connected</li> <li>Remote controller failure</li> <li>Open fuse or tripped circuit breaker (outdoor unit)</li> </ul>
Checking the connection. Please stand by. *	<ul> <li>Indoor printed-circuit board assembly failure</li> <li>Wrong wiring (between indoor and outdoor units)</li> </ul>

* [Checking the connection. Please stand by.] will be displayed for up to 90 seconds following the application of power to the indoor unit. This is normal and does not indicate a malfunction.

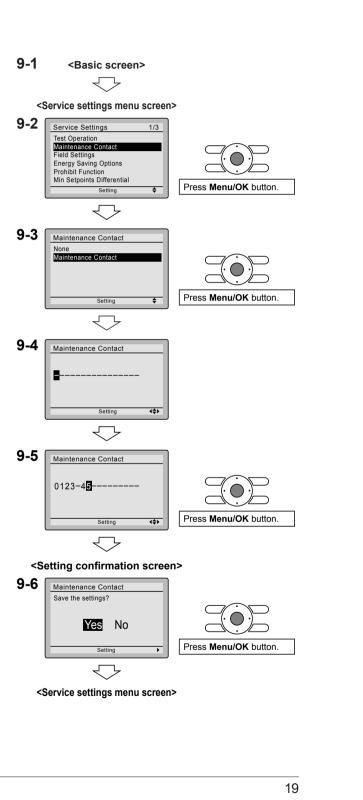
## 8. Procedure for Checking Error History

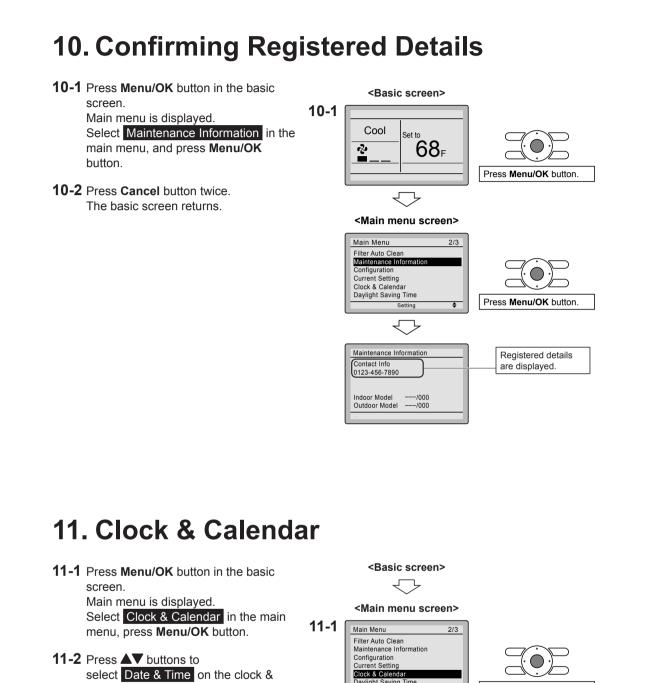
- **8-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
- **8-2** Select **Error History** in the service settings menu, and press **Menu/OK** button. The error history menu screen is displayed.
- 8-3 Select RC Error History in the error history menu, and press Menu/OK button. Error codes and unit No. can be confirmed in the RC error history screen.
- **8-4** In the error history, the 10 most recent items are displayed in order of occurrence.
- 8-5 Press Cancel button in the RC error history screen 3 times. The basic screen returns.



## 9. Adding Maintenance Contact Information

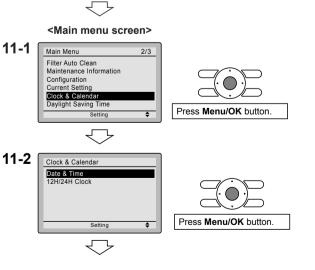
- Registration of the maintenance contact.
- **9-1** Press and hold **Cancel** button for 4 seconds or longer in the basic screen. Service settings menu is displayed.
- 9-2 Select Maintenance Contact in the service settings menu, and press
   Menu/OK button. Maintenance contact menu screen is displayed.
- 9-3 Select Maintenance Contact, and press Menu/OK button.
- 9-4 Enter the telephone number.
  Scroll through the numbers by using
  ▲▼ (Up/Down) buttons. Start from the left side. Blank digits should remain as " ".
- **9-5** Press **Menu/OK** button. Setting confirmation screen is displayed.
- **9-6** Select **Yes** and press **Menu/OK** button. Setting details are saved and service settings menu screen returns.
- **9-7** Press **Cancel** button once. The basic screen returns.

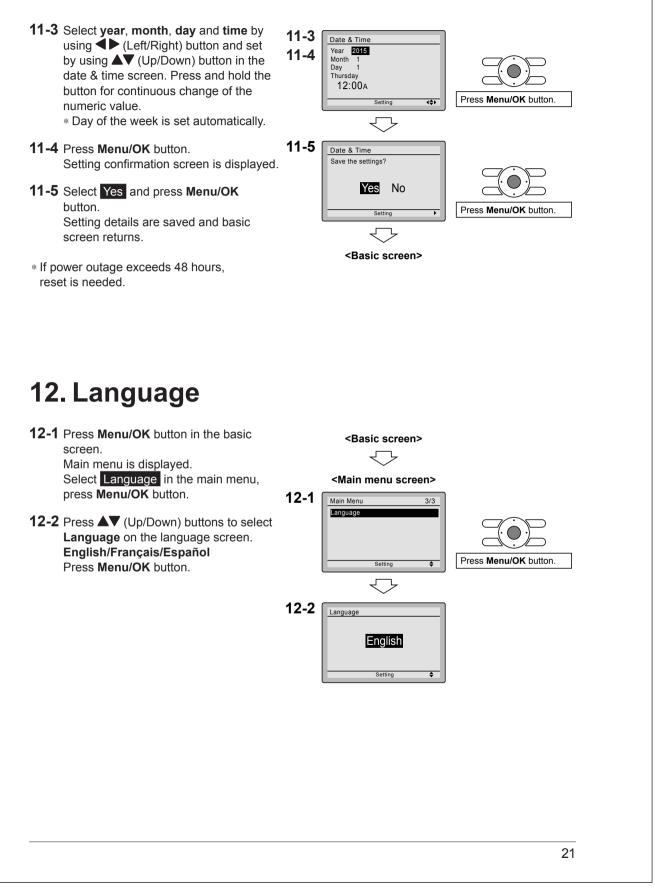




calendar screen.

* The date & time screen will appear when **Menu/OK** button is pressed.





## 12.6 <BRC082A43> Wireless Remote Controller

#### CONTENTS

1. SAFETY CONSIDERATIONS	2
2. BEFORE INSTALLATION	2
3. REMOTE CONTROLLER INSTALLATION	2
4. RECEIVER INSTALLATION	3
5. FIELD SETTING	6
6. TEST OPERATION	6

### 1. SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

	Indication a potentially hazardous sit- uation which, if not avoided, could result in death or serious injury.
	Indication a potentially hazardous sit- uation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
№ТЕ	Indication situation that may result in equipment or property-damage-only accidents.

#### -/! warning-

 Perform installation work in accordance with this installation manual.

Improper installation may result in electric shocks or fire.

- Be sure to use only the specified accessories and parts for installation work.
- Failure to use the specified parts may result in, electric shocks, fire or the unit falling.
- Before touching electrical parts, turn off the unit.
- Do not touch the switch with wet fingers.
- Touching a switch with wet fingers can cause electric shock.

### 

- Refer also to the installation manuals attached to the indoor unit and the decoration panel.
- Confirm that the following conditions are satisfied prior to installation. Ensure that nothing interrupts the operation of the wireless

remote controller. (Ensure that there is neither a source of light nor fluorescent lamp near the receiver. Also, ensure that the receiver is not exposed of direct sunlight.)

Ensure that the operation display lamp and other indicators are easy to see.

- The installation position of this receiver is one corner of the decoration panel. Therefore, confirm that its position is set so that the signal from the wireless remote controller can be easily transmitted and its display can be easily seen.
- If both this kit and fresh air intake kit are installed, only one duct chamber shall be used. Refer to the installation manual of the fresh air intake kit (optional hand book).

#### 2. BEFORE INSTALLATION

#### 2-1 ACCESSORIES

Check if the following accessories are included with the unit.

Name	(1) Receiver	1) Receiver (2) Wireless remote controller		
Quantity	1 pc.	1 pc.	1 pc.	
Shape				
Name	(4) Dry cell battery LR03 (AM4)	(5) Unit No. label	(6) Screw for install- ing remote con- troller holder	
Quantity	2 pcs.	1 pc.	2 pcs.	
Shape		$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	M3.5	

Name	(7) Mounting screw (Black)	(8) Mounting screw	(9) Paper pattern printing
Quantity	2 pcs.	2 pcs.	1 pc.
Shape	M4	M5	3-15/16x1-15/16 (in.)

Name	Name (10) Winged bar (11) Operation manual		(12) Installation manual	
Quantity	1 pc.	1 pc.	1 pc.	
Shape	•	$\langle \rangle$	$\bigcirc$	

#### 2-2 NOTE TO THE INSTALLER

Be sure to instruct the customer how to properly operate the system showing him/her the attached operation manual.

## 3. REMOTE CONTROLLER INSTALLATION <Installing wireless remote controller>

 Do not throw the remote controller or impose large shocks. Also, do not store where it may be exposed to moisture or direct sunlight.

- When operating, point the transmitting part of the remote controller in the direction of the receiver.
- The direct transmitting distance of the remote controller is approximately 23 ft..
- The signal cannot be transmitted if something such as curtains blocks the receiver and the remote controller.
- Installing to a wall or a pillar
  - 1. Fix the remote controller holder (3) with the screws (6).
  - 2. Slide the remote controller (2) into the remote controller holder (3) from the top.
- How to put the dry cell batteries
  - 1. Remove the back cover of the remote controller (2) to the direction pointed by the arrow mark.
  - Put the dry cell batteries. Use two LR03<AM4> dry cell batteries (4). Put the dry cell batteries (4) correctly to fit their (+) and (-).
  - 3. Close the back cover as before.

### 4. RECEIVER INSTALLATION

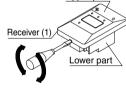
#### 

- Do not install more than 3 receivers in the vicinity of one another.
- With 4 or more units, there is always the possibility of malfunction.

#### 4-1. Preparations before installation

- Remove the upper part of the receiver (1).
- Insert the screwdriver (-) here and gently work off the upper part of the receiver (1).

Upper par



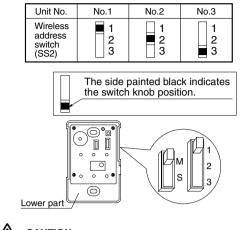
4-2. Determination of address and MAIN/SUB remote controller

If setting multiple wireless remote controllers to operate in 1 room, perform address setting for the receiver and the wireless remote controller. If setting multiple wired remote controllers in 1 room, change the MAIN/SUB switch of the receiver.

#### 4-3. Setting procedure

#### Setting the receiver

Set the wireless address switch (SS2) on the PC-board according to the table below.



#### 

Change the setting so that the internal electronic equipments are not damaged with a pen etc.

When using both a wired and a wireless remote controller for 1 indoor unit, the wired controller should be set to MAIN. Therefore, set the MAIN/SUB switch (SS1) of the receiver to SUB.

	MAIN	SUB
MAIN/ SUB switch (SS1)	M S	M S

#### 4-4. Receiver installation

#### —/! warning-

Be sure to turn off the power before installation.

### 

#### <Precautions on transmission wiring>

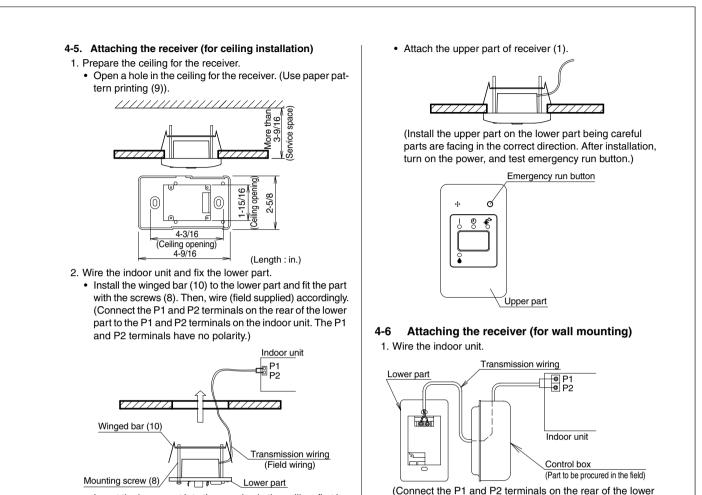
- 1. When wiring, run the wiring away the power supply wiring in order to avoid receiving electric noise (external noise).
- 2. When wiring, refer to the wiring diagram of indoor unit (attached to indoor unit) as well.

#### WIRING SPECIFICATION

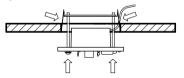
Wiring type	Sheathed wire (2 wire)
Size	AWG18-16
Wiring length	Max 650 ft. (See Note)

#### 

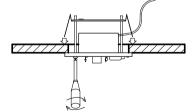
Keep wires to less than 650 ft. total when using 2 remote controllers (wired or wireless) and when not.



 Insert the lower part into the opening in the ceiling, first by pressing the wings inward to fit the hole and then by pushing from the screws (8) until it sits flat on the ceiling.



• Tighten the screws (8) until the lower part is fixed in place.



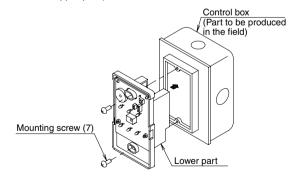
(Tighten both screws (8) evenly. Overtightening may deform the case and possibly make it harder to install the upper part.)

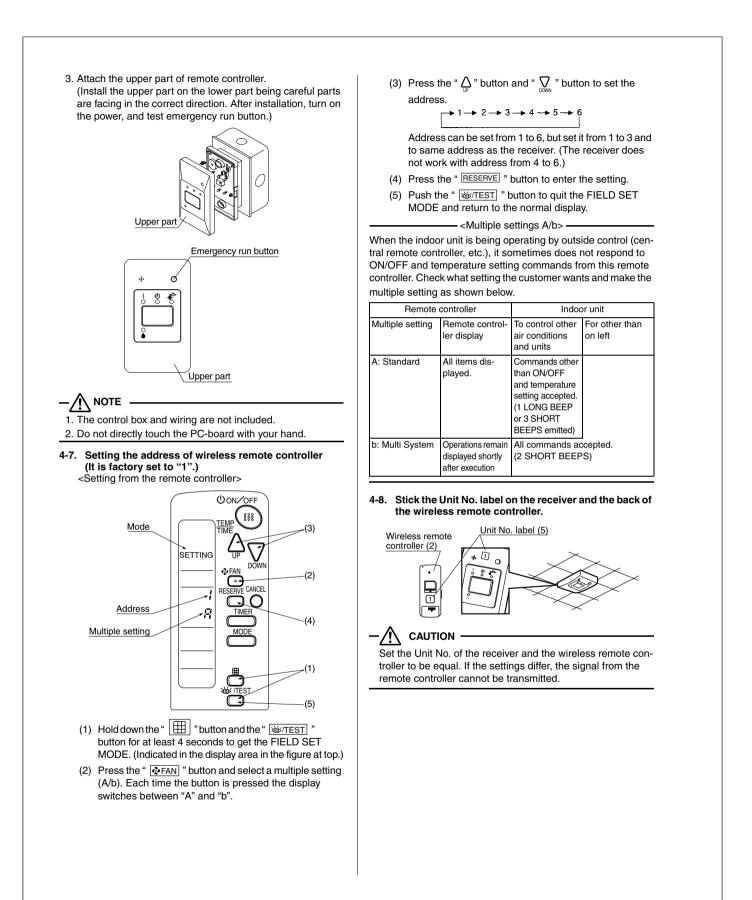
connections are crossed.) 2. Fix the lower part.

 Install the lower part on the control box (field supplied part). (Select as flat a place as possible to install the lower part. Also, be aware of the fact that overtightening the screws (7) may deform the case and possibly make it harder to install the upper part.)

Neither of the terminals is polarized, so it is not important if

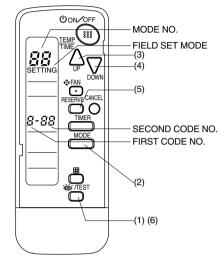
part to the P1 and P2 terminals on the indoor unit.





#### 5. FIELD SETTING

If optional accessories are mounted on the indoor unit, the indoor unit setting may have to be changed. Refer to the instruction manual (optional hand book) for each optional accessory.



#### Procedure

- (1) When in the normal mode, press the " <a>[<a>(1)</a>//TEST</a> " button for at least 4 seconds, and the FIELD SET MODE is entered.
- (2) Select the desired MODE NO. with the "  $\fbox{MODE}$  " button.
- (3) Push the " $\triangle$ " button and select the FIRST CODE NO..
- (4) Push the "  $\sum_{\text{DOWN}}$  " button and select the SECOND CODE NO..
- (5) Push the" [RESERVE] "button and the present settings are set.
- (6) Push the " <a>[bit]</a> " button to quit the FIELD SET MODE and return to the normal display.
- (Example) If the time to clean air filter is set to "Filter Contamination-Heavy", set Mode No. to "10", FIRST CODE NO. to "0", and SECOND CODE NO. to "02".

		9 <u> </u>		
MODE NO.	FIRST CODE NO.	DESCRIPTION OF SETTING		
10	0	Filter Contamination-Heavy/Light (Setting for spacing time of display time to clean air filter) (Setting for	Long-life type	
		when filter contamination is heavy, and spacing time of display time to clean air filter is to be halved)	Standard type	
	3	Spacing time of display time to clean air filter count (Setting for when the filter sign is not to be displayed		
12 (VRV system)	1	ON/OFF input from outside (Set to enable starting/ stopping from remote.)		
	2	Thermostat differential changeover remote controller thermostat sensor	· · ·	

MODE NO.	FIRST	SECOND CODE NO.				
	CODE NO.	01		02		03
10	0 Light	Light	Approx. 2,500 hours		Approx. 1,250 hours	
		Approx. 200 hours	Heavy	Approx. 100 hours		
	3		Display	Do	not display	_
12	1	Force	Forced OFF input		ON/OFF	_
(VRV system)	2		2°F		1°F	_

### 

The SECOND CODE NO. is factory set to "01". Do not use any settings not listed in the table. For group control with a wireless remote controller, initial settings for all the indoor units of the group are equal. (For group control, refer to the installation manual attached to the indoor unit for group control.)

#### 6. TEST OPERATION

- Perform test operation according to the instructions in the installation manual attached to the indoor unit.
- After refrigerant piping, drain piping, and electric wiring, operate according to the table to protect the unit.

### - AUTION -

- 1. Refer to a malfunction code in the installation manual attached to the outdoor unit if it does not operate.
- Refer to the installation manual attached to the outdoor unit for individual operation system types.
   Some of our product types should have the power supply turned ON 6 hours before starting operation in order to electrify crank case heater.

Refer to the installation manual attached to the outdoor unit.

Order	Operation
(1)	Open gas side stop valve.
(2)	Open liquid side stop valve.
(3)	Set to cooling with the remote controller and push " ON/OFF " button to start operation.
(4)	Push" 碰/TEST "button twice and operate in TEST OPERA- TION MODE for 3 minutes.
(5)	Push" 🞯/TEST "button and operate normally.
(6)	Confirm its function according to the operation manual.

## 12.7 RXL09QMVJU, RXL12QMVJU9

## Contents

Safety Considerations	1
Accessories	3
Precautions for Selecting a Location	3
Precautions on Installation	4
Outdoor Unit Installation Diagram	4
Installation Space Requirements	5
Outdoor Unit Installation	5
1. Installing the outdoor unit	5
2. Drain work (only for heat pump models, excluding RXL models)	5

3. Flaring the pipe end
Wiring 9
Facility Setting (cooling at low outdoor temperature)
Pump Down Operation11
Trial Operation and Testing 12
1. Trial operation and testing

## **Safety Considerations**

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

A DANGER	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
WARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
▲ NOTE	Indicates situations that may result in equipment or property-damage accidents only.

#### ANGER ·

1

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

### 🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

### A CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- · Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
  - (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in
- refrigerant leakage. (c) Near machinery emitting electromagnetic waves.
- Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

### 

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 478 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

RN003-U

## Accessories

(A) Installation manual		1	B Drain socket*       This is at the bottom of the packaging		1
© Drain cap (1)*	09/12 class	4	D Drain cap (2)*	09/12 class	2
	15/18/24 class	6	Ð	15/18/24 class	3
E Warranty		1		*Only for heat pump m	nodels.

## **Precautions for Selecting a Location**

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) The site must not be prone to flammable gas leaks in the surrounding area.
- 7) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- 8) Since water will flow from the drain of the outdoor unit, do not place under the unit anything which must be kept away from moisture.

#### NOTE

Cannot be installed suspended from a ceiling or stacked.

## 

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

Construct a large canopy.
Construct a pedestal.



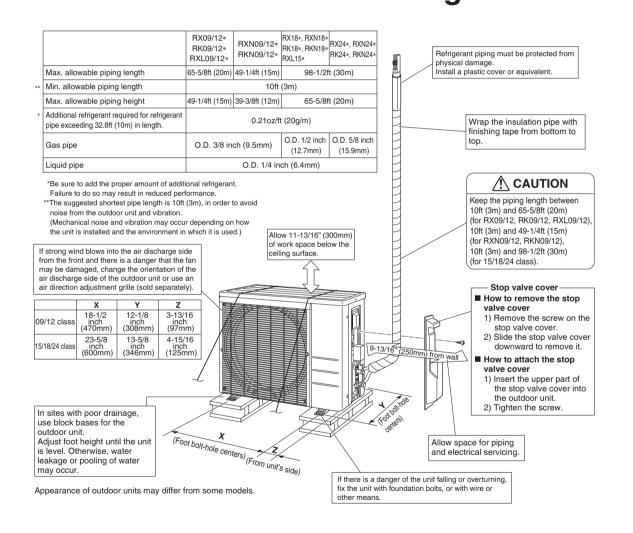
Install the unit high enough off the ground to prevent burying in snow.

3/4" (20mm)

## **Precautions on Installation**

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all sold separately.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

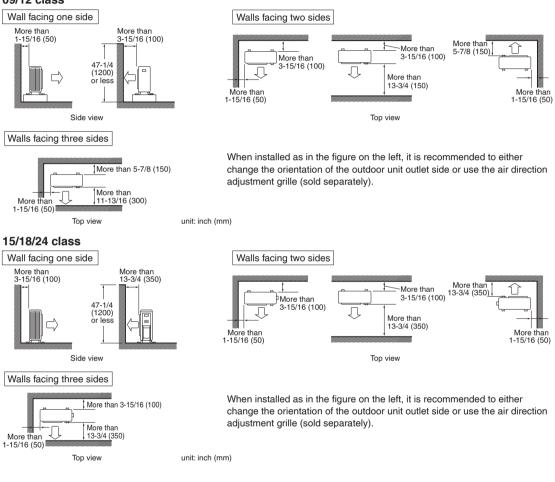
# **Outdoor Unit Installation Diagram**



## **Installation Space Requirements**

- · Position the unit on a horizontal surface.
- Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.

#### 09/12 class



## **Outdoor Unit Installation**

### **1.** Installing the outdoor unit

- When installing the outdoor unit, refer to "Precautions for Selecting a Location" and the "Outdoor Unit Installation Diagram".
- If drain work is necessary, follow the procedures in "2. Drain work (only for heat pump models, excluding RXL models)".

### 2. Drain work (only for heat pump models, excluding RXL models)

#### 

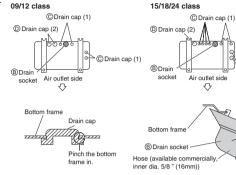
• In cold areas, do not use a drain socket, drain caps (1, 2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

Drain cap (2)

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
- 1) Attach  $\bigcirc$  drain cap (1) and  $\bigcirc$  drain cap (2).

#### 2) Attach (B) drain socket.

• When attaching (B) drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



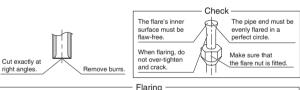
## 3. Flaring the pipe end

#### MARNING ·

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- · Incomplete flaring may result in refrigerant gas leakage.

## 

- Do not reuse joints which have been used once already.
  - 1) Cut the pipe end with a pipe cutter.
  - Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
  - 3) Put the flare nut on the pipe.
  - 4) Flare the pipe.
  - 5) Check that the flaring has been done correctly.

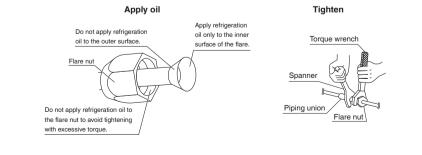


Set exactly at the po	osition			
, ∳A	$\square$	Flare tool for R410A	Convent	ional flare tool
	$  \rangle$	Clutch-type	Clutch-type (Rigid-type)	Wing-nut type (Imperial-type)
	А	0-0.020 inch (0-0.5mm)	0.039-0.059 inch (1.0-1.5mm)	0.059-0.079 inch (1.5-2.0mm)

## 4. Refrigerant piping

### 

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



## **Outdoor Unit Installation**

	Gas sid	le			Liquid side	
3/8 inch (9.5mm) 1/2 inch (12.7mm) 5/8 inch (15.9mm)					1/4 inch (6.4mm)	
24-1/8-29-1/2lbf • ft 36-1/2-44-1/2lbf •		/2lbf • ft	45-5/8-55-5/8lbf • ft		10-1/2-12-3/4lbf • ft	
(32.7-39.9N • m) (49		(49.5-60.3N • m)		75.4N • m)	(14.2-17.2 N • m)	
11/	16 inch (17mm)	3/4 inch	(19mm)	7/8 inch (22mm	) 1-1/16 inch (27mm)	
	Serv	rice port cap	tightening to	rque		
	11/	1/2 inch (12 t 36-1/2 - 44-1, (49.5-60.3N 11/16 inch (17mm) 10-1/2 - 12-5/8lbf • ft (14.2-17.2N • m)	t 36-1/2 - 44-1/2lbf • ft (49.5-60.3N • m) 11/16 inch (17mm) 3/4 inch 10-1/2 - 12-5/8lbf • ft (14.2-17.2N • m) (17.0-21	1/2 inch (12.7mm)         5/8 inc           t         36-1/2 - 44-1/2lbf • ft         45-5/8- (49.5-60.3N • m)           (11/16 inch (17mm))         3/4 inch (19mm)           10-1/2 - 12-5/8lbf • ft         12-5/8 - 15-3/8lbf • ft           (14.2-17.2N • m)         (17.0-21.0N • m)	1/2 inch (12.7mm)         5/8 inch (15.9mm)           t         36-1/2 - 44-1/2lbf • ft (49.5-60.3N • m)         45-5/8 - 55-5/8lbf • ft (61.8-75.4N • m)           11/16 inch (17mm)         3/4 inch (19mm)         7/8 inch (22mm)           10-1/2 - 12-5/8lbf • ft         12-5/8 - 15-3/8lbf • ft         16 - 20-1/4lbf • ft	

#### Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- All pipe bends should be as gentle as possible. Use a pipe bender for bending.

#### Selection of copper and heat insulation materials

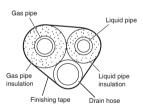
When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C)) Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
	O.D. 3/8 inch (9.5mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm)	I.D. 15/32-19/32 inch (12-15mm)	
Gas side O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	(C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	13/32 inch	
O.D. 5/8 inch 1-15/16 inch		1-15/16 inch (50mm) or more	0.039 inch (1.0mm) (C1220T-O)	I.D. 5/8-13/16 inch (16-20mm)	(10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

 Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.



Be sure to

place a cap

If no flare cap is available, cover the flare mouth with tape to keep dirt and water out

## 5. Pressure test and evacuating system

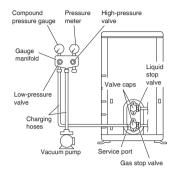
#### 

- Make sure that air or any matter other than refrigerant (R410A) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R410A, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- Use a vacuum pump for R410A exclusively. Using the same vacuum pump for different refrigerants may damage the vacuum
  pump or the unit.

### 

It is highly recommended that you do not open/close the stop valves when the outdoor temperature is below -5°F (-21°C) as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 550psi (3.8MPa) (do not pressurize more than 550psi (3.8MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)^{*1}
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques.

Refer to "4. Refrigerant piping" on page 6 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint.

Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

### 6. Refilling refrigerant

Check the type of refrigerant to be used on the machine nameplate.

Precautions when adding R410A

Fill from the liquid pipe in liquid form.

R410A is a mixed refrigerant, so adding it in gas form may cause the refrigerant composition to change, preventing normal operation.

• Before filling, check whether the cylinder has a siphon attached or not. (It should have something like "liquid filling siphon attached" displayed on it.)

Filling a cylinder with an attached siphon

Filling other cylinders

Turn the cylinder upside-down when filling.

There is a siphon pipe inside, so the cylinder need not be upside-down to fill with liquid.

Stand the cylinder upright when filling.

upsi

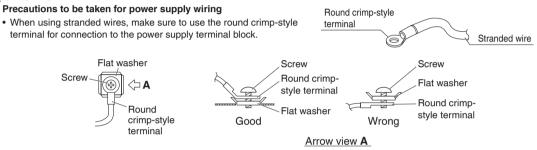
• Be sure to use the R410A tools to ensure pressure and to prevent foreign objects entering.

## Wiring

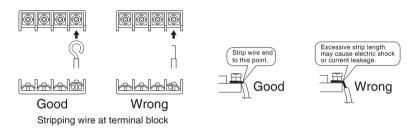
#### 

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

### 

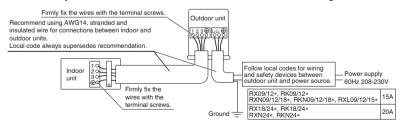


• When connecting the inter-unit wires to the terminal block using a single core wire, be sure to curl the end of the lead. Improper work may cause heat and fire.



• Do not turn on the circuit breaker until all work is completed.

- 1) Strip the insulation from the wire (3/4 inch (20mm)).
- 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.



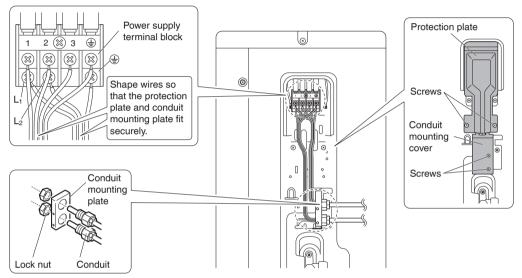
#### NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.

#### 09/12 class

#### [Method of mounting conduit]

- A protection plate is fixed for protection from the high-voltage section.
- 1) Dismount the stop valve cover by removing the screw.
- 2) Dismount the protection plate by removing the 2 screws.
- 3) Dismount the conduit mounting cover by removing the 2 screws.
- 4) Pass wires through the conduit and secure them with a lock nut.
- 5) After completing the work, reattach the stop valve cover, the conduit mounting cover, and the protection plate to its original position.



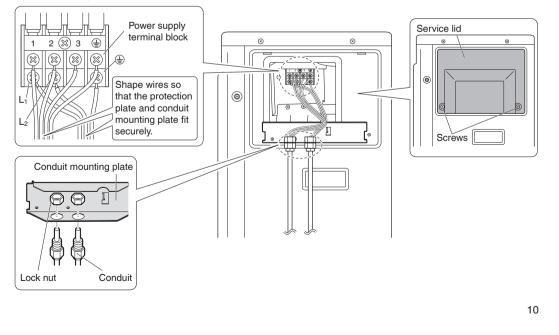
#### 15/18/24 class

[Method of mounting conduit]

1) Dismount the service lid by removing the 2 screws.

2) Pass wires through the conduit and secure them with a lock nut.

3) After completing the work, reattach the service lid to its original position.



## Facility Setting* (cooling at low outdoor temperature)

#### 

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used.
- A humidifier might cause dew condensation from the indoor unit outlet vent.
- Cutting jumper 6 (J6) sets the indoor fan tap to the highest position. Notify the user about this.

#### This function is limited only for facilities (the target of air conditioning is equipment (such as computer)). Never use it in a residence or office (the space where there is a human). *Only for RX, RK, and RXL models.

- Cutting jumper 6 (J6) on the circuit board will expand the operation range down to 5°F (-15°C). However it will stop if the outdoor temperature drops below -4°F (-20°C) and start back up once the temperature rises again.
  - 1) Remove the top plate of the outdoor unit. (09/12 class: 3 screws, 15/18/24 class: 6 screws)
  - 2) Remove the front plate. (09/12 class: 4 screws, 15/18/24 class: 8 screws)
  - 3) Cut the jumper (J6) of the PCB inside.

## **Pump Down Operation**

### 

• When pressing the switch, do not touch the terminal block. It has a high voltage, and touching it could cause electric shock.

#### In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

- 1) Remove the valve cap from the liquid stop valve and gas stop valve.
- 2) Begin forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
- 4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
- 5) Attach the valve cap once procedures are complete.

#### Forced cooling operation

#### Using the indoor unit ON/OFF switch

- Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)
- · Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.

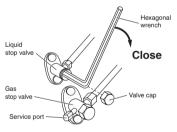
#### Using the indoor unit's remote controller

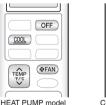
- [For wall mounted units]
- and OFF at the same time. 1) Press
- 2) Press (TEMP), then select ?", press (FAN).
- 3) Press COOL to turn on the system.
- · Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press OFF ).

#### [For floor standing units]

11

- 1) Press Mode and select the COOL operation.
- 2) Press ( () to turn on the system.
- 3) Press Temp and Mode at the same time.
- 4) Press , select " 7 ", and press (Mode) for confirmation.
- Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press ( )



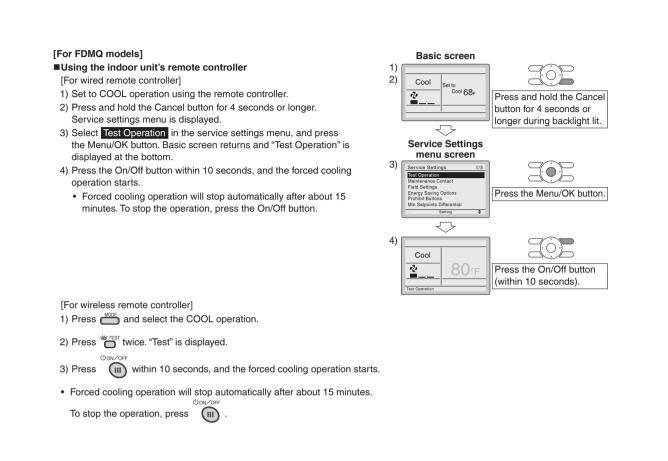


COOLING ONLY mode

(*FAN

COOL OFF





## **Trial Operation and Testing**

### 1. Trial operation and testing

Refer to the installation manual for the indoor unit.

### 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
The specified wires are used for inter-unit wiring.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

## 12.8 RXL15QMVJUA

## Contents

Safety Considerations	1
Accessories	3
Precautions for Selecting a Location	3
Precautions on Installation	4
Outdoor Unit Installation Diagram	4
Installation Space Requirements	5
Outdoor Unit Installation	5
1. Installing the outdoor unit	5
2. Drain work (only for heat pump models, excluding RXL models)	6
models, excluding HAL models)	6

3. Flaring the pipe end 6	
4. Refrigerant piping 6	
5. Pressure test and evacuating system 7	
6. Refilling refrigerant 8	
7. Refrigerant piping work 8	
Wiring	
Facility Setting cooling at low outdoor temperature)	
Pump Down Operation11	
Trial Operation and Testing12	
1. Trial operation and testing12	
2. Test items	

## **Safety Considerations**

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** 

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

A DANGER ·······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>NOTE</u>	Indicates situations that may result in equipment or property-damage accidents only.

#### ANGER ·

1

- Refrigerant gas is heavier than air and replaces oxygen.
   A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death.
   Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

### 🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

### A CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in
- refrigerant leakage. (c) Near machinery emitting electromagnetic waves.
- Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

### 

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

RN003-U 2

## Accessories

(A) Installation manual		1	B Drain socket*       This is at the bottom of the packaging		1
© Drain cap (1)*	09/12 class	4	D Drain cap (2)*	09/12 class	2
15/18/24 class		6	۲	15/18/24 class	3
(È) Warranty		1		*Only for heat pump m	odels.

## **Precautions for Selecting a Location**

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the hot air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) The site must not be prone to flammable gas leaks in the surrounding area.
- 7) Install units, power cords and inter-unit wire at least 10ft (3m) away from television and radio sets. (This is to prevent interference to images and sounds. Noise may be produced even if they are more than 10ft (3m) away depending on radio wave conditions.)
- 8) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- 9) Since water will flow from the drain of the outdoor unit, do not place under the unit anything which must be kept away from moisture.

#### NOTE

Cannot be installed suspended from a ceiling or stacked.

### 

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

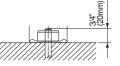
Construct a large canopy.
Construct a pedestal.



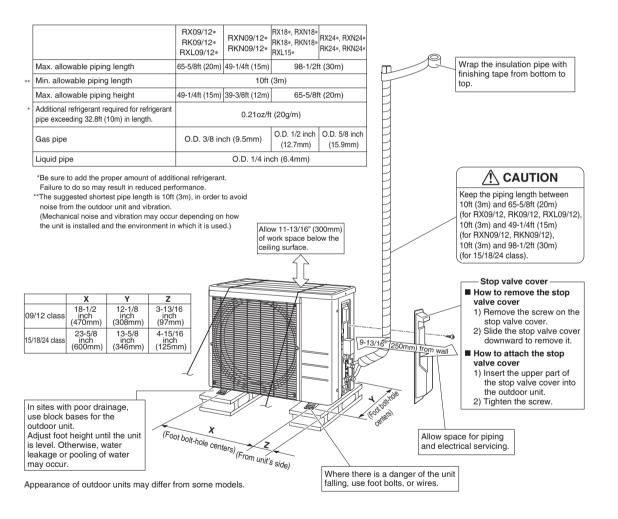
/ Install the unit high enough off the ground to prevent burying in snow.

## **Precautions on Installation**

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all separately available.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

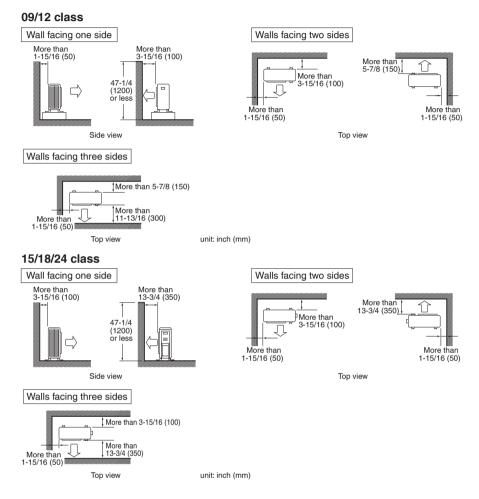


## **Outdoor Unit Installation Diagram**



## **Installation Space Requirements**

- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.



## **Outdoor Unit Installation**

## **1.** Installing the outdoor unit

When installing the outdoor unit, refer to "Precautions for Selecting a Location" and the "Outdoor Unit Installation Diagram".
 If drain work is necessary, follow the procedures on the next page.

## 2. Drain work (only for heat pump models, excluding RXL models)

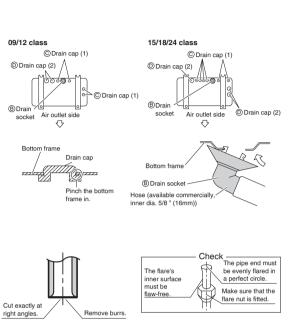
#### 

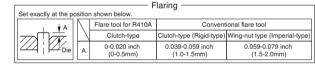
In cold areas, do not use a drain socket, drain caps (1,2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)

- If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
- 1) Attach  $\bigcirc$  drain cap (1) and  $\bigcirc$  drain cap (2).
- 2) Attach (B) drain socket.
  - When attaching (B) drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.

## **3.** Flaring the pipe end

- 1) Cut the pipe end with a pipe cutter.
- Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
- 3) Put the flare nut on the pipe.
- 4) Flare the pipe.
- 5) Check that the flaring has been done correctly.





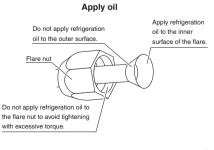
### 

- Do not apply mineral oil to the flare.
- Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- Incomplete flaring may result in refrigerant gas leakage.

## 4. Refrigerant piping

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.

		Flare	e nut tigh	tening to	rque		
		Gas si	de				Liquid side
3/8 inch (9.5m	n)	1/2 inch(12	.7mm)	5/8 inc	h(15.9mm)	1/	4 inch (6.4mm)
24-1/8-29-1/2ft • lbf 36-1/2-44-1			/2ft • lbf	45-5/8-	55-5/8ft • lbf	10-1/2-12-3/4ft • lbf	
(32.7-39.9N • r	(32.7-39.9N • m) (49.5-60.3N • m) (61.8-75.4N • r		75.4N • m)	(14.2-17.2 N • m)			
	_						
Width across flats	11/1	6 inch(17mm)	3/4 inch	(19mm)	7/8 inch(22m	nm)	1-1/16 inch(27mm)
Valve cap tightening torque		/2–12-5/8ft • lbf .2-17.2N • m)			16-20-1/4ft (21.6-27.4N		35-3/8-44-1/8ft • lbf (48-59.8N • m)
		Service	port cap	tightenin	g torque		
		8-10-7	/8ft • lbf (	(10.8-14.	7N • m)		



## **Outdoor Unit Installation**

## 5. Pressure test and evacuating system

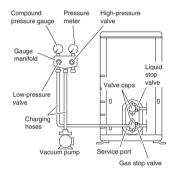
#### 

- Do not mix any substance other than the specified refrigerant (R410A) into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R410A, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- Use a vacuum pump for R410A exclusively. Using the same vacuum pump for different refrigerants may damage the vacuum pump or the unit.

### 

It is highly recommended that you do not open/close the stop valves when the outdoor temperature is below -5°F (-21°C) as this may result in refrigerant leakage.

- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
  All refrigerant pipe joints should be tightened with a torque wrench to the
- All reingerant pipe joints should be lightened with a torque wrench to the specified tightening torque.



- Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 550psi (3.8MPa) (do not pressurize more than 550psi (3.8MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- Fully open the gauge manifold's low-pressure valve (Lo) and completely close its high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the gauge manifold's low-pressure valve (Lo) and stop vacuum pump.
- (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)*1
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) Turn the liquid stop valve's rod 90° counter-clockwise with a hexagonal wrench to open the valve. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.
- 8) Disconnect the charging hose from the gas stop valve's service port, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rod further than it can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques.

Refer to "4. Refrigerant piping" on page 6 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint.

Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

## 6. Refilling refrigerant

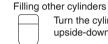
Check the type of refrigerant to be used on the machine nameplate. Precautions when adding R410A

#### Fill from the liquid pipe in liquid form.

R410A is a mixed refrigerant, so adding it in gas form may cause the refrigerant composition to change, preventing normal operation.

1) Before filling, check whether the cylinder has a siphon attached or not. (It should have something like "liquid filling siphon attached" displayed on it.)

Filling a cylinder with an attached siphon Stand the cylinder upright when filling.



Turn the cylinder upside-down when filling.

Be sure to

place a cap

If no flare cap is available, cove

the flare mouth with tape to keep dirt and water out

There is a siphon pipe inside, so the cylinder need not be upside-down to fill with liquid.

• Be sure to use the R410A tools to ensure pressure and to prevent foreign objects entering.

## 7. Refrigerant piping work

#### 7-1. Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- · All pipe bends should be as gentle as possible. Use a pipe bender for bending.

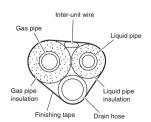
#### 7-2. Selection of copper and heat insulation materials

When using commercial copper pipes and fittings, observe the following:

- · Insulation material: Polyethylene foam Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C)) Be sure to use insulation that is designed for use with HVAC Systems.
- · ACR Copper only.
- · Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 3/8 inch (9.5mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm)	I.D. 15/32-19/32 inch (12-15mm)	13/32 inch
	O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	(C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	
	O.D. 5/8 inch (15.9mm)	1-15/16 inch (50mm) or more	0.039 inch (1.0mm) (C1220T-O)	I.D. 5/8-13/16 inch (16-20mm)	(10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

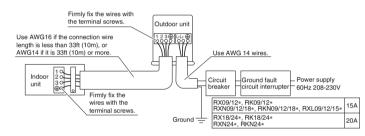




## Wiring

### 

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- Be sure to install a ground fault circuit interrupter. (One that can handle higher harmonics.) (This unit uses an inverter. Therefore, a ground fault circuit interrupter capable of handling higher harmonics must be used in order to prevent the ground fault circuit interrupter malfunctioning.)
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.
- Do not turn on the circuit breaker until all work is completed.
  - 1) Strip the insulation from the wire (3/4 inch (20mm)).
  - 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a flathead screwdriver be used to tighten the screws. The screws are packed with the terminal block.

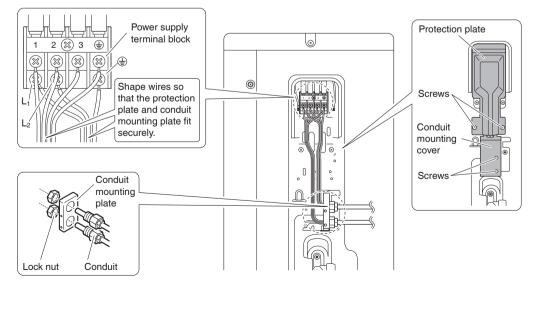


#### 09/12 class

9

[Method of mounting conduit]

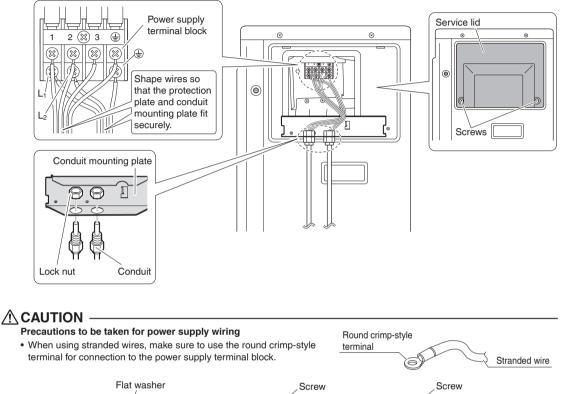
- A protection plate is fixed for protection from the high-voltage section.
- 1) Dismount the stop valve cover by removing the screw.
- 2) Dismount the protection plate by removing the 2 screws.
- 3) Dismount the conduit mounting cover by removing the 2 screws.
- 4) Pass wires through the conduit and secure them with a lock nut.
- 5) After completing the work, reattach the stop valve cover, the conduit mounting cover, and the protection plate to its original position.

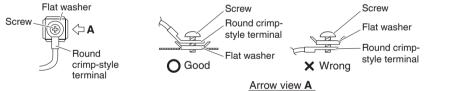


#### 15/18/24 class

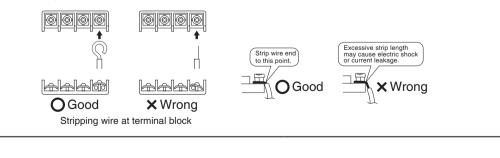
[Method of mounting conduit]

- 1) Dismount the service lid by removing the 2 screws.
- 2) Pass wires through the conduit and secure them with a lock nut.
- 3) After completing the work, reattach the service lid to its original position.





• When connecting the inter-unit wires to the terminal block using a single core wire, be sure to curl the end of the lead. Improper work may cause heat and fires.



## Facility Setting* (cooling at low outdoor temperature)

This function is limited only for facilities (the target of air conditioning is equipment (such as computer)). Never use it in a residence or office (the space where there is a human). *Only for RX, RK, and RXL models.

- <u>Cutting jumper 6 (J6)</u> on the circuit board will expand the operation range down to 5°F (-15°C). However it will stop if the outdoor temperature drops below -4°F (-20°C) and start back up once the temperature rises again.
  - 1) Remove the top plate of the outdoor unit. (09/12 class: 3 screws, 15/18/24 class: 6 screws)
  - 2) Remove the front plate. (09/12 class: 4 screws, 15/18/24 class: 8 screws)
  - 3) Cut the jumper (J6) of the PCB inside.

### 

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used. A humidifier might cause dew jumping from the indoor unit outlet vent.
- Cutting jumper 6 (J6) sets the indoor fan tap to the highest position. Notify the user about this.

## **Pump Down Operation**

#### In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

1) Remove the valve cap from the liquid stop valve and gas stop valve.

- 2) Carry out forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.

4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.

#### Forced cooling operation

Using the indoor unit ON/OFF switch

- Press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)
- Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.



[For wall mounted units]

- 1) Press (1), (1) and OFF at the same time.
- 2) Press ( ), then select ? , press (FAN) .
- 3) Press cool to turn on the system.
- Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press OFF.

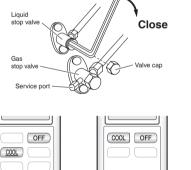
#### [For floor standing units]

- 1) Press Mode and select the COOL operation.
- 2) Press () to turn on the system.
- 3) Press (*, , *, and Mode) at the same time.
- 4) Press Temp , select " 7 ", and press Mode for confirmation.
- Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press ( )

#### 

• When pressing the switch, do not touch the terminal block. It has a high voltage, and touching it could cause electric shock.

11



Hexagonal wrench

**⊕**FAN

HEAT PUMP mode



#FAN

## **Trial Operation and Testing**

## 1. Trial operation and testing

• Trial operation should be carried out in either COOL or HEAT operation.

- 1-1. Measure the supply voltage and make sure that it is within the specified range.
- 1-2. In COOL operation, select the lowest programmable temperature; in HEAT operation, select the highest programmable temperature.
- 1-3. Carry out the trial operation following the instructions in the operation manual to ensure that all functions and parts, such as the movement of the flap, are working properly.
  - To protect the air conditioner, restart operation is disabled for 3 minutes after the system has been turned off.
- 1-4. After trial operation is complete, set the temperature to a normal level (78°F to 82°F (26°C to 28°C) in COOL operation, 68°F to 75°F (20°C to 24°C) in HEAT operation).
- When operating the air conditioner in COOL operation in winter, or HEAT operation in summer, activate trial operation mode by following the instructions in the installation manual for the indoor unit.
- The air conditioner draws a small amount of power in its standby mode. If the system is not to be used for some time after installation, shut off the circuit breaker to eliminate unnecessary power consumption.
- If the circuit breaker trips to shut off the power to the air conditioner, the system will restore the original operation mode when the circuit breaker is opened again.

## 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed properly on solid bases.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
The specified wires are used for inter-unit wiring.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

## 12.9 RXL18/24UMVJUA

## Contents

Safety Considerations	1		
Accessories	3		
Precautions for Selecting a Location			
Precautions on Installation			
Outdoor Unit Installation Diagram			
Installation Space Requirements			
Outdoor Unit Installation	5		
1. Installing the outdoor unit	5		
2. Drain work			
3. Flaring the pipe end	6		

<ul> <li>4. Refrigerant piping</li></ul>				
Wiring 9				
Facility Setting (cooling at low outdoor temperature)				
When attaching the drain pan heater				
Pump Down Operation11				
Trial Operation and Testing12				
1. Trial operation and testing				

## **Safety Considerations**

Read these **Safety Considerations for Installation** carefully before installing an air conditioner or heat pump. After completing the installation, make sure that the unit operates properly during the startup operation.

Instruct the user on how to operate and maintain the unit. Inform users that they should store this installation manual with the operation manual for future reference.

Always use a licensed installer or contractor to install this product. Improper installation can result in water or refrigerant leakage, electric shock, fire, or explosion.

Meanings of DANGER, WARNING, CAUTION, and NOTE Symbols:

ANGER ······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>NOTE</u>	Indicates situations that may result in equipment or property-damage accidents only.

#### 

1

- Refrigerant gas is heavier than air and replaces oxygen. A massive leak can lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- Do not ground units to water pipes, gas pipes, telephone wires, or lightning rods as incomplete grounding can cause a severe shock hazard resulting in severe injury or death. Additionally, grounding to gas pipes could cause a gas leak and potential explosion causing severe injury or death.

- If refrigerant gas leaks during installation, ventilate the area immediately. Refrigerant gas may produce toxic gas if it comes into contact with fire. Exposure to this gas could cause severe injury or death.
- After completing the installation work, check that the refrigerant gas does not leak throughout the system.
- Do not install unit in an area where flammable materials are present due to risk of explosions that can cause serious injury or death.
- Safely dispose all packing and transportation materials in accordance with federal/state/local laws or ordinances. Packing materials such as nails and other metal or wood parts, including plastic packing materials used for transportation may cause injuries or death by suffocation.

### 🕂 WARNING -

- Only qualified personnel must carry out the installation work. Installation must be done in accordance with this installation manual. Improper installation may result in water leakage, electric shock, or fire.
- When installing the unit in a small room, take measures to keep the refrigerant concentration from exceeding allowable safety limits. Excessive refrigerant leaks, in the event of an accident in a closed ambient space, can lead to oxygen deficiency.
- Use only specified accessories and parts for installation work. Failure to use specified parts may result in water leakage, electric shock, fire, or the unit falling.
- Install the air conditioner or heat pump on a foundation strong enough that it can withstand the weight of the unit. A foundation of insufficient strength may result in the unit falling and causing injuries.
- Take into account strong winds, typhoons, or earthquakes when installing. Improper installation may result in the unit falling and causing accidents.

- Make sure that a separate power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to local, state, and national regulations. An insufficient power supply capacity or improper electrical construction may lead to electric shock or fire.
- Make sure that all wiring is secured, that specified wires are used, and that no external forces act on the terminal connections or wires. Improper connections or installation may result in fire.
- When wiring, position the wires so that the electrical wiring box cover can be securely fastened. Improper positioning of the electrical wiring box cover may result in electric shock, fire, or the terminals overheating.
- · Before touching electrical parts, turn off the unit.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Securely fasten the outdoor unit terminal cover (panel). If the terminal cover/panel is not installed properly, dust or water may enter the outdoor unit causing fire or electric shock.
- When installing or relocating the system, keep the refrigerant circuit free from substances other than the specified refrigerant (R410A) such as air. Any presence of air or other foreign substance in the refrigerant circuit can cause an abnormal pressure rise or rupture, resulting in injury.
- Do not change the setting of the protection devices. If the pressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or explosion may occur.

### A CAUTION -

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not touch the refrigerant pipes during and immediately after operation as the refrigerant pipes may be hot or cold, depending on the condition of the refrigerant flowing through the refrigerant piping, compressor, and other refrigerant cycle parts. Your hands may suffer burns or frostbite if you touch the refrigerant pipes. To avoid injury, give the pipes time to return to normal temperature or, if you must touch them, be sure to wear proper gloves.
- Install drain piping to ensure proper drainage. Improper drain piping may result in water leakage and property damage.
- Insulate piping to prevent condensation.
- Be careful when transporting the product.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- Do not use a charging cylinder. Using a charging cylinder may cause the refrigerant to deteriorate.
- Refrigerant R410A in the system must be kept clean, dry, and tight.
- (a) Clean and Dry -- Foreign materials (including mineral oils such as SUNISO oil or moisture) should be prevented from getting into the system.

- (b) Tight -- R410A does not contain any chlorine, does not destroy the ozone layer, and does not reduce the earth's protection again harmful ultraviolet radiation. R410A can contribute to the greenhouse effect if it is released. Therefore take proper measures to check for the tightness of the refrigerant piping installation. Read the chapter *Refrigerant Piping Work* and follow the procedures.
- Since R410A is a blend, the required additional refrigerant must be charged in its liquid state. If the refrigerant is charged in a state of gas, its composition can change and the system will not work properly.
- The indoor unit is for R410A. See the catalog for indoor models that can be connected. Normal operation is not possible when connected to other units.
- Remote controller (wireless kit) transmitting distance can be shorter than expected in rooms with electronic fluorescent lamps (inverter or rapid start types). Install the indoor unit far away from fluorescent lamps as much as possible.
- Indoor units are for indoor installation only. Outdoor units can be installed either outdoors or indoors.
- Do not install the air conditioner or heat pump in the following locations:
- (a) Where a mineral oil mist or oil spray or vapor is produced, for example, in a kitchen. Plastic parts may deteriorate and fall off or result in water leakage.
- (b) Where corrosive gas, such as sulfurous acid gas, is produced. Corroding copper pipes or soldered parts may result in
- refrigerant leakage. (c) Near machinery emitting electromagnetic waves.
- Electromagnetic waves may disturb the operation of the control system and cause the unit to malfunction.
- (d) Where flammable gas may leak, where there is carbon fiber, or ignitable dust suspension in the air, or where volatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions can cause a fire.
- Take adequate measures to prevent the outdoor unit from being used as a shelter by small animals. Small animals making contact with electrical parts can cause malfunctions, smoke, or fire. Instruct the user to keep the area around the unit clean.

### 

- The outdoor unit should be positioned where the unit and power supply wires (breaker panel to outdoor unit) are at least 10ft (3m) away from any televisions or radios. (The unit may cause interference with the picture or sound.) Depending on the radio waves, a distance of 10ft (3m) may not be sufficient to eliminate the noise.
- Dismantling the unit, treatment of the refrigerant, oil and additional parts must be done in accordance with the relevant local, state, and national regulations.
- Do not use the following tools that are used with conventional refrigerants: gauge manifold, charge hose, gas leak detector, reverse flow check valve, refrigerant charge base, vacuum gauge, or refrigerant recovery equipment.
- If the conventional refrigerant and refrigerator oil are mixed in R410A, the refrigerant may deteriorate.
- This air conditioner or heat pump is an appliance that should not be accessible to the general public.
- As design pressure is 604 psi, the wall thickness of fieldinstalled pipes should be selected in accordance with the relevant local, state, and national regulations.

RN003-U

# Accessories

(A) Installation manual	1	B Drain socket       This is at the bottom of the packaging.	1
© Drain cap (1)	6	Drain cap (2)	3
(E) Warranty	1		

# **Precautions for Selecting a Location**

- 1) Choose a place solid enough to bear the weight and vibration of the unit, where the operating sound will not be amplified.
- 2) Choose a location where the air discharged from the unit or the operating sound will not cause a nuisance to the neighbors of the user.
- 3) Avoid locations, such as near bedrooms, where the operating sound may cause disturbance.
- 4) There must be sufficient space to carry the unit into and out of the site.
- 5) There must be sufficient space for air passage and no obstructions around the air inlet and the air outlet.
- 6) The site must not be prone to flammable gas leaks in the surrounding area.
- 7) In coastal areas or other places with a salty atmosphere or one containing sulfate gas, corrosion may shorten the life of the air conditioner.
- Since water will flow from the drain of the outdoor unit, do not place under the unit anything which must be kept away from moisture.

#### NOTE

Cannot be installed suspended from a ceiling or stacked.

### 

When operating the air conditioner in a low outdoor ambient temperature, be sure to follow the instructions described below.

- To prevent exposure to wind, install the outdoor unit with its suction side facing the wall.
- Never install the outdoor unit at a site where the suction side may be exposed directly to wind.
- To prevent exposure to wind, it is recommended to install a baffle plate on the air discharge side of the outdoor unit.
- In heavy snow areas, select an installation site where the snow will not affect the unit.
- If there is a likelihood of snow accumulating on the outdoor unit, attach a snow protection hood.
- In high humidity areas or heavy snow areas, it is recommended to attach a drain pan heater to prevent ice build-up from the bottom frame.

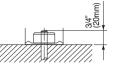
Construct a large canopy.Construct a pedestal.



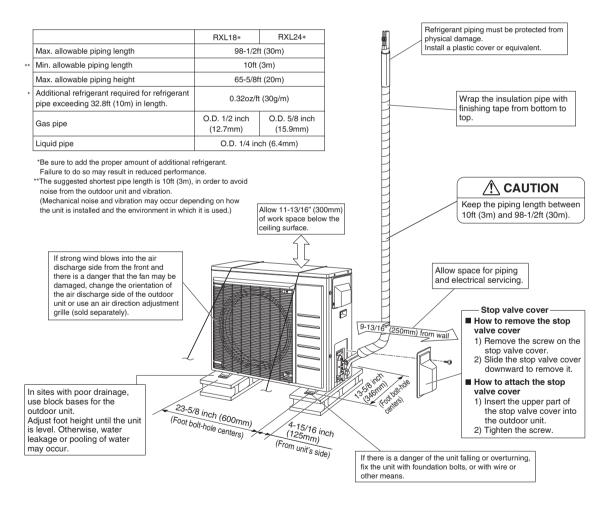
Install the unit high enough off the ground to prevent burying in snow.

# **Precautions on Installation**

- Check the strength and level of the installation surface so that the unit does not cause any operating vibrations or noise after installation.
- Fix the unit in place securely using foundation bolts, as in the figure. (Prepare 4 sets of 5/16 inch (M8) or 3/8 inch (M10) foundation bolts, nuts and washers; all sold separately.)
- It is best to screw in the foundation bolts until their ends are 3/4 inch (20mm) from the foundation surface.

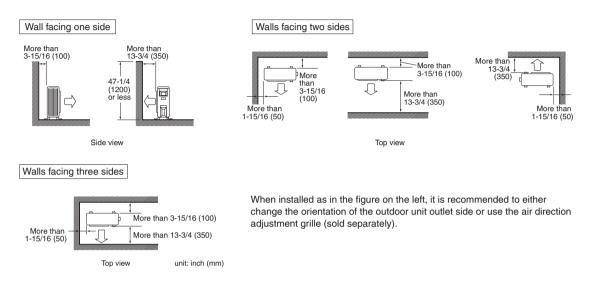


# **Outdoor Unit Installation Diagram**



# **Installation Space Requirements**

- · Position the unit on a horizontal surface.
- Any tilt in the unit should be 3° or less to the horizontal.
- Where a wall or other obstacle is in the path of the outdoor unit's intake or exhaust airflow, follow the installation space requirements below.
- For any of the below installation patterns, the wall height on the outlet side should be 47-1/4 inch (1200mm) or less.



# **Outdoor Unit Installation**

# **1.** Installing the outdoor unit

- When installing the outdoor unit, refer to "Precautions for Selecting a Location" and the "Outdoor Unit Installation Diagram".
- If drain work is necessary, follow the procedures in "2. Drain work".

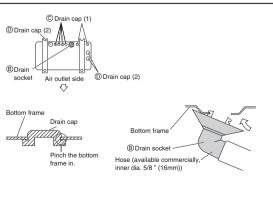
# 2. Drain work

# 

- In cold areas, do not use a drain socket, drain caps (1,2) and a drain hose with the outdoor unit. (Drain water may freeze, impairing heating performance.)
  - If the drain port is covered by a mounting base or floor surface, place additional foot bases of at least 1-1/4 inch (30mm) in height under the outdoor unit's feet.
  - 1) Attach  $\bigcirc$  drain cap (1) and  $\bigcirc$  drain cap (2).

2) Attach (B) drain socket.

• When attaching ^(B) drain socket to the bottom frame, make sure to connect the drain hose to the drain socket first.



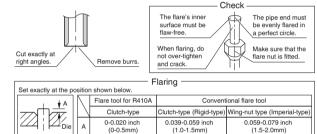
# 3. Flaring the pipe end

#### 

- Do not apply mineral oil to the flare.
- · Prevent mineral oil from getting into the system as this would reduce the service life of the units.
- Never use piping which has been used for previous installations. Only use parts which are delivered with this unit.
- Never install a dryer to this R410A unit in order to guarantee its service life.
- The drying material may dissolve and damage the system.
- · Incomplete flaring may result in refrigerant gas leakage.

## 

- · Do not reuse joints which have been used once already.
  - 1) Cut the pipe end with a pipe cutter.
  - 2) Remove burrs with the cut surface facing downward, so that the filings do not enter the pipe.
  - 3) Put the flare nut on the pipe.
  - 4) Flare the pipe.
  - 5) Check that the flaring has been done correctly.

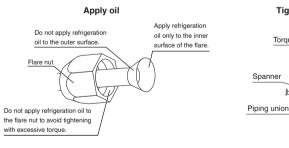


(0-0.5mm)

#### 4. Refrigerant piping

#### 

- Use the flare nut fixed to the main unit. (This is to prevent the flare nut from cracking as a result of deterioration over time.)
- To prevent gas leakage, apply refrigeration oil only to the inner surface of the flare. (Use refrigeration oil for R410A.)
- Use a torque wrench when tightening the flare nuts to prevent damage to the flare nuts and gas leakage.
- Align the centers of both flares and tighten the flare nuts 3 or 4 turns by hand, then tighten them fully with a spanner and a torque wrench.



# Torque wrencl

Tiahten



# **Outdoor Unit Installation**

Flare nut tightening torque			
Gas side		Liquid side	
1/2 inch (12.7mm)	5/8 inch (15.9mm)	1/4 inch (6.4mm)	
36-1/2-44-1/2lbf • ft 45-5/8-55-5/8lbf • ft		10-1/2-12	2-3/4lbf • ft
(49.5-60.3N • m) (61.8-75.4N • m)		(14.2-17.2 N • m)	
Width across flats	11/16 inch (17mm)	3/4 inch (19mm)	1-3/16 inch (30mm)
Valve cap         10-1/2 – 12-5/8lbf • ft           tightening torque         (14.2-17.2N • m)		12-5/8–15-3/8lbf • ft (17.0-21.0N • m)	16-5/8-20-1/4lbf • ft (22.5-27.5N • m)
Service port cap tightening torque			
8-10-7/8lbf • ft (10.7-14.7N • m)			

#### Cautions on pipe handling

- Protect the open end of the pipe from dust and moisture.
- · All pipe bends should be as gentle as possible. Use a pipe bender for bending

#### Selection of copper and heat insulation materials

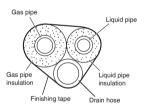
When using commercial copper pipes and fittings, observe the following:

- Insulation material: Polyethylene foam Heat transfer rate: 0.041 to 0.052W/mK (0.024 to 0.030Btu/fth°F (0.035 to 0.045kcal/mh°C))
   Be sure to use insulation that is designed for use with HVAC Systems.
- ACR Copper only.
- Be sure to insulate both the gas and liquid piping and observe the insulation dimensions as below.

	Piping size	Minimum bend radius	Piping thickness	Thermal insulation size	Thermal insulation thickness
Gas side	O.D. 1/2 inch (12.7mm)	1-9/16 inch (40mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 9/16-5/8 inch (14-16mm)	
Gas side	O.D. 5/8 inch (15.9mm)	1-15/16 inch (50mm) or more	0.039 inch (1.0mm) (C1220T-O)	I.D. 5/8-13/16 inch (16-20mm)	13/32 inch (10mm) Min.
Liquid side	O.D. 1/4 inch (6.4mm)	1-3/16 inch (30mm) or more	0.031 inch (0.8mm) (C1220T-O)	I.D. 5/16-13/32 inch (8-10mm)	

• Use separate thermal insulation pipes for gas and liquid refrigerant pipes.

• Using finishing tape, bundle and wrap the indoor unit piping and drain hose together so that the drain hose is below the other piping.



# 5. Pressure test and evacuating system

### 

- Make sure that air or any matter other than refrigerant (R410A) does not get into the refrigeration cycle.
- If refrigerant gas leaks should occur, ventilate the room as soon and as much as possible.
- R410A, as well as other refrigerants, should always be recovered and never be released directly into the environment.
- Use a vacuum pump for R410A exclusively. Using the same vacuum pump for different refrigerants may damage the vacuum
  pump or the unit.

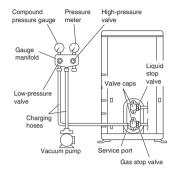
### 

It is highly recommended that you do not open/close the stop valves when the outdoor temperature is below -5°F (-21°C) as this may result in refrigerant leakage.





- When piping work is complete, it is necessary to perform a pressure test and evacuate system with a vacuum pump.
- If using additional refrigerant, purge the air from the refrigerant pipes and indoor unit using a vacuum pump, then charge additional refrigerant.
- Use a hexagonal wrench (3/16 inch (4mm)) to operate the stop valve rod.
- All refrigerant pipe joints should be tightened with a torque wrench to the specified tightening torque.



- Pressurize the liquid pipe and gas pipe from the service ports of each stop valve to 550psi (3.8MPa) (do not pressurize more than 550psi (3.8MPa)) for 1 hour minimum, 24 hours recommended. If there is a pressure drop, check for leaks, make repairs and perform the pressure test again.
- 2) Connect the gauge manifold's charging hose to the gas stop valve's service port.
- Fully open the low-pressure valve (Lo) on the gauge manifold and fully close the high-pressure valve (Hi). (High-pressure valve will require no further operation.)
- 4) Evacuate system using vacuum pump to below 500 microns for 1 hour minimum.
- 5) Close the low-pressure valve (Lo) on the gauge manifold and stop vacuum pumping. (Maintain this condition for a few minutes to make sure that the compound pressure gauge pointer does not swing back.)^{*1}
- 6) Remove the valve caps from the liquid stop valve and gas stop valve.
- 7) To open the liquid stop valve, turn the rod of the valve 90° counter-clockwise using a hexagonal wrench. Close it after 5 seconds, and check for gas leakage. Using soapy water, check for gas leakage from the indoor unit's flare and outdoor unit's flare and valve rods. After the check is complete, wipe all soapy water off.
- 8) Disconnect the charging hoses from the service port for the gas stop valve, then fully open the liquid and gas stop valves. (Do not attempt to turn the valve rods further than they can go.)
- 9) Tighten the valve caps and service port caps for the liquid and gas stop valves with a torque wrench to the specified torques.

Refer to "4. Refrigerant piping" on page 6 for details.

*1 If the compound pressure gauge pointer swings back, the refrigerant may have water content or there may be a loose pipe joint.

Check all pipe joints and retighten nuts as needed, then repeat steps 3) through 5).

### 6. Refilling refrigerant

Check the type of refrigerant to be used on the machine nameplate.

Precautions when adding R410A

Fill from the liquid pipe in liquid form.

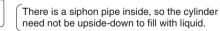
R410A is a mixed refrigerant, so adding it in gas form may cause the refrigerant composition to change, preventing normal operation.

• Before filling, check whether the cylinder has a siphon attached or not. (It should have something like "liquid filling siphon attached" displayed on it.)

Filling a cylinder with an attached siphon

Filling other cylinders

Turn the cylinder upside-down when filling.



Stand the cylinder upright when filling.

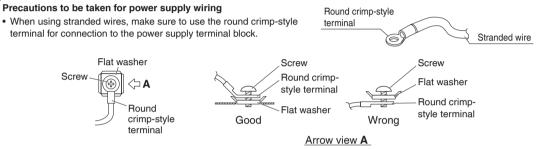
· Be sure to use the R410A tools to ensure pressure and to prevent foreign objects entering.

# Wiring

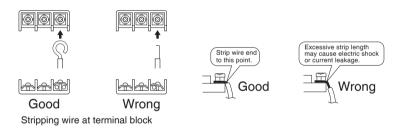
### 

- Do not use tapped wires, extension cords, or starburst connections, as they may cause overheating, electric shock, or fire.
- Do not use locally purchased electrical parts inside the product. (Do not branch the power for the drain pump, etc., from the terminal block.) Doing so may cause electric shock or fire.
- The circuit must be protected with safety devices in accordance with local and national codes, i.e. a circuit breaker.
- Use an all-pole disconnection type circuit breaker with at least 1/8 inch (3mm) between the contact point gaps.
- When carrying out wiring, take care not to pull at the conduit.
- Do not connect the power wire to the indoor unit. Doing so may cause electric shock or fire.

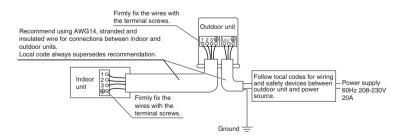
### 



• When connecting the inter-unit wires to the terminal block using a single core wire, be sure to curl the end of the lead. Improper work may cause heat and fire.



- Do not turn on the circuit breaker until all work is completed.
  - 1) Strip the insulation from the wire (3/4 inch (20mm)).
  - 2) Connect the inter-unit wires between the indoor and outdoor units so that the terminal numbers match. Tighten the terminal screws securely. It is recommended that a slot-head screwdriver be used to tighten the screws.



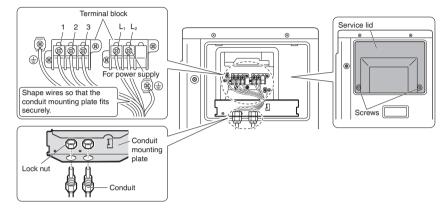
#### NOTE

Take care to ensure that all wiring between indoor unit and outdoor unit has a consistent connection. Any splices can cause communication errors.

[Method of mounting conduit]

- 1) Dismount the service lid by removing the 2 screws.
- 2) Pass wires through the conduit and secure them with a lock nut.

3) After completing the work, reattach the service lid to its original position.



# Facility Setting (cooling at low outdoor temperature)

### 

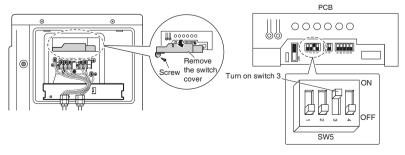
Make sure to turn the power OFF before removing the service lid.

### 

- If the outdoor unit is installed where the heat exchanger of the unit is exposed to direct wind, provide a windbreak wall.
- Intermittent noises may be produced by the indoor unit due to the outdoor fan turning on and off when using facility settings.
- Do not place humidifiers or other items which might raise the humidity in rooms where facility settings are being used.
- A humidifier might cause dew condensation from the indoor unit outlet vent. • Activating the facility setting sets the indoor fan tap to the highest position.
- Notify the user about this.

# This function is designed for facilities such as equipment or computer rooms. It is never to be used in a residence or office where people occupy the space.

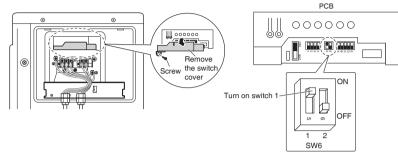
 Turning on SW5-3 on the PCB will extend the operation range to 14°F (-10°C). Installing an air direction adjustment grille (sold separately) will further extend the operation range to -4°F (-20°C). In these cases, the unit will stop operating if the outdoor temperature falls below -4°F (-20°C), restarting once the temperature rises above this level.



# When attaching the drain pan heater

1) Attach the drain pan heater in accordance with the installation manual included with the drain pan heater.

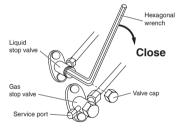
2) Turn on SW6-1 on the PCB.



# **Pump Down Operation**

In order to protect the environment, be sure to pump down when relocating or disposing of the unit.

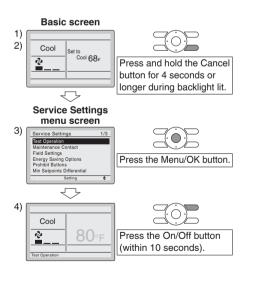
- 1) Remove the valve cap from the liquid stop valve and gas stop valve.
- 2) Begin forced cooling operation.
- 3) After 5 to 10 minutes, close the liquid stop valve with a hexagonal wrench.
- 4) After 2 to 3 minutes, close the gas stop valve and stop forced cooling operation.
- 5) Attach the valve cap once procedures are complete.



### Forced cooling operation

[For FDMQ models]

- Using the indoor unit's remote controller
- [For wired remote controller]
- 1) Set to COOL operation using the remote controller.
- 2) Press and hold the Cancel button for 4 seconds or longer. Service settings menu is displayed.
- Select Test Operation in the service settings menu, and press the Menu/OK button. Basic screen returns and "Test Operation" is displayed at the bottom.
- Press the On/Off button within 10 seconds, and the forced cooling operation starts.
  - Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the On/Off button.



[For wireless remote controller] 1) Press 🗂 and select the COOL operation.	
2) Press 🎬 🗂 twice. "Test" is displayed.	
3) Press within 10 seconds, and the forced cooling operation starts.	
<ul> <li>Forced cooling operation will stop automatically after about 15 minutes.</li> <li>To stop the operation, press</li> </ul>	
[For FTX models]	
•	
<ul> <li>Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.</li> </ul>	
■Using the indoor unit's remote controller	
1) Press Mode and select the COOL operation.	
2) Press $(0)$ to turn on the system.	
3) Press $\begin{bmatrix} \star \\ Term \\ Type \\$	
4) Press Tree , select " 7 ", and press Mode for confirmation.	202
	<ol> <li>Press and select the COOL operation.</li> <li>Press and select the forced cooling operation starts.</li> <li>Forced cooling operation will stop automatically after about 15 minutes.</li> <li>Forced cooling operation, press and the forced cooling operation starts.</li> <li>For FTX models</li> <li>Using the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)</li> <li>Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch for at least 5 seconds. (The operation will start.)</li> <li>Forced cooling operation will stop automatically after about 15 minutes. To stop the operation, press the indoor unit ON/OFF switch.</li> <li>Using the indoor unit's remote controller</li> <li>Press and select the COOL operation.</li> </ol>

• Forced cooling operation will stop automatically after about 30 minutes. To stop the operation, press (b).

# **Trial Operation and Testing**

• When trial operation is conducted directly after the circuit breaker is turned on, in some cases no air will be output for about 15 minutes in order to protect the air conditioner.

# 1. Trial operation and testing

Refer to the installation manual for the indoor unit.

# 2. Test items

Test items	Symptom	Check
Indoor and outdoor units are installed securely.	Fall, vibration, noise	
No refrigerant gas leaks.	Incomplete cooling/heating function	
Refrigerant gas and liquid pipes and indoor drain hose extension are thermally insulated.	Water leakage	
Draining line is properly installed.	Water leakage	
System is properly grounded.	Electrical leakage	
The specified wires are used for inter-unit wiring.	No operation or burn damage	
Indoor or outdoor unit's air inlet or air outlet are unobstructed.	Incomplete cooling/heating function	
Stop valves are opened.	Incomplete cooling/heating function	
Indoor unit properly receives remote control commands.	No operation	

# 13. Operation Manual

# 13.1 FTX09/12/15NMVJU

Read Before Operation

# **Safety Considerations**

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain

the unit. Inform users that they should store this operation manual with the installation manual for future reference. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

### — 🕂 DANGER -

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

#### — 🕂 WARNING ·

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.

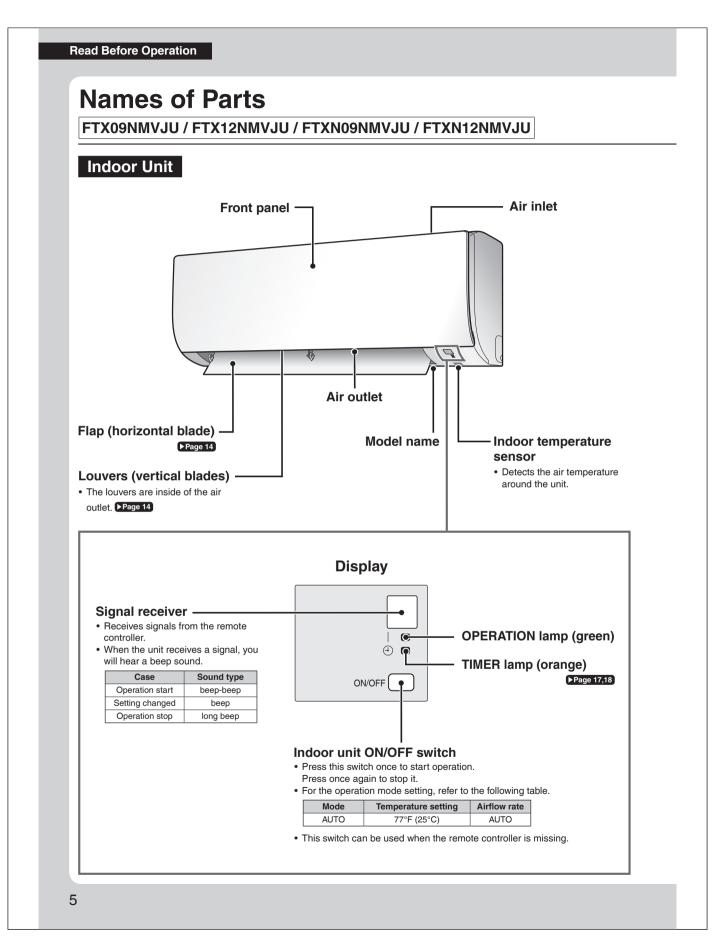
### – 🕂 CAUTION –

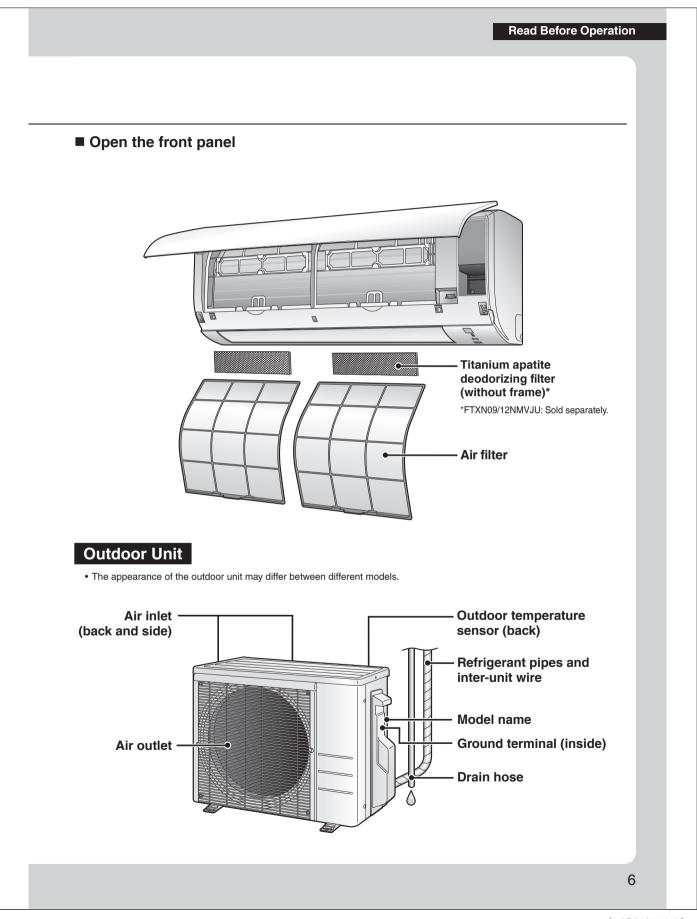
 Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
 Do not use the unit for cooling precision instruments, food, plants, animals or works of art.

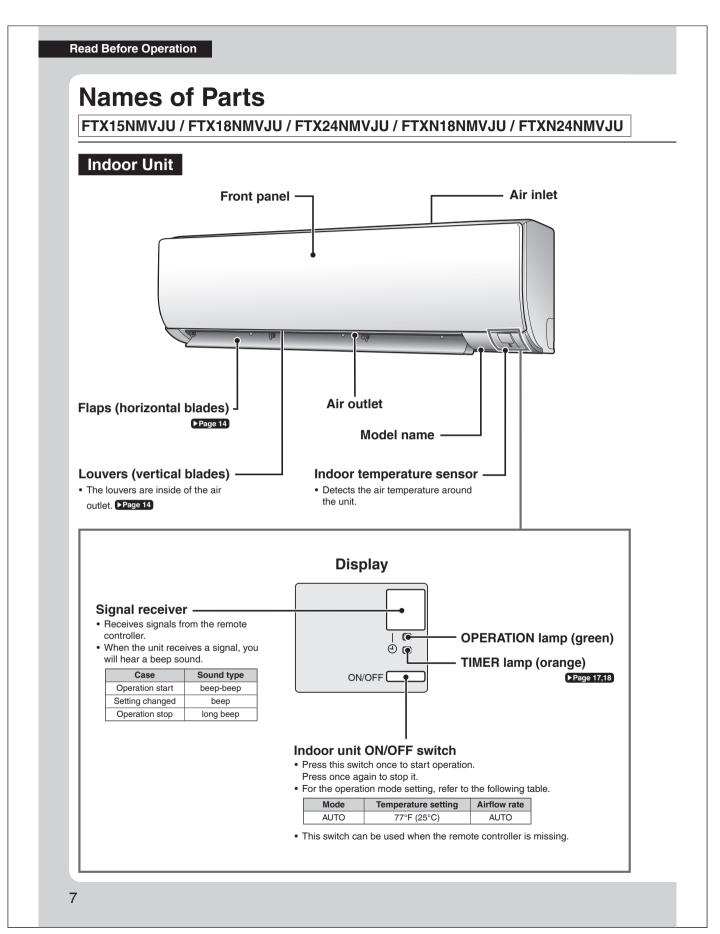
#### **Read Before Operation**

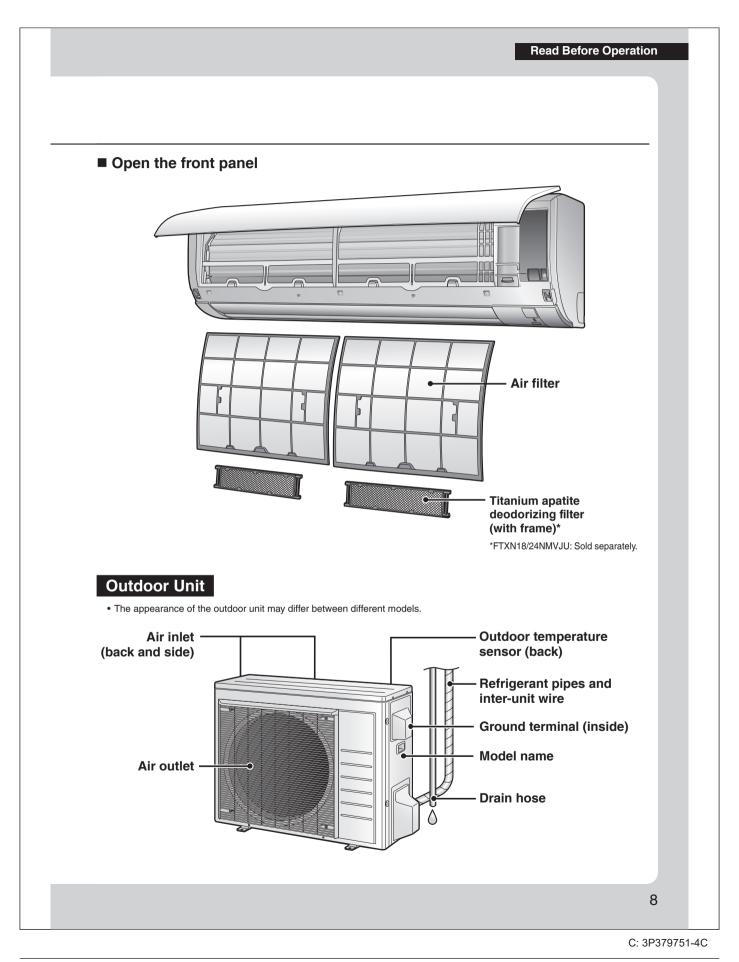
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
   Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- · Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.
- 🕂 NOTE -
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.

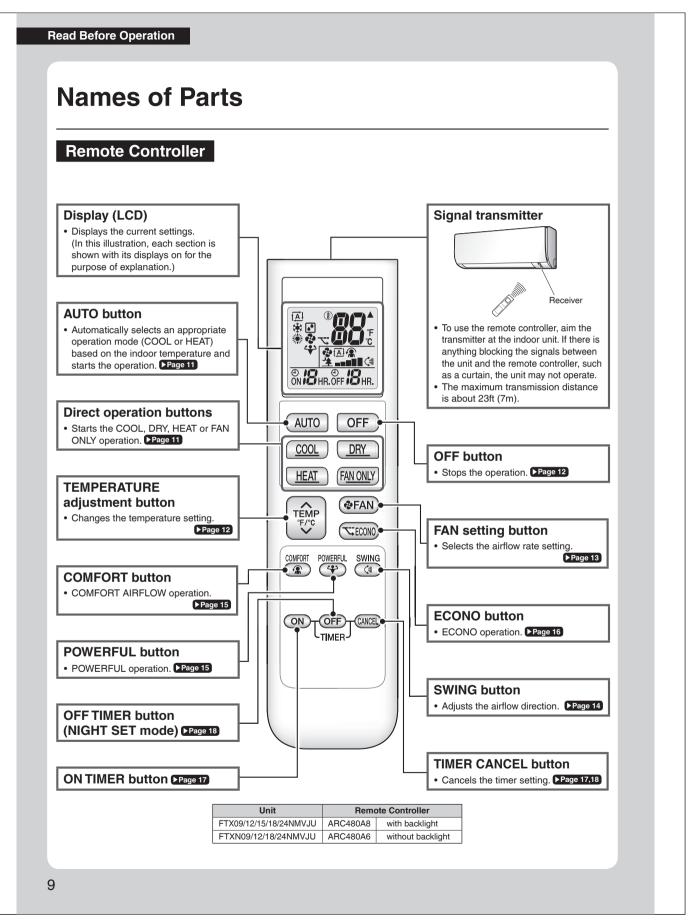
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  - a. Places with a mist of mineral oil, such as cutting oil.
  - b. Locations such as coastal areas where there is a lot of salt in the air.
  - c. Locations such as hot springs where there is a lot of sulfur in the air.
  - Locations such as factories where the power voltage varies a lot.
  - e. In cars, boats, and other vehicles.
  - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  - g. Locations where equipment produces electromagnetic waves.
  - h. Places with an acid or alkaline mist.
  - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  - b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.











**Read Before Operation** 

# **Preparation Before Operation**





# To insert the batteries

- **1.** Remove the back cover by sliding and then slightly lifting it.
- **2.** Insert 2 dry batteries AAA.LR03 (alkaline).
- **3.** Replace the back cover.

To fix the remote controller holder to a wall

- **1.** Choose a place where the signals reach the unit.
- **2.** Attach the holder to a wall, a pillar, or similar location with the screws supplied with the holder.
- **3.** Hang the remote controller on the remote controller holder.

# [°]Fم ٤°C

Remote controller holder

Screws

### Fahrenheit/Celsius display switch

- Press and ON (TIMER button) simultaneously for about 5 seconds.
  - The temperature will be displayed in Celsius when it is presently displayed in Fahrenheit, and vice versa.
  - The switch operation is only possible when the temperature is being displayed.

### Turn on the circuit breaker

• After the power is turned on, the flap of the indoor unit opens and closes once to set the reference position.

## NOTE

#### Notes on batteries

- When replacing the batteries, use batteries of the same type, and replace both old batteries together.
- The batteries will last for about 1 year. However, if the remote controller display begins to fade and the possible transmission range becomes
- shorter within a year, replace both batteries with new, size AAA.LR03 (alkaline) batteries.
- The batteries supplied with the remote controller are for initial operation. The batteries may run out in less than 1 year.

#### Note on remote controller

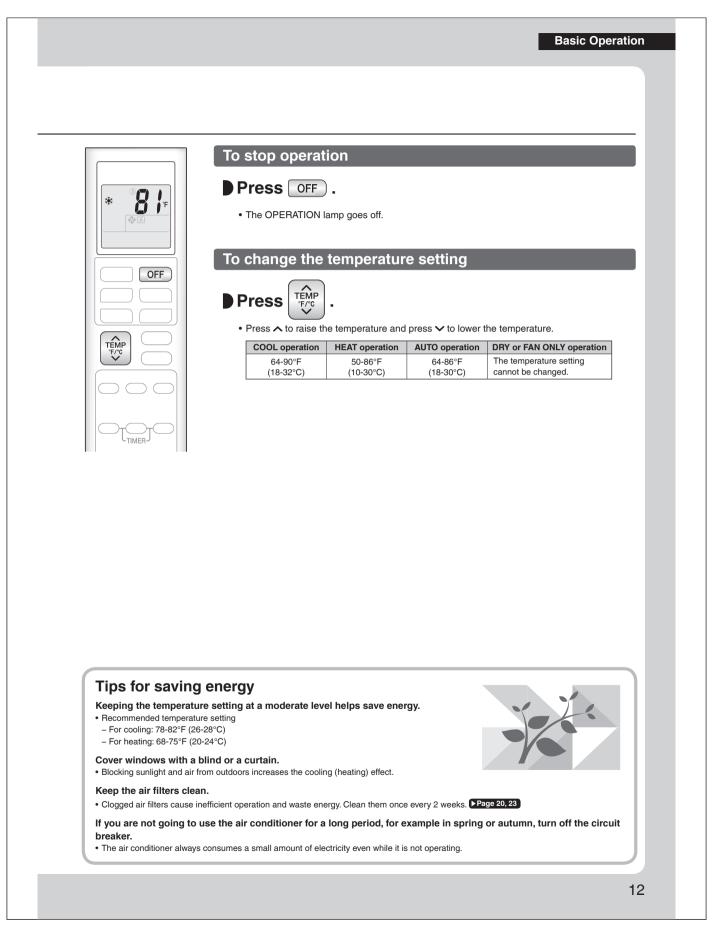
- Do not drop the remote controller. Do not get it wet.
- Fahrenheit/Celsius display change function of remote controller
- The set temperature may increase when the display is changed to Celsius from Fahrenheit, because a fraction of 0.5°C is rounded up.
  Example: A set temperature of 65°F (equivalent to 18.5°C) will be converted into 19°C.
- When the display is changed to Fahrenheit again, the set temperature will be converted into 66°F (equivalent to 19°C) instead of the original set temperature (65°F) but a set temperature of 66°F (equivalent to 19°C) will be converted into 19°C with no temperature change.
- A reception sound will go off for the transmission of set temperature to the indoor unit at the time of setting the Fahrenheit/Celsius display change function.

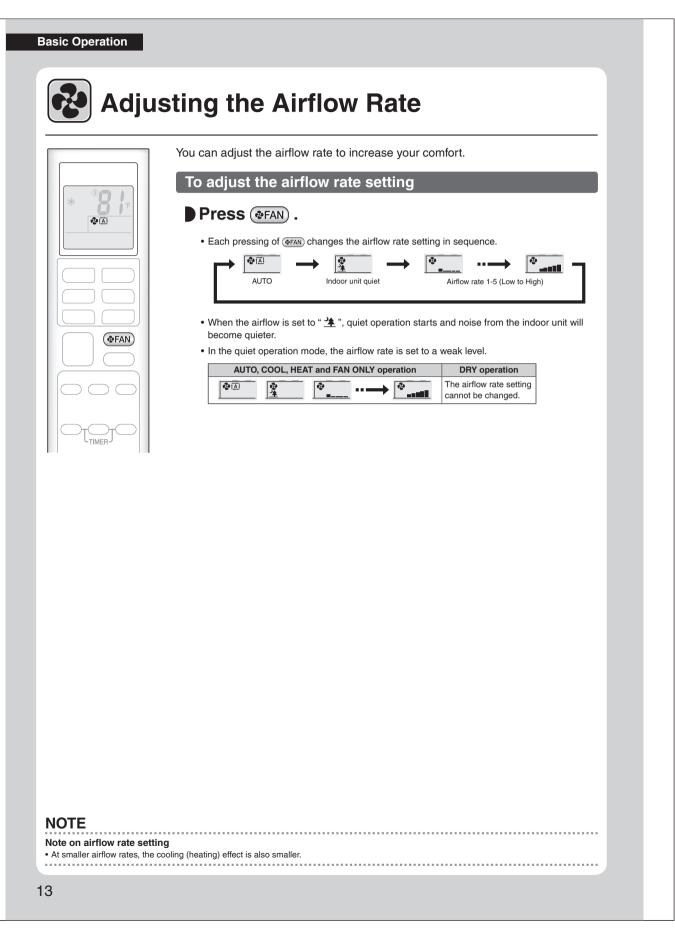
#### Basic Operation

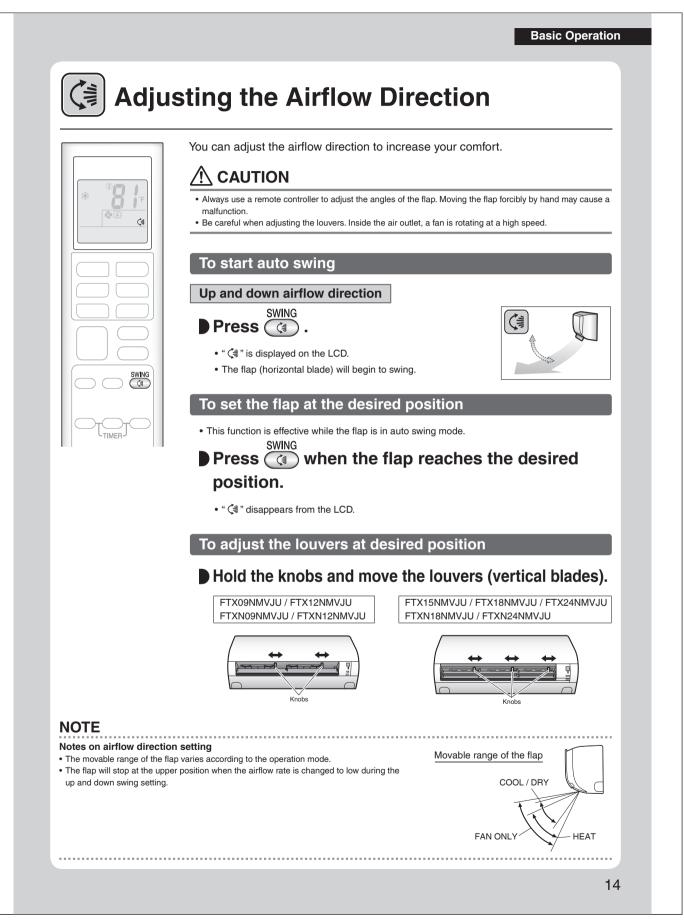
# AUTO · COOL · DRY · HEAT · FAN ONLY Operation

	The air conditioner operates with the operation mode of your choic	e.
	To start operation	
	AUTO operation • To automatically select an appropriate temperature and operation mode. • Press AUTO .	
(COOL) DRY HEAT (FAN ONLY)	COOL operation	.*.
	To lower the temperature.     Press COOL .	<b>│</b> ₩ 
	DRY operation	
	• To lower the humidity.	•
	HEAT operation	
	To raise the temperature.	3442
	FAN ONLY operation	
	To circulate air in the room.	2
	The OPERATION lamp lights green.	
NOTE	- repres	
operation.	selects an appropriate operation mode (COOL or HEAT) based on the indoor temperature ar lects setting at a regular interval to bring the indoor temperature to the user-setting level.	nd starts the
Note on DRY operation	taining the indoor temperature as much as possible. It automatically controls temperature and	l airflow rate, so







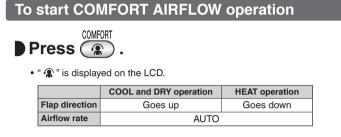


#### Useful Functions

# COMFORT AIRFLOW Operation



The air direction and flow rate are adjusted so that the air will not blow directly at people in the room.



• Not available in FAN ONLY mode.

# To cancel COMFORT AIRFLOW operation



- " 🏦 " disappears from the LCD.
- The flap will return to the memory position from before COMFORT AIRFLOW operation.

# POWERFUL Operation



POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.

### To start POWERFUL operation



- " 🛟 " is displayed on the LCD.
- POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.

### **To cancel POWERFUL operation**



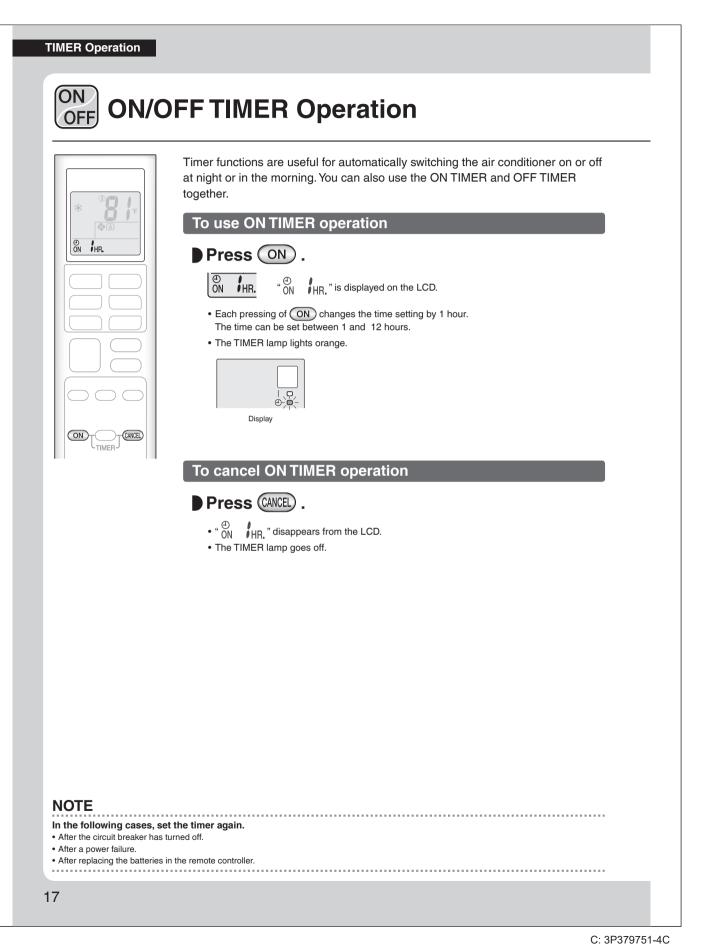
• " 🛟 " disappears from the LCD.

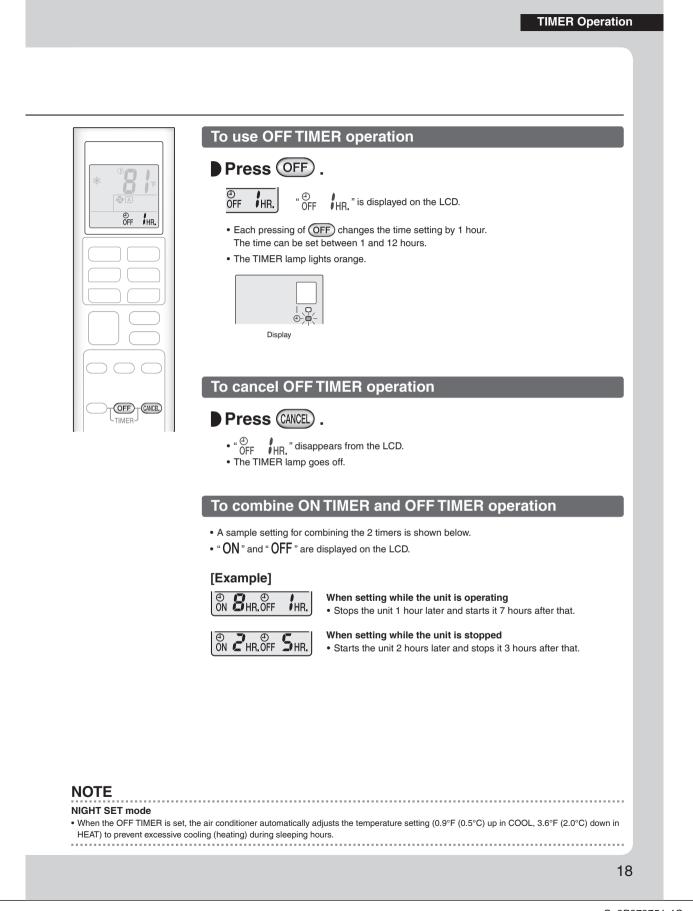
# **Useful Functions ECONO Operation** ECONO operation enables efficient operation by limiting the maximum power consumption. This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit. To start ECONO operation Press (TECONO) . • " 🏹 " is displayed on the LCD. • Not available in FAN ONLY mode. **To cancel ECONO operation** TTECONO) Press (TECONO) again. • " 🏹 " disappears from the LCD. NOTE Note on COMFORT AIRFLOW operation · If the up and down airflow direction is selected, the COMFORT AIRFLOW operation will be canceled. Notes on POWERFUL operation • Pressing OFF causes the settings to be canceled, and " 🝄 " disappears from the LCD. · POWERFUL operation will not increase the capacity of the air conditioner if the air conditioner is already in operation with its maximum capacity demonstrated. - In COOL, HEAT and AUTO operation To maximize the cooling (heating) effect, the capacity of outdoor unit increases and the airflow rate becomes fixed at the maximum setting. The temperature setting cannot be changed. - In DRY operation The temperature setting is lowered by 4.5°F (2.5°C) and the airflow rate is slightly increased. - In FAN ONLY operation The airflow rate is fixed at the maximum setting. Notes on ECONO operation • Pressing OFF ) causes the settings to be canceled, and " 🏹 " disappears from the LCD. • If the power consumption level is already low, switching to ECONO operation will not reduce the power consumption. Some useful functions can be used together.

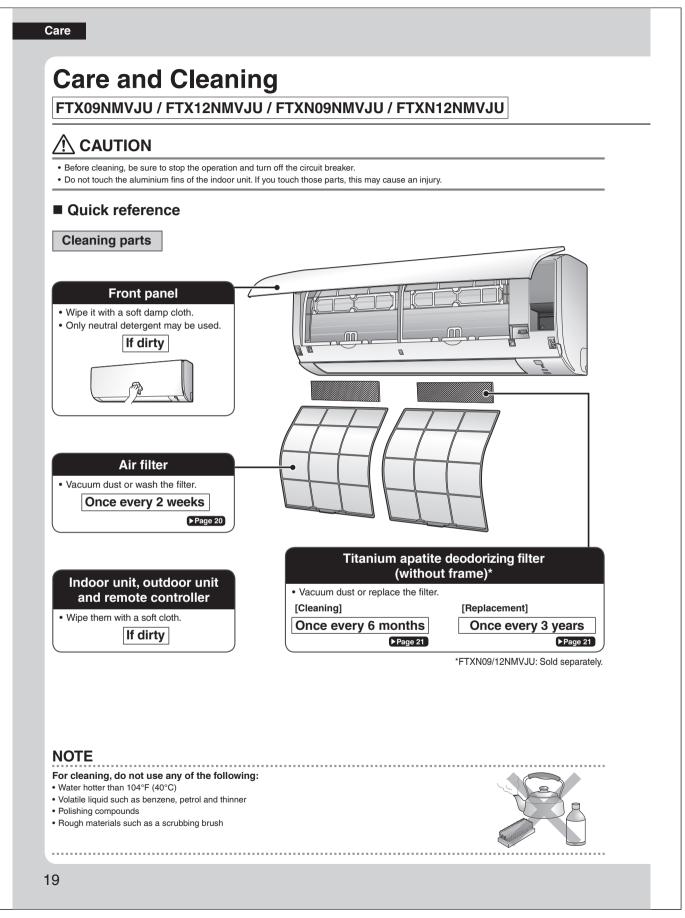
 COMFORT AIRFLOW + ECONO
 Available

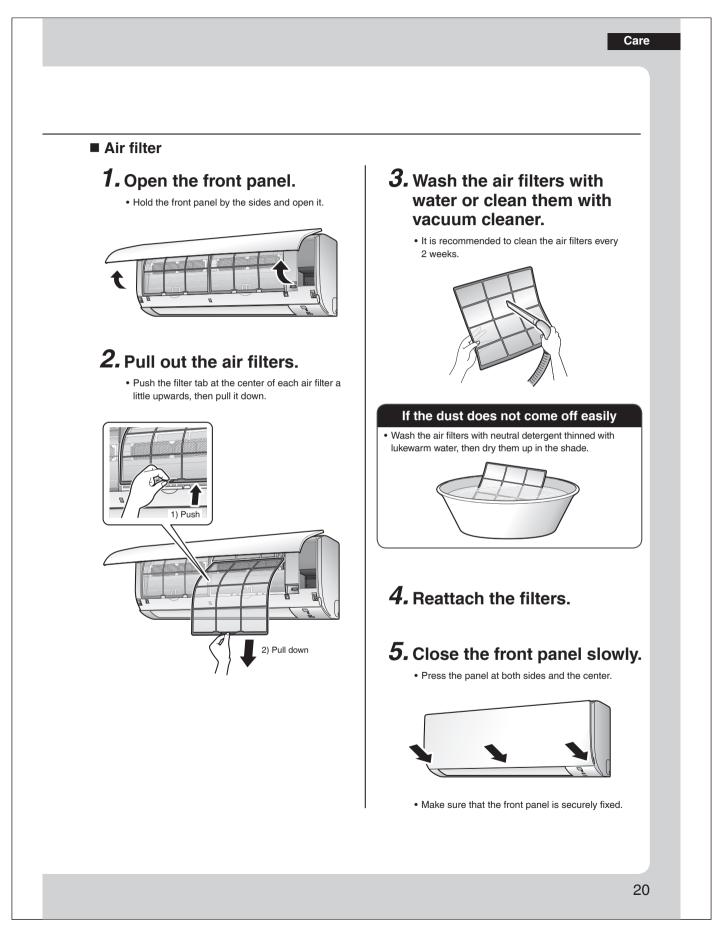
 POWERFUL + COMFORT AIRFLOW
 Not available*

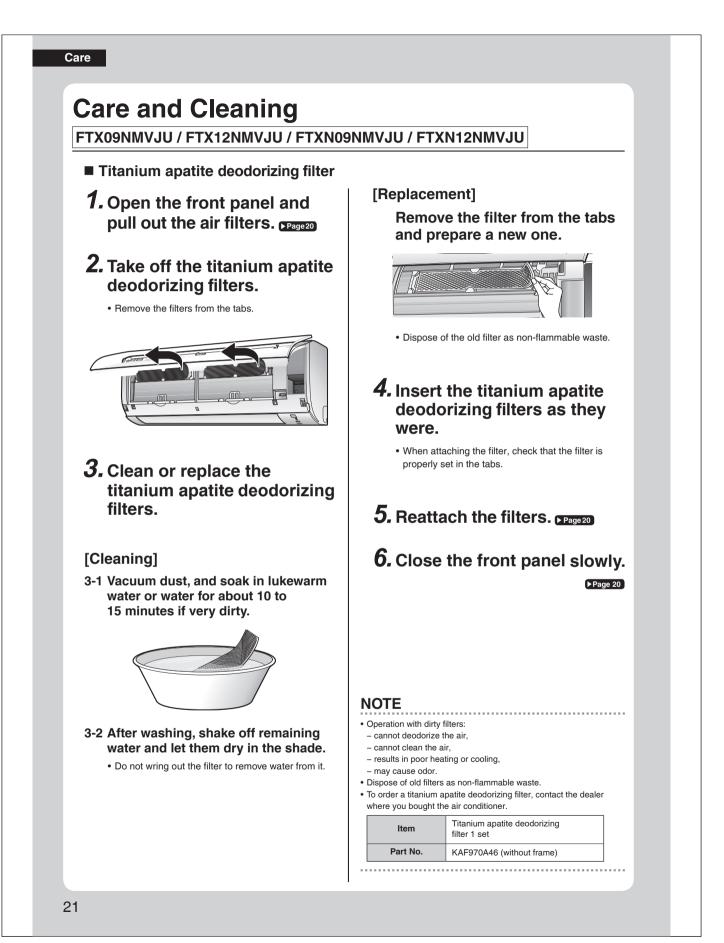
 POWERFUL + ECONO
 Not available*

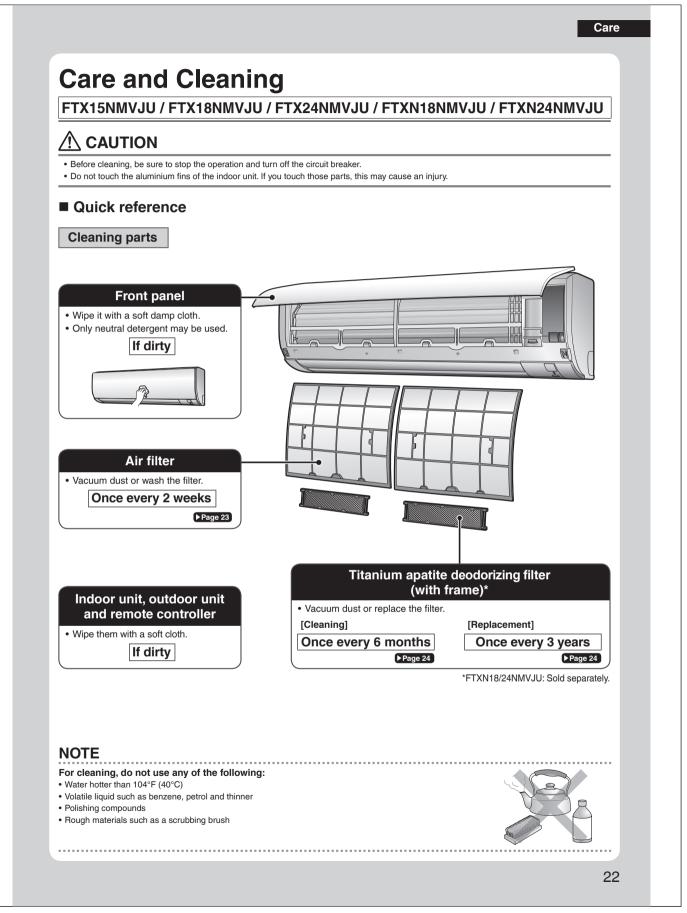


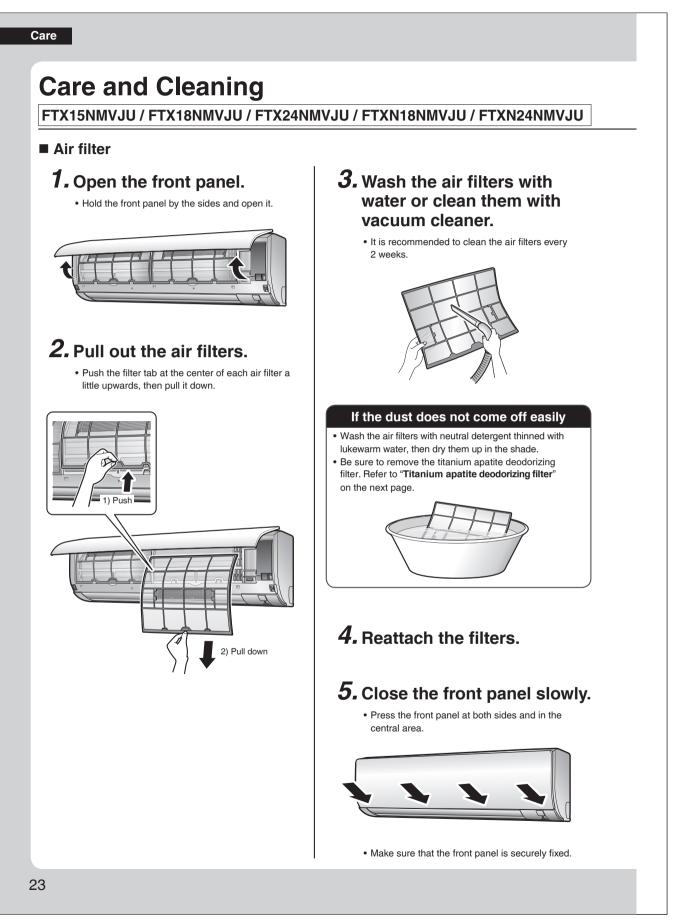


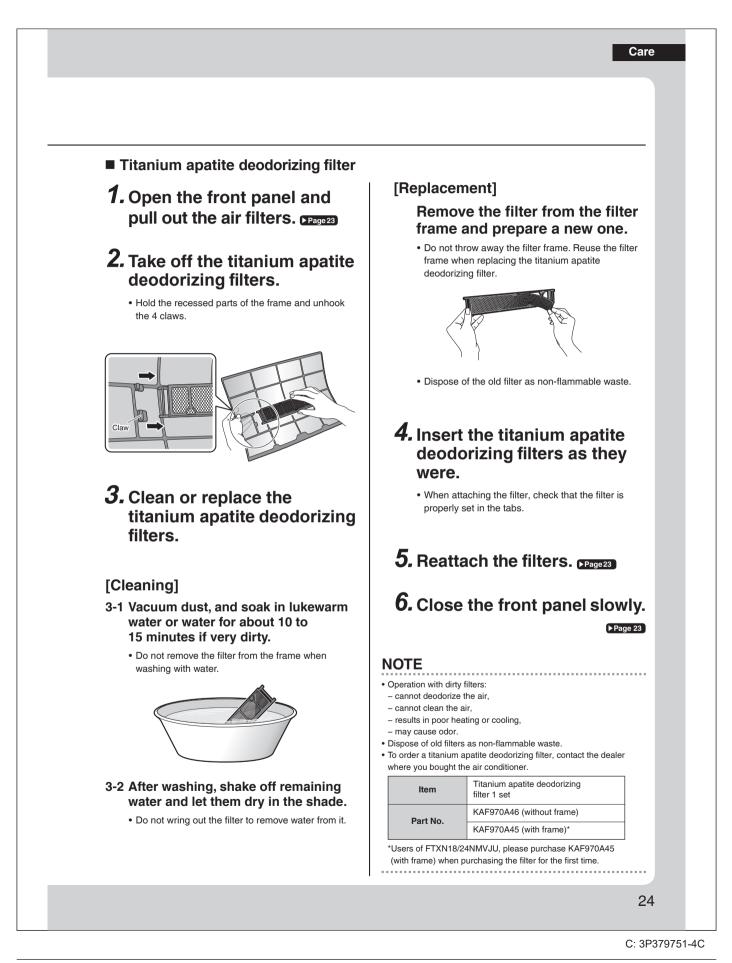












Care

# Care and Cleaning

- Prior to a long period of non-use
  - **1.** Operate the FAN ONLY mode for several hours to dry out the inside.

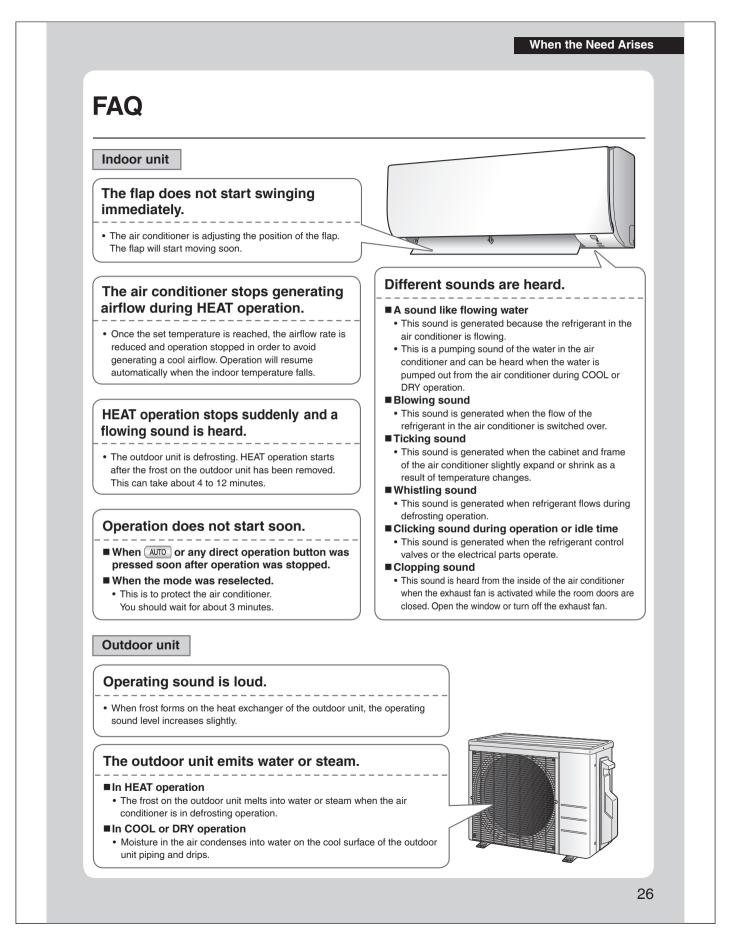
• Press (FAN ONLY) .

**2.** After operation stops, turn off the circuit breaker for the room air conditioner.

**3.** Take out the batteries from the remote controller.

### We recommend periodical maintenance

- In certain operating conditions, the inside of the air conditioner may get foul after several seasons of use, resulting in poor performance. It is recommended to have periodical maintenance by a qualified contractor in addition to regular cleaning by the user.
- For qualified contractor maintenance, please contact the dealer where you bought the air conditioner.



When the Need Arises

# Troubleshooting

Before making an inquiry or a request for repair, please check the following. If the problem persists, consult your dealer.

### Not a problem This case is not a problem.



### Check

Please check again before requesting repairs.

### The air conditioner does not operate

Case	Description / what to check	
OPERATION lamp is off.	<ul> <li>Has the circuit breaker been tripped or the fuse blown?</li> <li>Is there a power failure?</li> <li>Are batteries set in the remote controller?</li> </ul>	
OPERATION lamp is blinking.	• Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer.	

#### The air conditioner suddenly stops operating

Case	Description / what to check	
OPERATION lamp is on.	• To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes.	
OPERATION lamp is blinking.	Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit? Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. ▶Page 30	

#### The air conditioner does not stop operating

Case	Description / what to check
The air conditioner continues operating even after operation is stopped.	<ul> <li>Immediately after the air conditioner is stopped</li> <li>The outdoor unit fan continues rotating for about another 1 minute to protect the system.</li> <li>While the air conditioner is not in operation</li> <li>When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system.</li> </ul>

#### The room does not cool down / warm up

Case	Description / what to check
Air does not come out.	<ul> <li>In HEAT operation</li> <li>The air conditioner is warming up. Wait for about 1 to 4 minutes.</li> <li>During defrosting operation, hot air does not flow out of the indoor unit.</li> </ul>
Air does not come out / Air comes out.	<ul> <li>Is the airflow rate setting appropriate?</li> <li>Is the airflow rate setting low, such as "Indoor unit quiet" or "Airflow rate 1"? Increase the airflow rate setting.</li> <li>Is the set temperature appropriate?</li> <li>Is the adjustment of the airflow direction appropriate?</li> </ul>
Air comes out.	<ul> <li>Is there any furniture directly under or beside the indoor unit?</li> <li>Is the air conditioner in ECONO operation? Page 16</li> <li>Are the air filters dirty?</li> <li>Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?</li> <li>Is a window or door open?</li> <li>Is an exhaust fan turning?</li> </ul>

Mist comes out	
Case	Description / what to check
Mist comes out of the indoor unit.	• This happens when the air in the room is cooled into mist by the cold airflow during COO or other operation.
Remote controller _{Case}	Description / what to check
	The batteries may be exhausted.     Replace both batteries with new dry batteries AAA.LR03 (alkaline).     For details, refer to "Preparation Before Operation". Page 10
Case The unit does not receive signals from the remote controller or has	<ul> <li>The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Prage 10</li> <li>Signal communication may be disabled if an electronic-starter-type fluorescent lamp (suc as inverter-type lamps) is in the room. Consult your dealer if that is the case.</li> <li>The remote controller may not function correctly if the transmitter is exposed to direct</li> </ul>

### Air has an odor

Case	Description / what to check
The air conditioner gives off an odor.	• The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer.

### Others

Case	Description / what to check
The air conditioner suddenly starts behaving strangely during operation.	• The air conditioner may malfunction due to lightning or radio. If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller.

#### Notes on the operating conditions

- If operation continues under any conditions other than those listed in the table,
- A safety device may activate to stop the operation.
- Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

Mode	Operating conditions
COOL / DRY	Outdoor temperature: 50-115°F (10-46°C) Indoor temperature: 64-90°F (18-32°C) Indoor humidity: 80% max.
HEAT	Outdoor temperature: [RX, RXN]: 5-75°F (-15-24°C) [RXL]: -13-75°F (-25-24°C) Indoor temperature: 50-86°F (10-30°C)

When the Need Arises

# Troubleshooting

## Call your dealer immediately

# \Lambda WARNING

- When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### Do not attempt to repair or modify the air conditioner by yourself.

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The circuit breaker, a fuse, or the ground fault circuit interrupter cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

Turn off the circuit breaker and call your dealer.



#### After a power failure

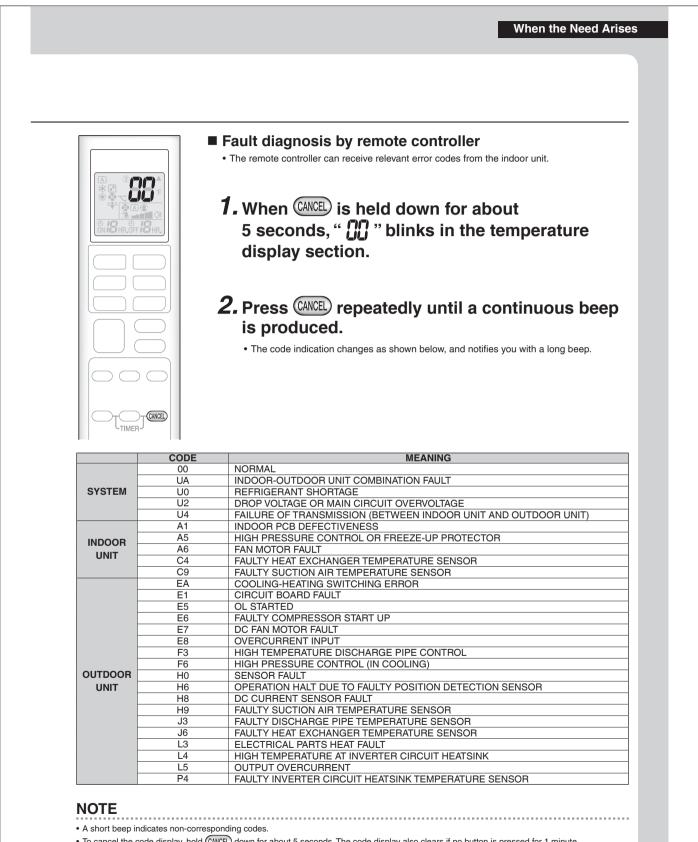
• The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

### Lightning

• If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

## Disposal requirements

• Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.



• To cancel the code display, hold CANCEL) down for about 5 seconds. The code display also clears if no button is pressed for 1 minute.

## 13.2 FTX18/24UVJU

Read Before Operation

# **Safety Considerations**

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain

the unit. Inform users that they should store this operation manual with the installation manual for future reference. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MWARNING ·······	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

### — 🕂 DANGER -

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

### 

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.

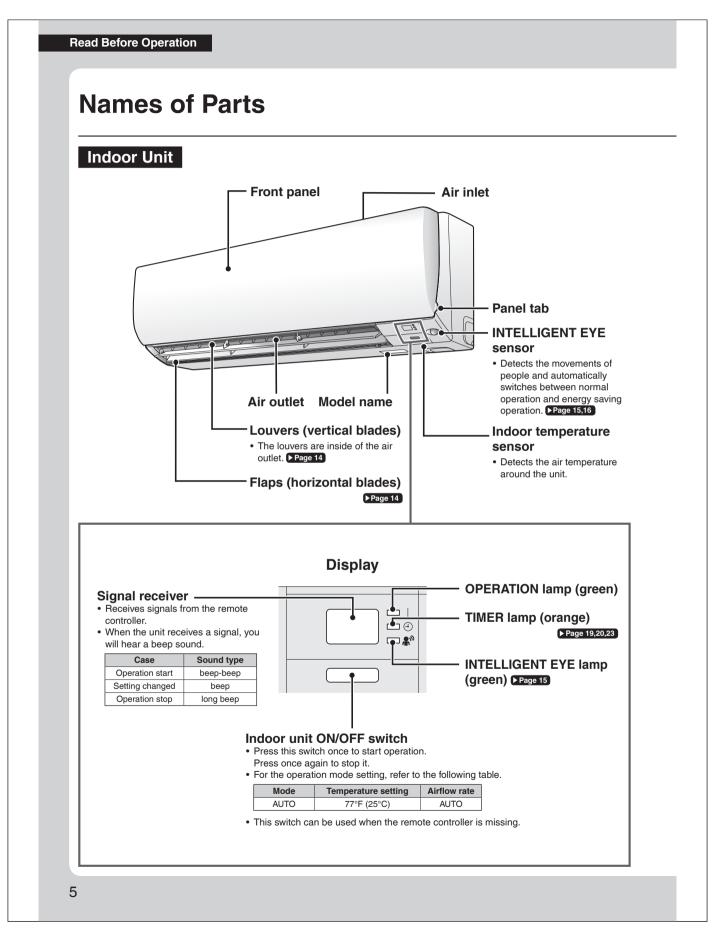
## – 🕂 CAUTION –

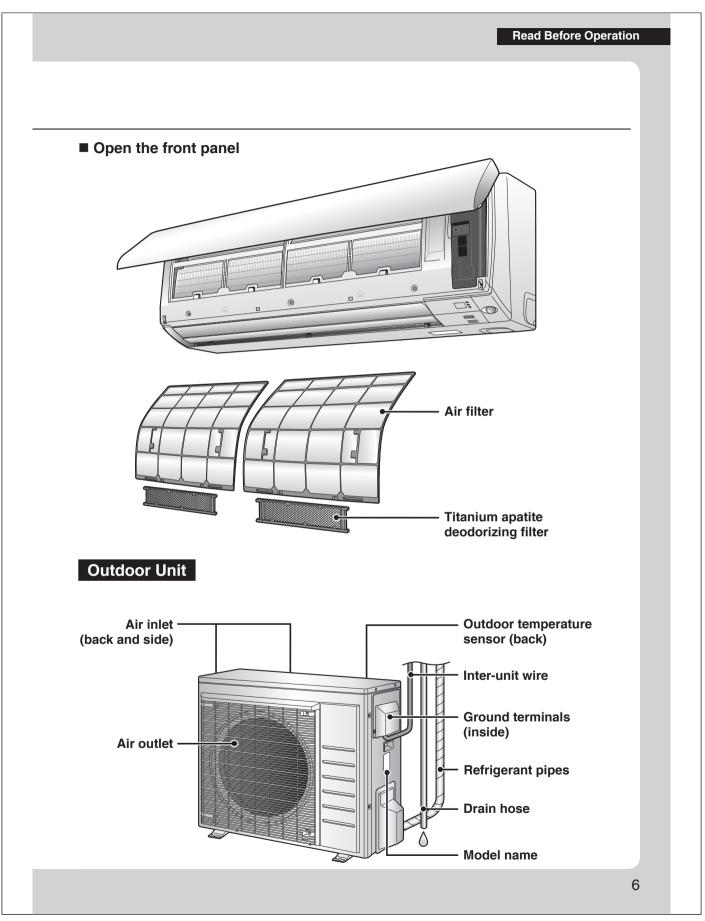
 Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
 Do not use the unit for cooling precision instruments, food, plants, animals or works of art.

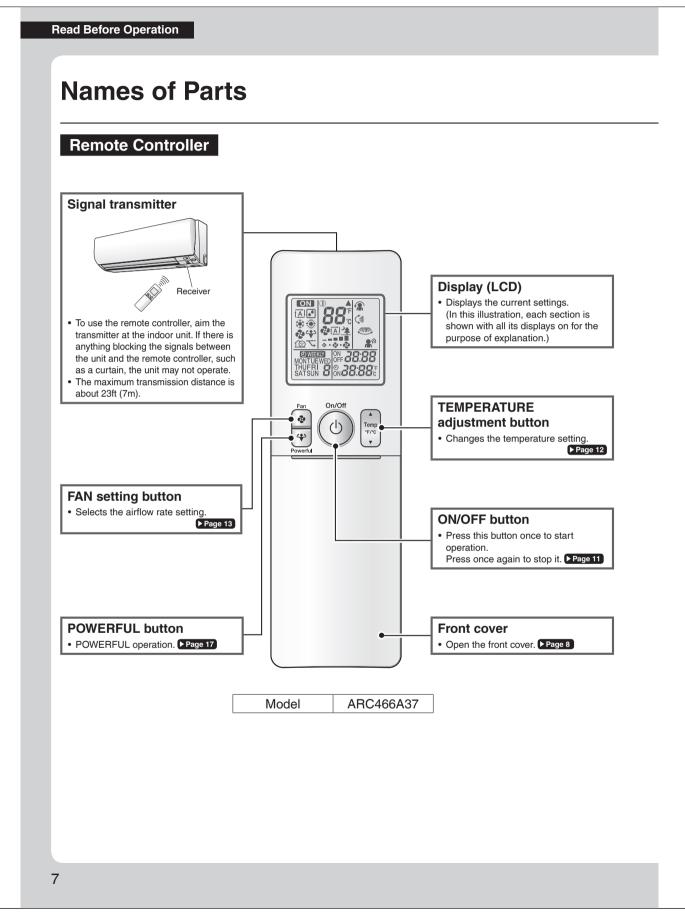
### **Read Before Operation**

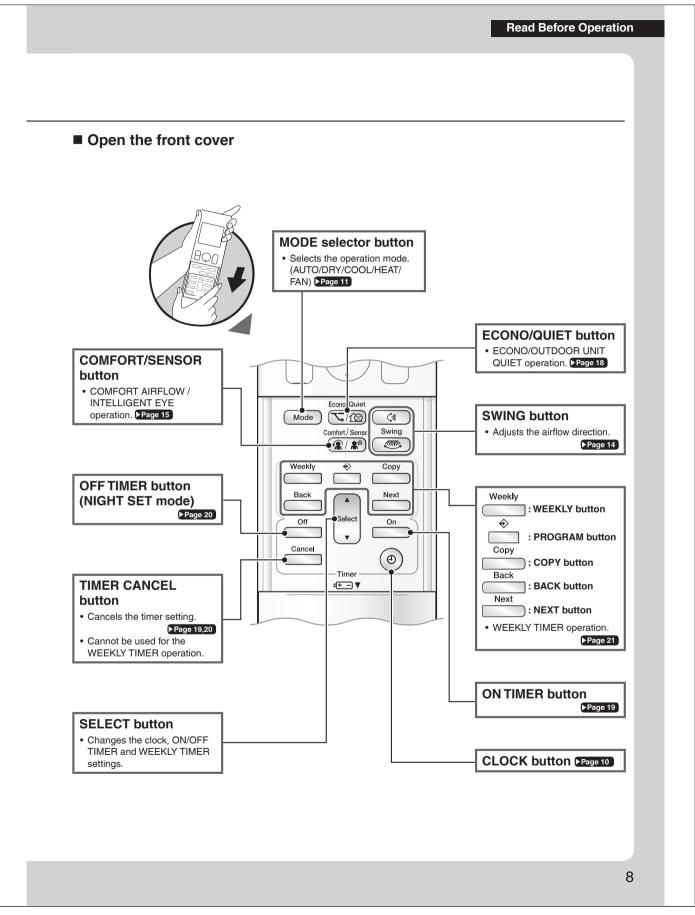
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
   Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- · Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.
- 🕂 NOTE -
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.

- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  - a. Places with a mist of mineral oil, such as cutting oil.
  - b. Locations such as coastal areas where there is a lot of salt in the air.
  - c. Locations such as hot springs where there is a lot of sulfur in the air.
  - d. Locations such as factories where the power voltage varies a lot.
  - e. In cars, boats, and other vehicles.
  - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  - g. Locations where equipment produces electromagnetic waves.
  - h. Places with an acid or alkaline mist.
  - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  - Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.









Read Before Operation

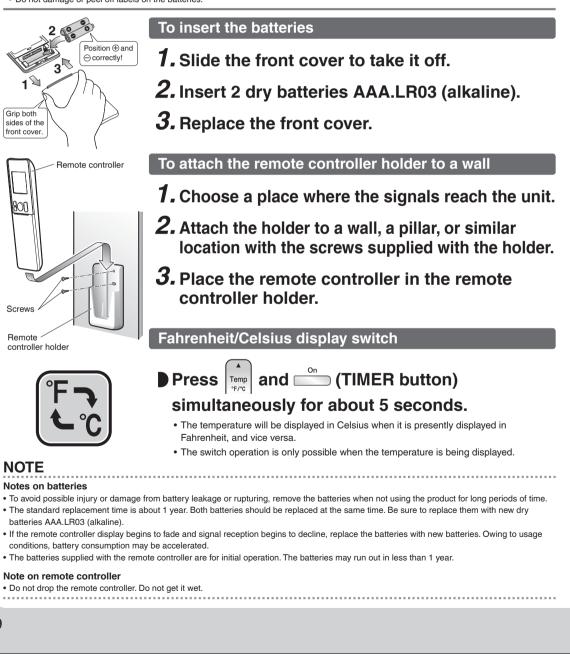
# **Preparation Before Operation**

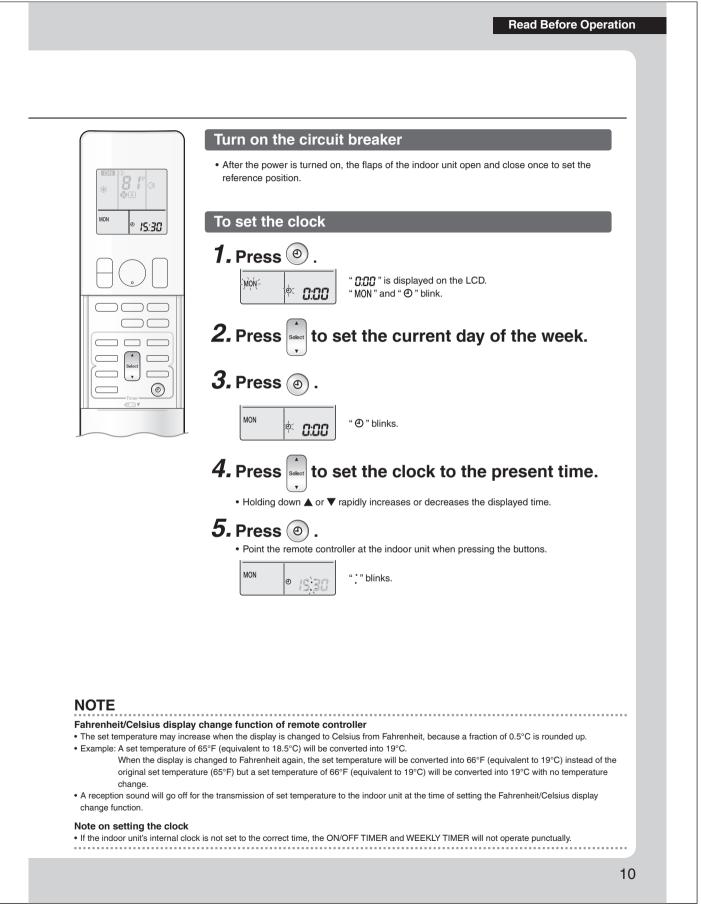
# 

9

Incorrect handling of batteries can result in injury from battery leakage, rupturing or heating, or lead to equipment failure. Please observe the following precautions and use safely.

- If the alkaline solution from the batteries should get in the eyes, do not rub the eyes. Instead, immediately flush the eyes with tap water and seek the attention of a medical professional.
- Keep batteries out of reach of children. In the event that batteries are swallowed, seek the immediate attention of a medical professional.
- Do not expose batteries to heat or fire. Do not disassemble or modify batteries. The insulation or gas release vent inside the battery may be damaged, resulting in battery leakage, rupturing, or heating.
- Do not damage or peel off labels on the batteries.

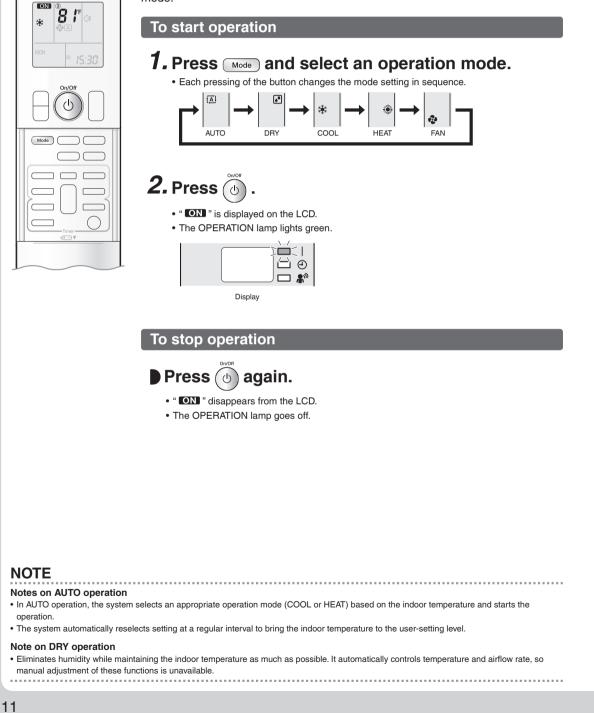


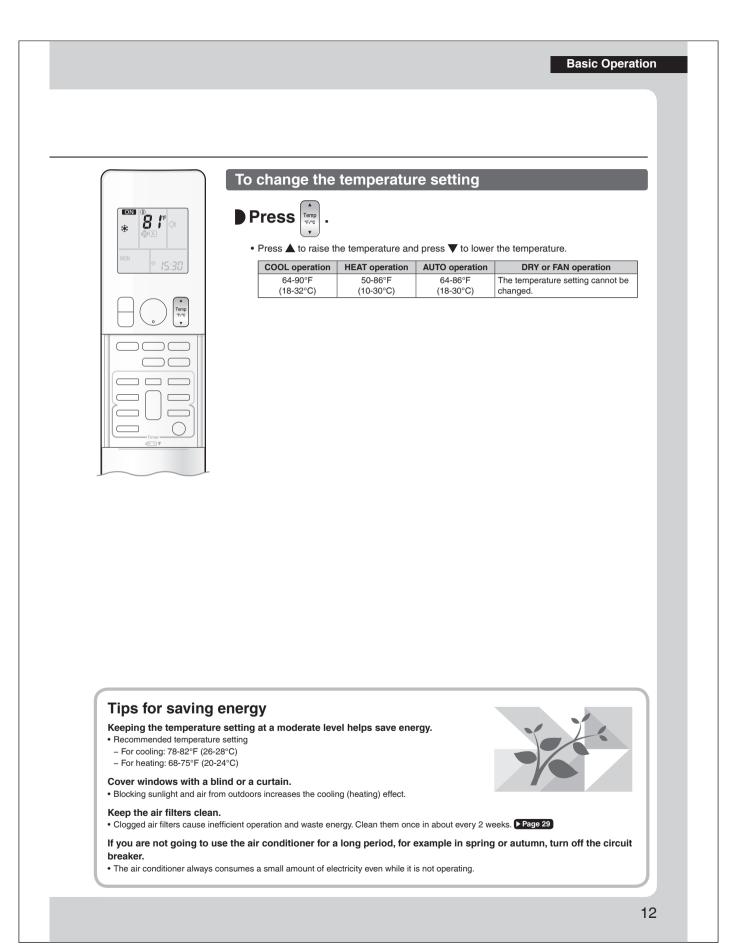


### Basic Operation

# AUTO · DRY · COOL · HEAT · FAN Operation

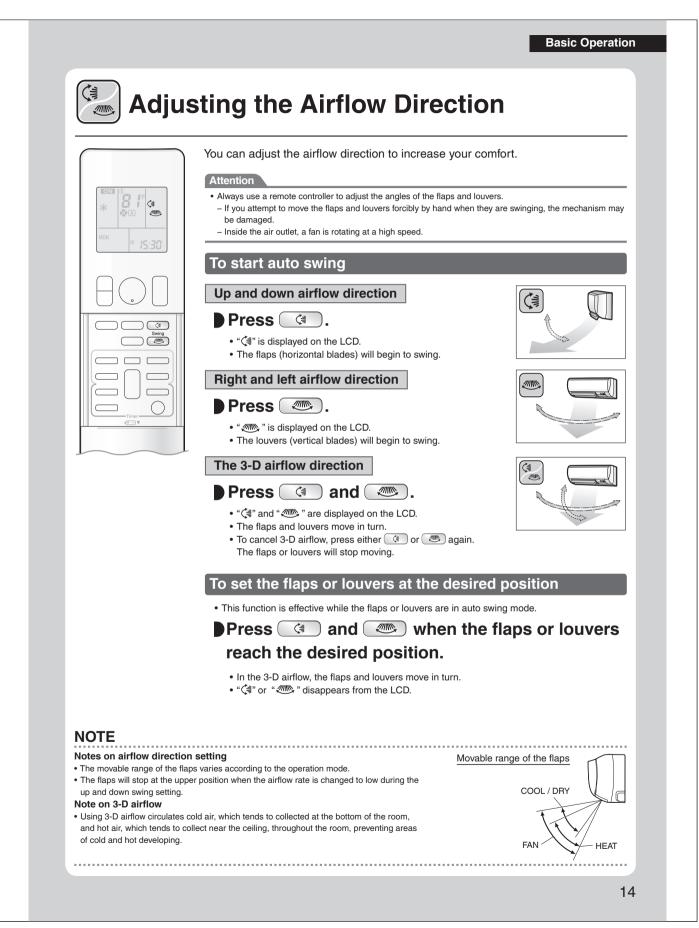
The air conditioner operates with the operation mode of your choice. From the next time on, the air conditioner will operate with the same operation mode.





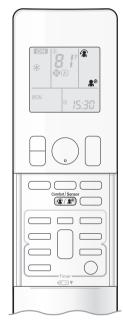
# **Basic Operation Adjusting the Airflow Rate** You can adjust the airflow rate to increase your comfort. To adjust the airflow rate setting 2a) Press 🔹 . • Each pressing of schanges the airflow rate setting in sequence. 2 * 4 4 A Ð AUTO Indoor unit quiet Airflow rate 1-5 (Low to Hig • When the airflow is set to "* ", quiet operation starts and noise from the indoor unit will become quieter. • In the quiet operation mode, the airflow rate is set to a weak level. AUTO, COOL, HEAT and FAN operation DRY operation 2 • י≰ Ð The airflow rate setting cannot be ō. . . . 4 4 A changed. NOTE Note on airflow rate setting

At smaller airflow rates, the cooling (heating) effect is also smaller.



### Useful Functions

# COMFORT AIRFLOW / INTELLIGENT EYE Operation



**COMFORT AIRFLOW operation:** The airflow direction is upward while in COOL and DRY operation, and downward while in HEAT operation. This function prevents cold or warm air from blowing directly on the occupants in the room.

**INTELLIGENT EYE operation:** The INTELLIGENT EYE sensor detects human movement. If no one is in the room for more than 20 minutes, the operation automatically changes to energy saving operation.

# 

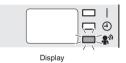
• Do not place large objects near the INTELLIGENT EYE sensor. Also keep heating units and humidifiers outside the sensor's detection area. This sensor can detect undesirable objects.

• Do not hit or violently push the INTELLIGENT EYE sensor. This can lead to damage and malfunction.

### To start operation

# Press ( ( ) and select the desired mode.

- Each time ( ) is pressed, a different setting option is displayed on the LCD.
- When INTELLIGENT EYE is selected, the INTELLIGENT EYE lamp lights green.



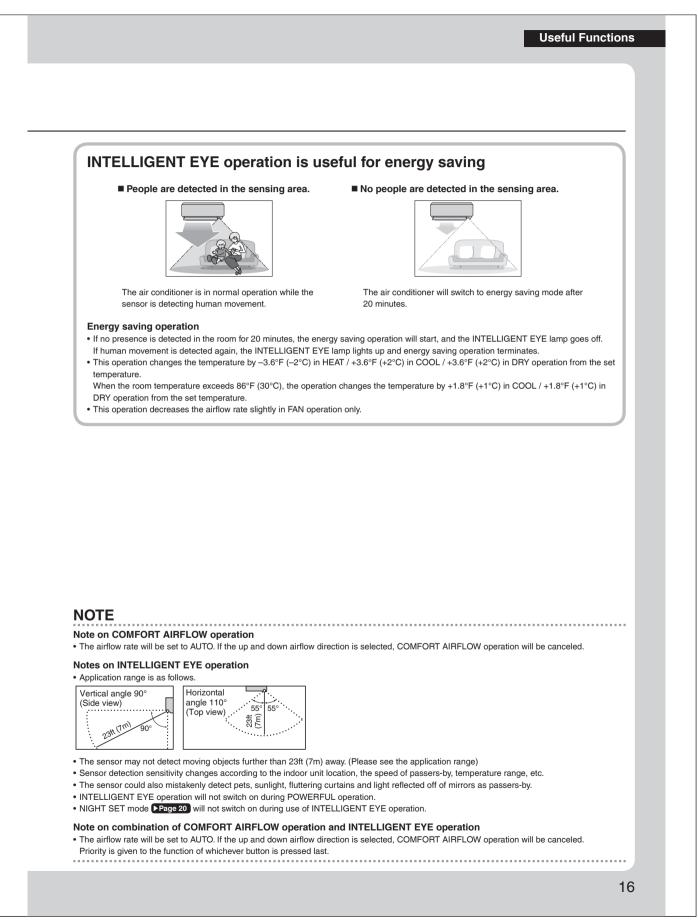


• When the flaps (horizontal blades) are swinging, selecting any of the modes above will cause the flaps (horizontal blades) to stop.

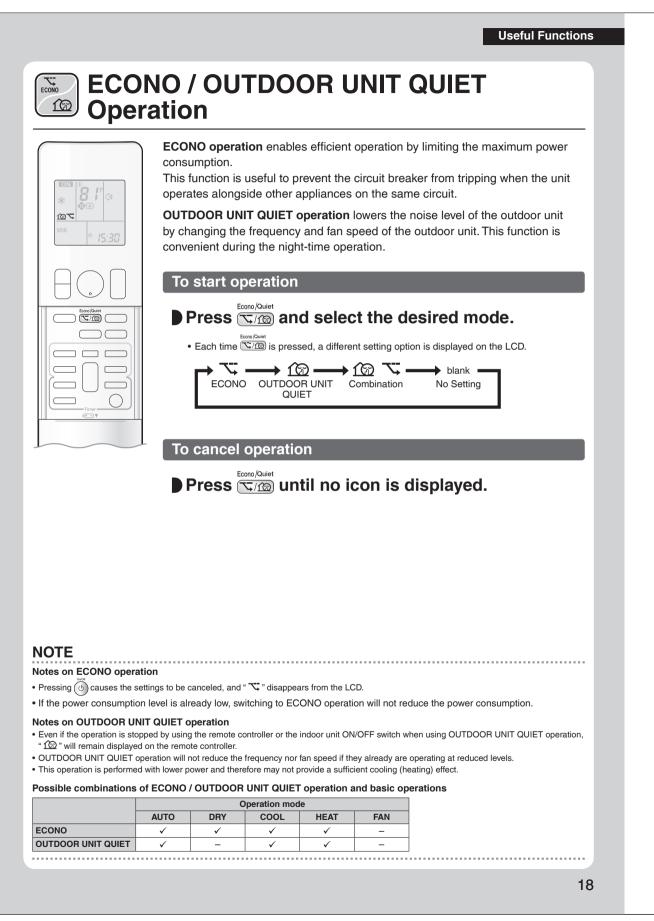
### To cancel operation

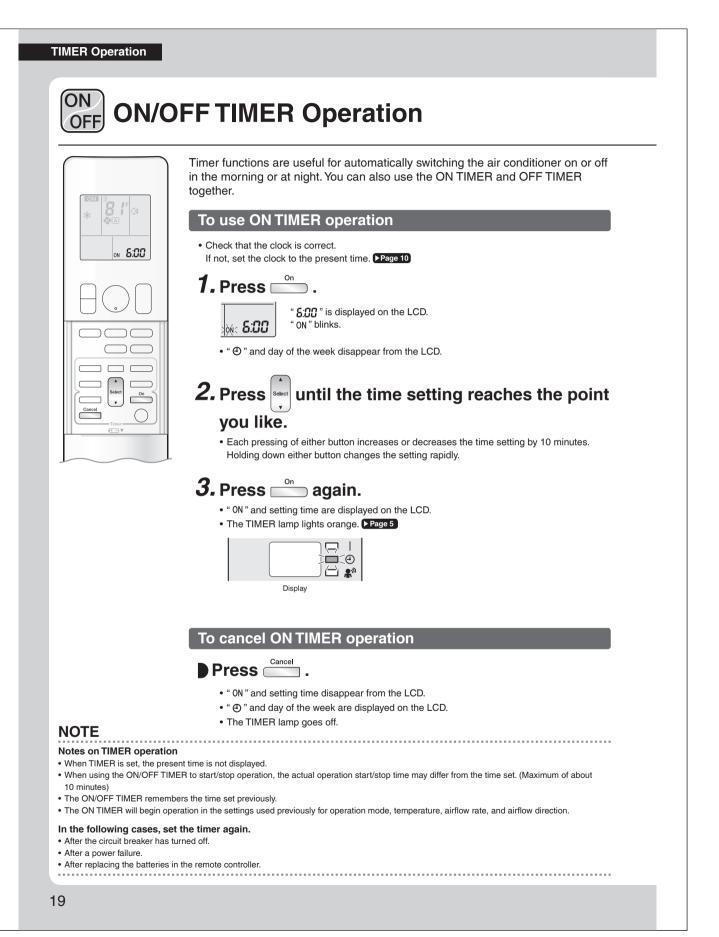


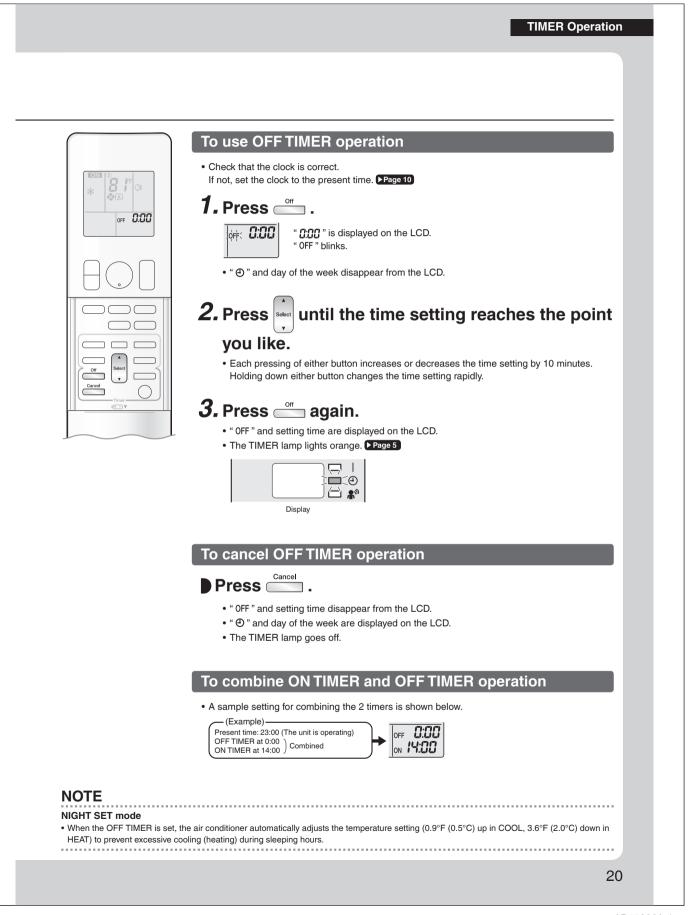
• If the INTELLIGENT EYE operation was being used, the INTELLIGENT EYE lamp goes off.



	ERFUL Operation
	POWERFUL operation quickly maximizes the cooling (heating) effect in any operation mode. In this mode, the air conditioner operates at maximum capacity.
	To start POWERFUL operation
MON © 15:30	Press with during operation.
Powerld	<ul> <li>" " " is displayed on the LCD.</li> <li>POWERFUL operation ends in 20 minutes. Then the system automatically operates again with the previous settings which were used before POWERFUL operation.</li> </ul>
	To cancel POWERFUL operation
	Press eventu again.
	• " 🛟 " disappears from the LCD.
NOTE	
Notes on POWERFUL oper	
	gs to be canceled, and " 🍄 " disappears from the LCD.
The temperature and airflow	ting) effect, the capacity of outdoor unit increases and the airflow rate becomes fixed at the maximum setting.
<ul> <li>In DRY operation</li> <li>The temperature setting is low</li> <li>In FAN operation</li> </ul>	wered by 4.5°F (2.5°C) and the airflow rate is slightly increased.
The airflow rate is fixed at the	
POWERFUL + COMFORT AIR	Of POWERFUL and other operations  FLOW  Not available*







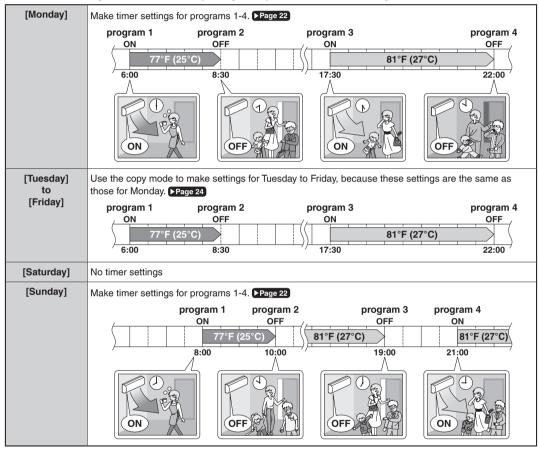
TIMER Operation

#### 

Up to 4 timer settings can be saved for each day of the week. This is convenient to adapt the WEEKLY TIMER to your family's life style.

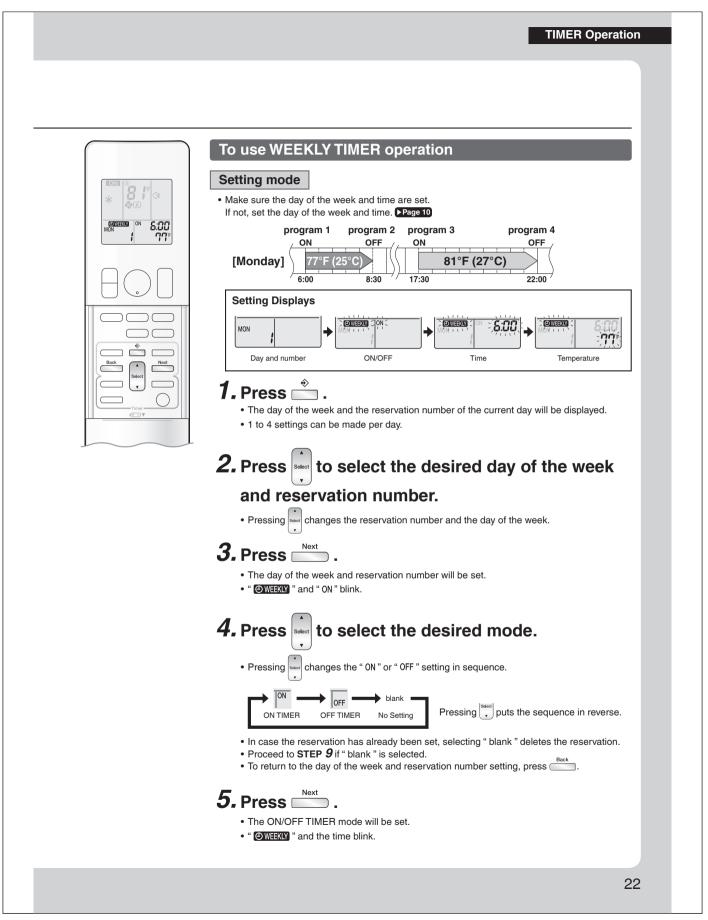
### Setting example of the WEEKLY TIMER

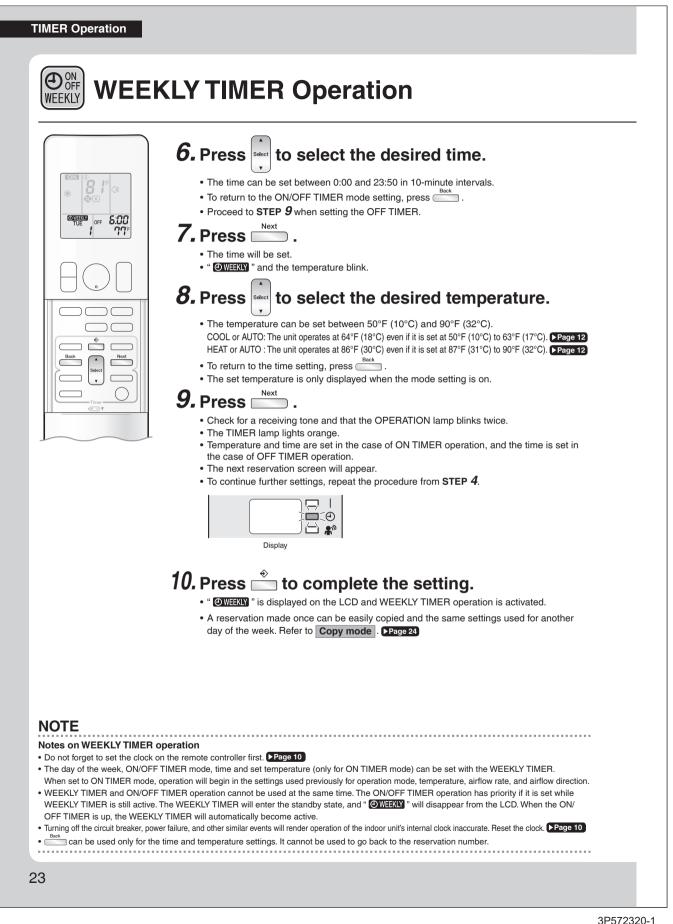
The same timer settings are used from Monday through Friday, while different timer settings are used for the weekend.

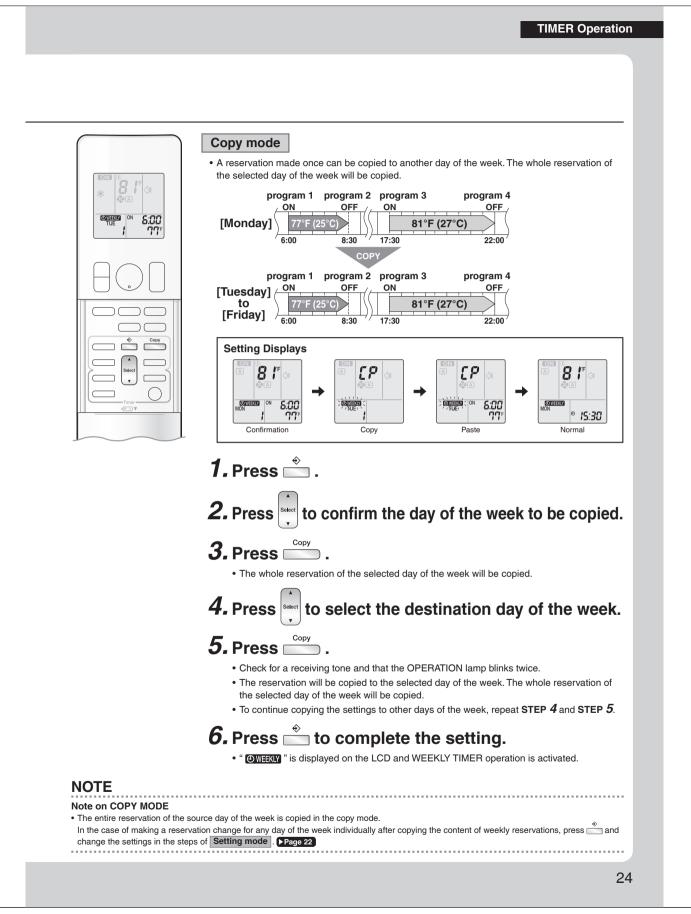


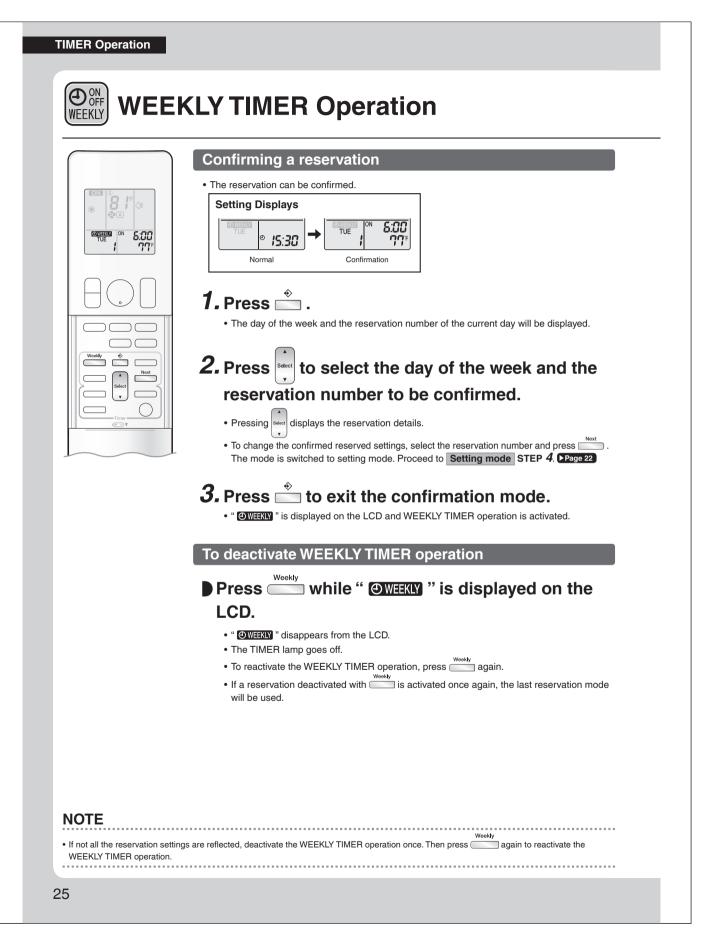
• Up to 4 reservations per day and 28 reservations per week can be set using the WEEKLY TIMER. The effective use of the copy mode simplifies timer programing.

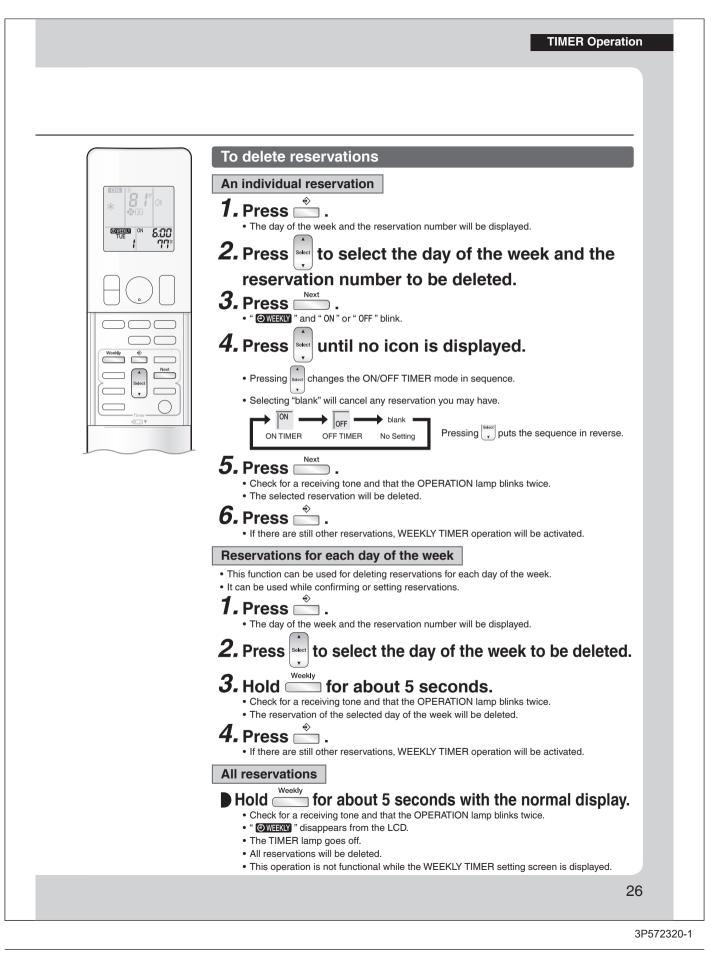
• The use of ON-ON-ON settings, for example, makes it possible to schedule operating mode and set temperature changes. Furthermore, by using OFF-OFF-OFF settings, only the turn off time of each day can be set. This will turn off the air conditioner automatically if you forget to turn it off.

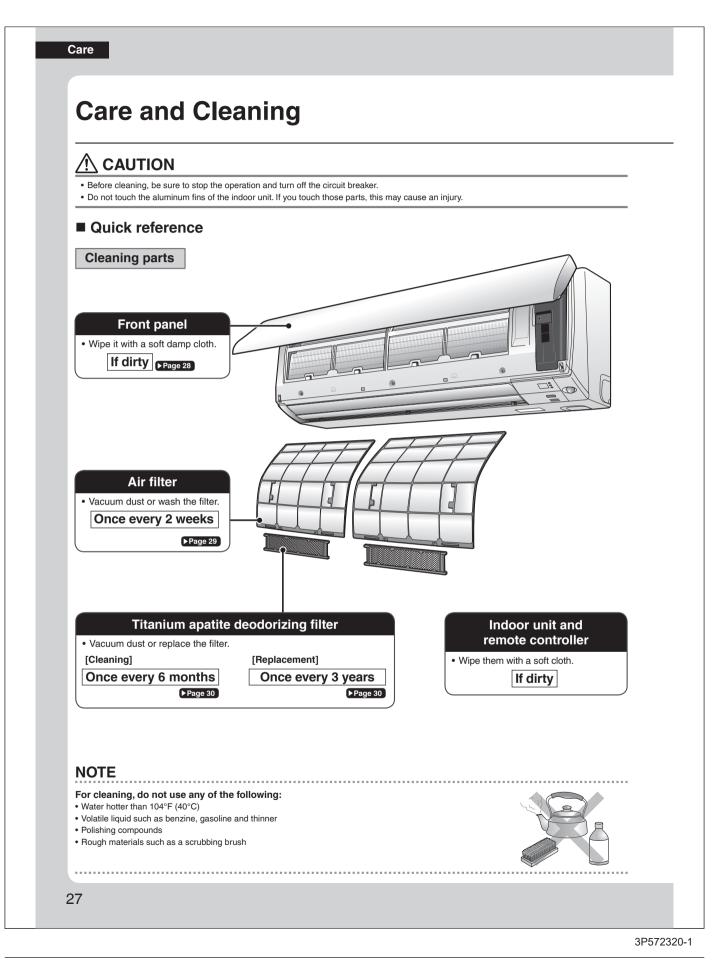


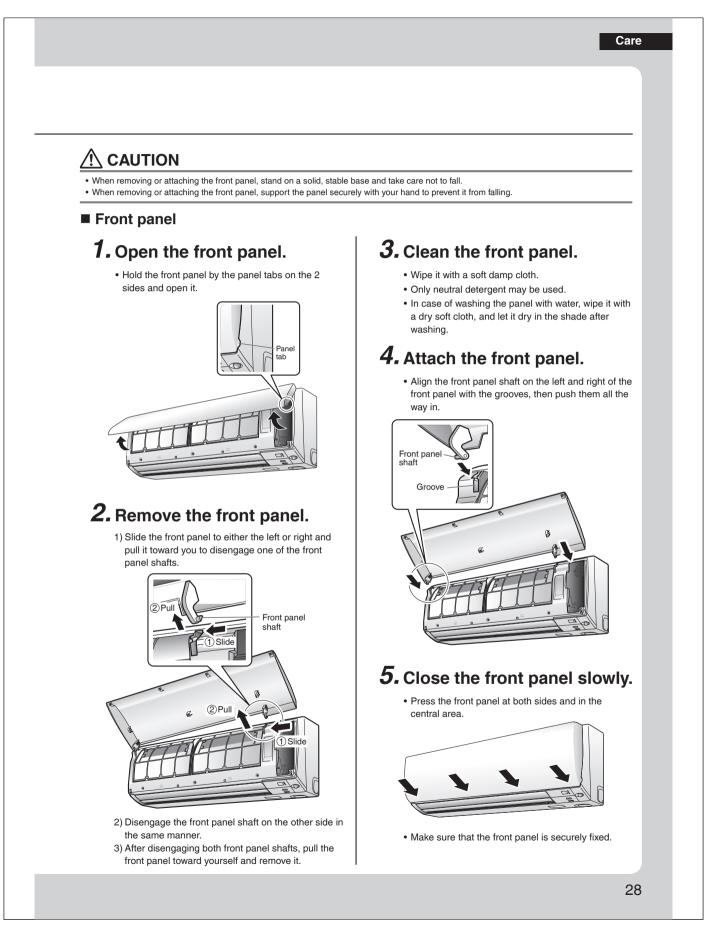


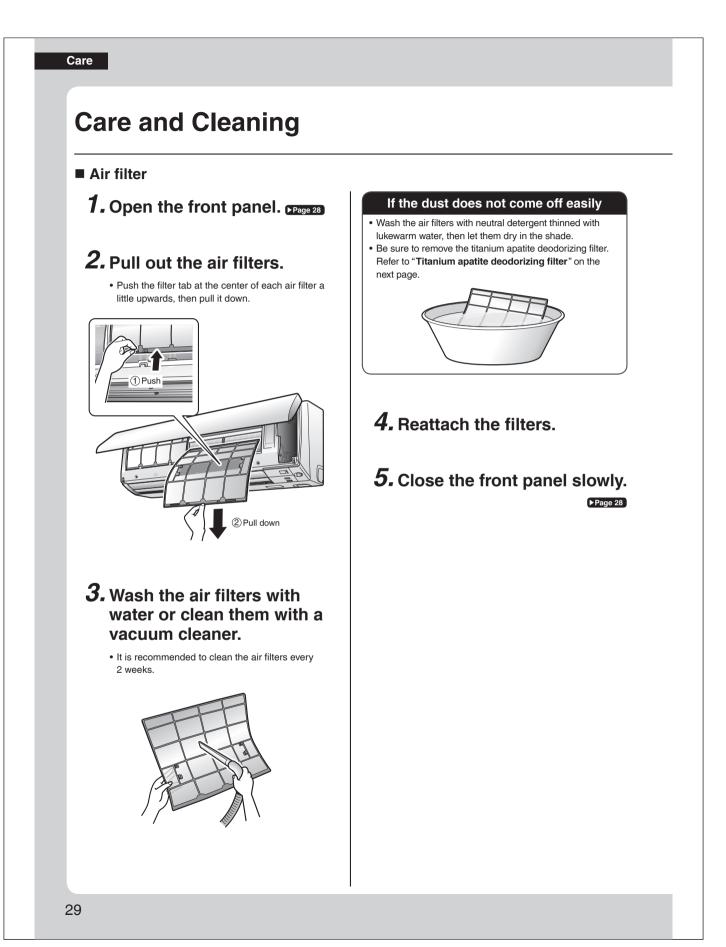


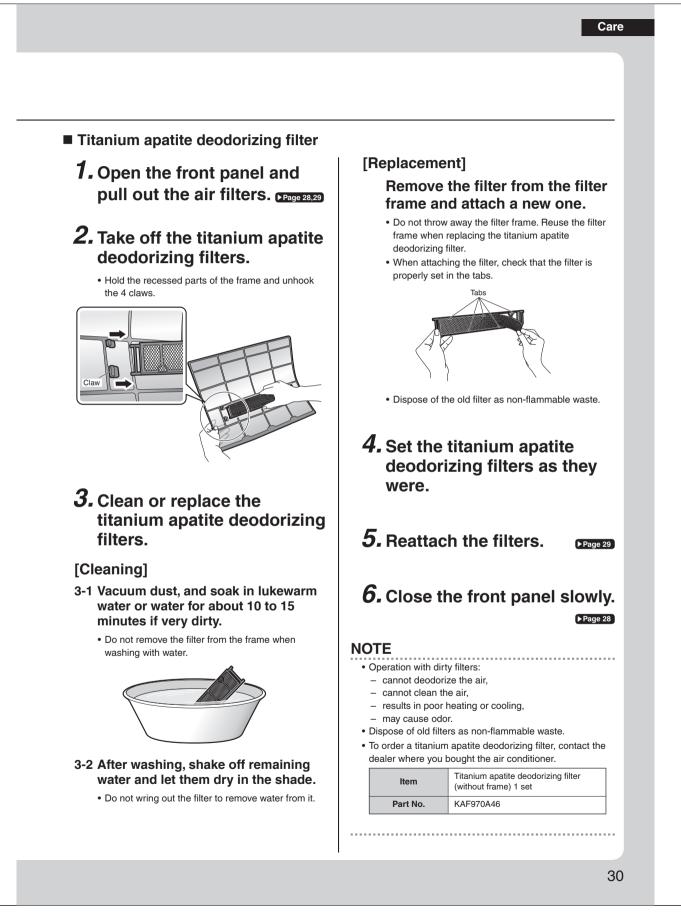


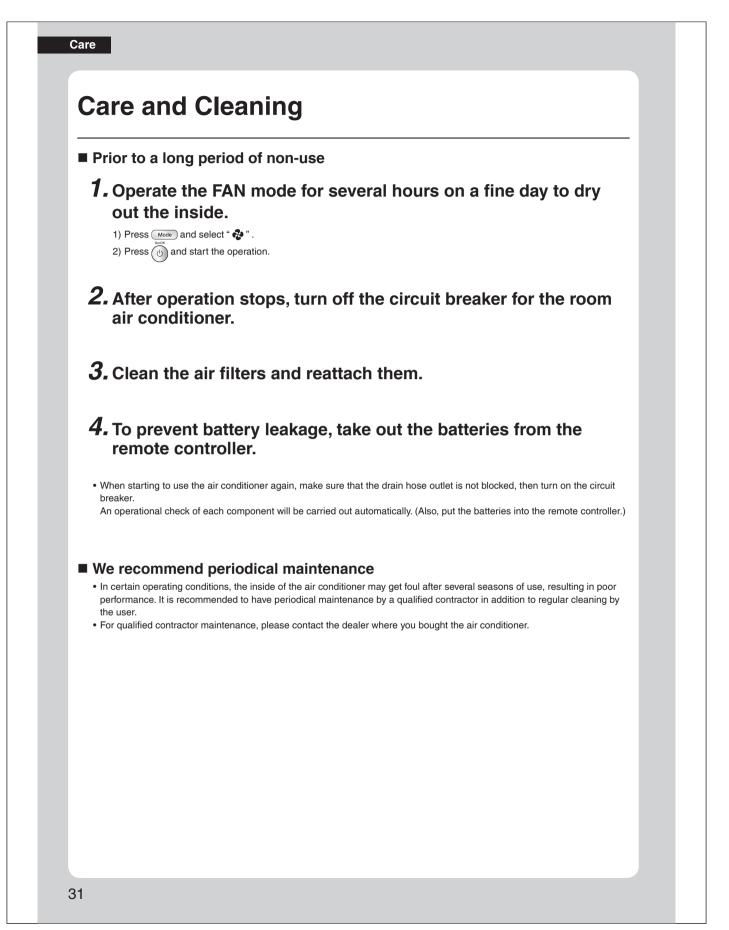


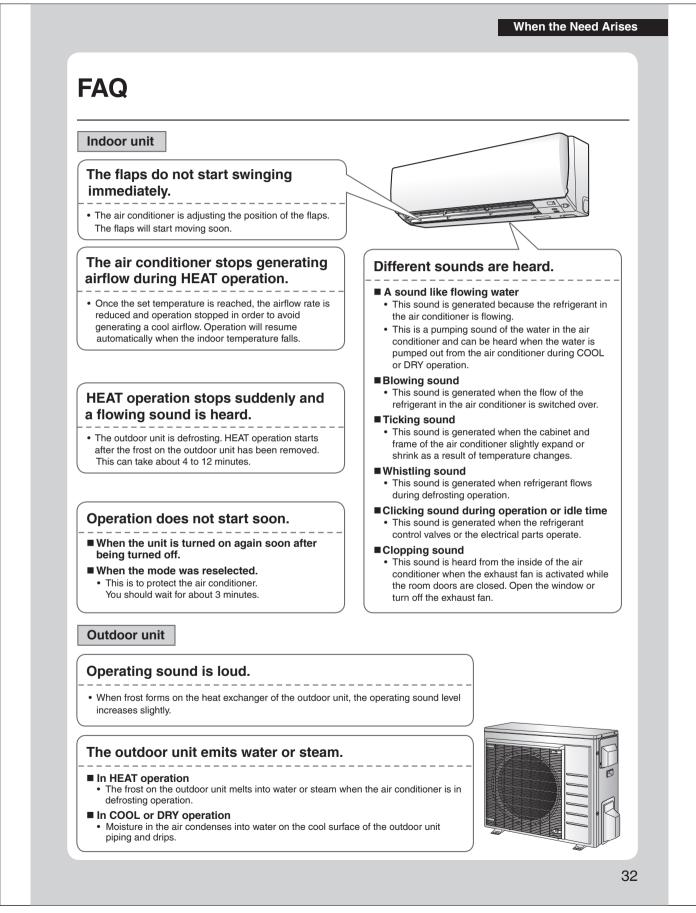












When the Need Arises

# Troubleshooting

Before making an inquiry or a request for repair, please check the following. If the problem persists, consult your dealer.

 $\mathbf{\overline{\mathbf{A}}}$ 

Not a problem This case is not a problem.



### песк

Please check again before requesting repairs.

## The air conditioner does not operate

Case	Description / what to check
OPERATION lamp is off.	<ul> <li>Has the circuit breaker been tripped or the fuse blown?</li> <li>Is there a power failure?</li> <li>Are batteries set in the remote controller?</li> </ul>
OPERATION lamp is blinking.	• Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Page 36

### The air conditioner suddenly stops operating

Case	Description / what to check
OPERATION lamp is on.	• To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes.
OPERATION lamp is blinking.	<ul> <li>Are the air filters dirty? Clean the air filters.</li> <li>Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit? Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Page 36</li> </ul>

### The air conditioner does not stop operating

Case	Description / what to check
The air conditioner continues operating even after operation is stopped.	<ul> <li>Immediately after the air conditioner is stopped</li> <li>The outdoor unit fan continues rotating for about another 1 minute to protect the system.</li> <li>While the air conditioner is not in operation</li> <li>When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system.</li> </ul>

### The room does not cool down / warm up

Case	Description / what to check
Air does not come out.	<ul> <li>In HEAT operation         <ul> <li>To prevent the release of cold air, air does not come out directly after operation is started. Please wait 1 to 4 minutes.</li> <li>During defrosting operation, hot air does not flow out of the indoor unit.</li> </ul> </li> <li>When the air conditioner operates immediately after the circuit breaker is turned on         <ul> <li>The air conditioner is preparing to operate. Wait for about 3 to 10 minutes.</li> </ul> </li> </ul>
Air does not come out / Air comes out.	<ul> <li>Is the airflow rate setting appropriate?</li> <li>Is the airflow rate setting low, such as "Indoor unit quiet" or "Airflow rate 1"? Increase the airflow rate setting.</li> <li>Is the set temperature appropriate?</li> <li>Is the adjustment of the airflow direction appropriate?</li> </ul>
Air comes out.	<ul> <li>Is there any furniture directly under or beside the indoor unit?</li> <li>Is the air conditioner in ECONO operation or OUTDOOR UNIT QUIET operation? Page 18</li> <li>Are the air filters dirty?</li> <li>Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?</li> <li>Is a window or door open?</li> <li>Is an exhaust fan turning?</li> </ul>

Water or mist comes out Case	Description / what to check
Mist comes out of the indoor unit.	• This happens when the air in the room is cooled into mist by the cold airflow during COOl or other operation.
Water is leaking from the indoor unit	• If the drain hose is crushed or clogged, water from the indoor unit may be unable to drain and start leaking. Stop operation of the unit immediately and contact your dealer.
Remote controller	
Case	Description / what to check
The unit does not receive signals from the remote controller or has a limited operating range.	<ul> <li>The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Prace 9</li> <li>Signal communication may be disabled if an electronic-starter-type fluorescent lamp (suc as inverter-type lamps) is in the room. Consult your dealer if that is the case.</li> <li>The remote controller may not function correctly if the transmitter is exposed to direct sunling.</li> </ul>
LCD is faint, is not working, or the display is erratic.	The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 9
Other electric devices start operating.	• If the remote controller activates other electric devices, move them away or consult your dealer.
Air has an odor	
Case	Description / what to check
	• The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer.
The air conditioner gives off an odor.	<ul> <li>The indoor unit is blowing out room odor it has absorbed (the smell of walls or carpeting, furniture, clothes, and so on).</li> <li>If the air conditioner has been used for a long time, there is a chance that a dirty heat exchanger or fan are emitting an odor.</li> <li>We recommend you to have the indoor unit cleaned. Please consult your dealer.</li> <li>Do not spray the air conditioner unit with any deodorizers.</li> </ul>
Others	
Case	Description / what to check
The air conditioner suddenly	• The air conditioner may malfunction due to lightning or radio.

HEAT operation cannot be selected, even though the unit is heat pump model.	Check that the jumper (J8) has not been cut. If it has been cut, contact your dealer.	
The ON/OFF TIMER does not operate according to the settings.	Check if the ON/OFF TIMER and the WEEKLY TIMER are set to the same time. Change or deactivate the settings in the WEEKLY TIMER. Page 21	
The ceiling and walls around the indoor unit are black and dirty.	• Due to the circulation pattern of the air and static electricity, the air conditioner is causing airborne dirt and dust to stick to walls and other surfaces. Depending on the wallpaper type, dirt may adhere more easily. A thorough cleaning of the area around the air conditioner is recommended.	

#### Notes on the operating conditions

• If operation continues under any conditions other than those listed in the table,

- A safety device may activate to stop the operation.

 Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

Mode	Operating conditions
COOL / DRY	Outdoor temperature: 50-115°F (10-46°C) Indoor temperature: 64-90°F (18-32°C) Indoor humidity: 80% max.
HEAT	Outdoor temperature: 5-75°F (–15-24°C) Indoor temperature: 50-86°F (10-30°C)

When the Need Arises

# Troubleshooting

## Call your dealer immediately

## \Lambda WARNING

- When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### Do not attempt to repair or modify the air conditioner by yourself.

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

### If one of the following symptoms takes place, call your dealer immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The circuit breaker cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

#### After a power failure

• The air conditioner automatically resumes operation in about 3 minutes. Please wait for a while.

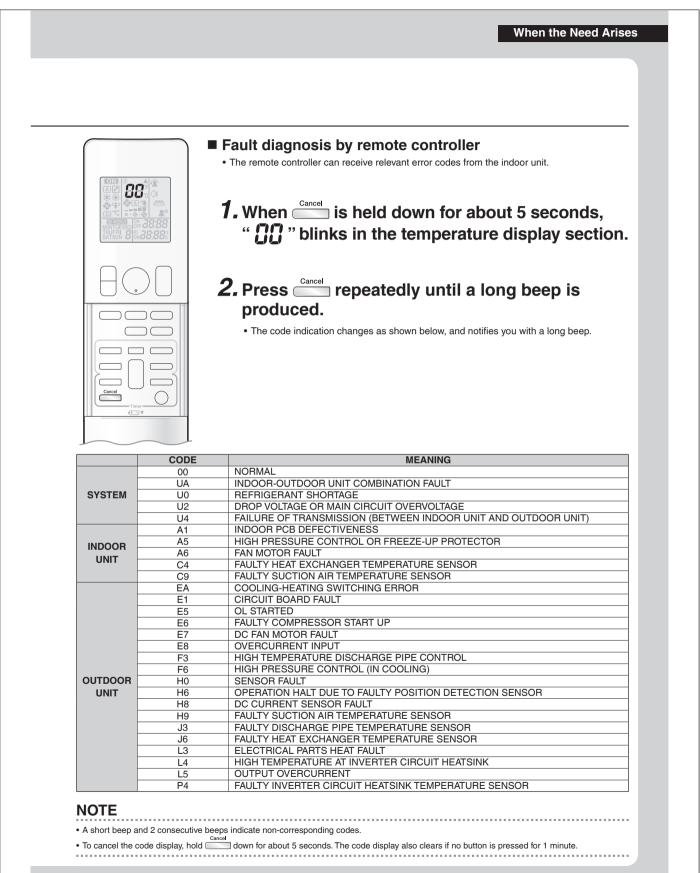
#### Lightning

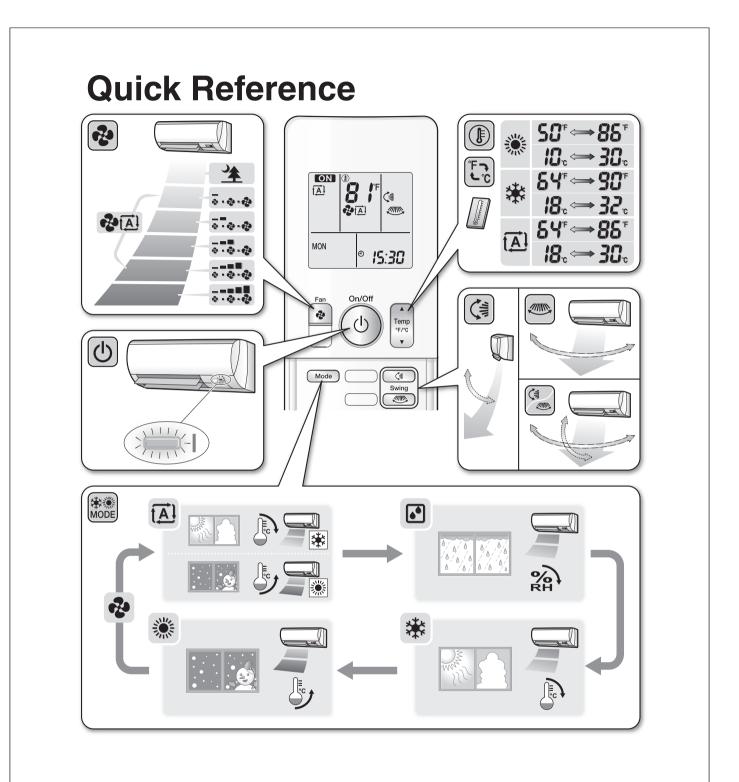
• If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

Turn off the circuit breaker and call your dealer.

## Disposal requirements

• Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.





## 13.3 FVXS09/12/15NVJU

#### Read Before Operation

# **Safety Considerations**

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain

the unit. Inform users that they should store this operation manual with the installation manual for future reference. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** Symbols:

Anger	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
MARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u>∧</u> NOTE	Indicates situations that may result in equipment or property-damage accidents only.

#### — 🕂 DANGER -

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.
- Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

#### — 🕂 WARNING ·

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never remove the fan guard of the unit. A fan rotating at high speed without the fan guard is very dangerous.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could cause a shock or fire if a spill occurs.
- Do not touch the air outlet or horizontal blades while the swing flap is in operation because fingers could get caught and injured.
- Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. To check and adjust internal parts, contact your dealer.

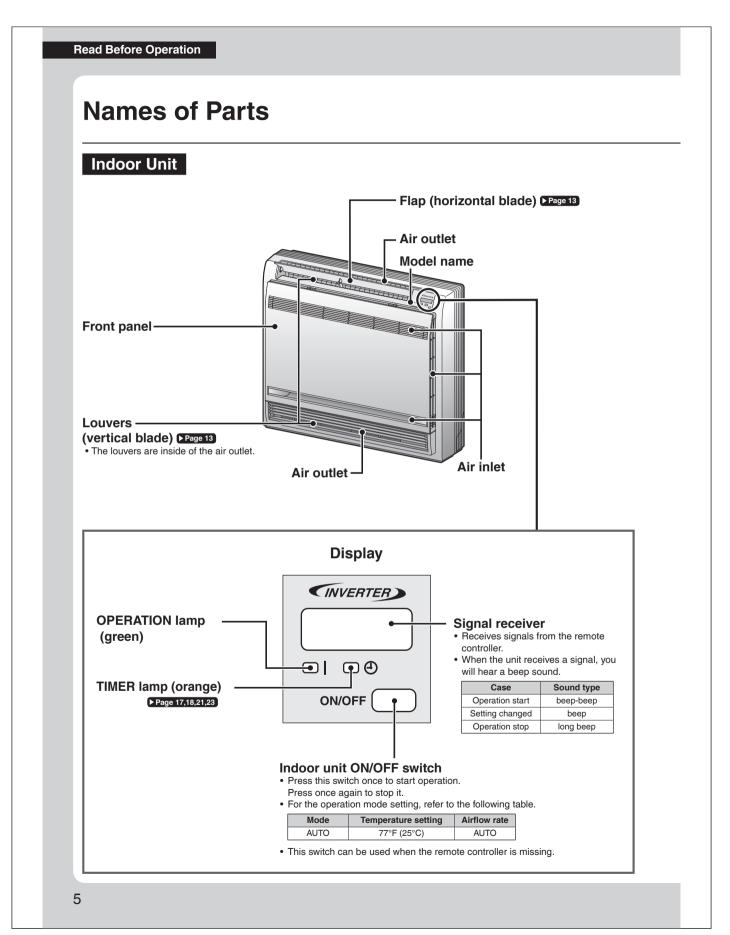
#### – 🕂 CAUTION –

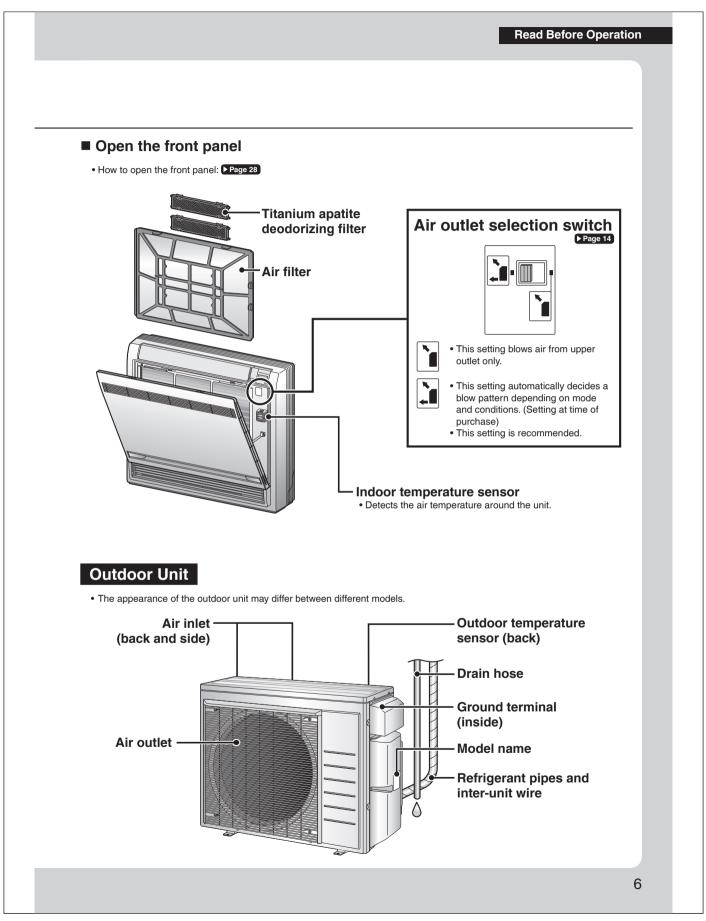
 Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
 Do not use the unit for cooling precision instruments, food, plants, animals or works of art.

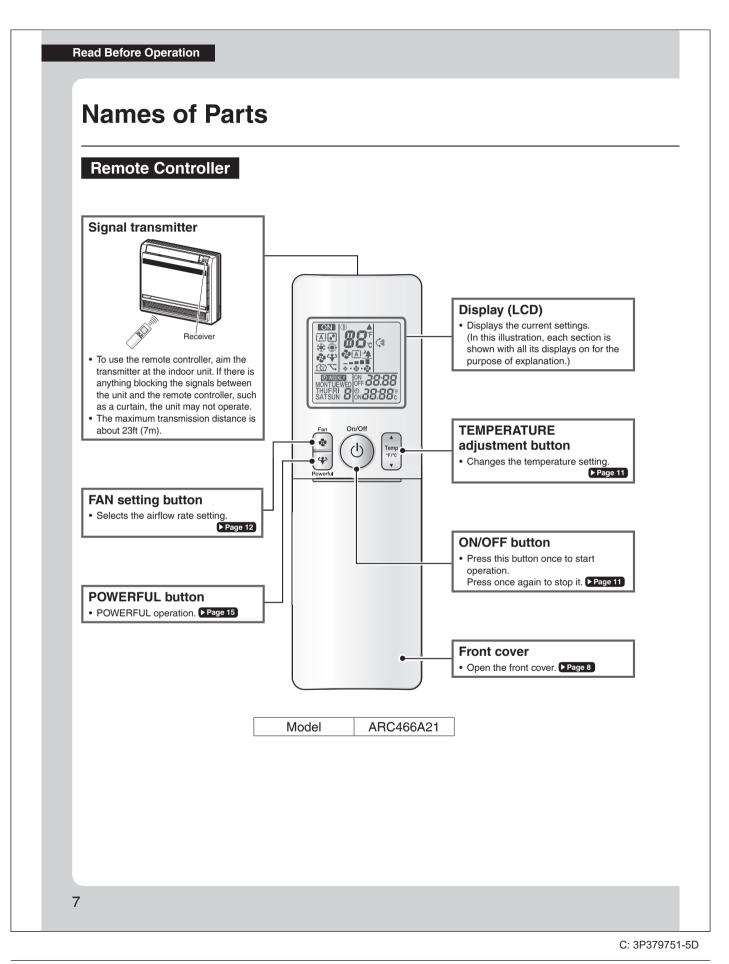
#### **Read Before Operation**

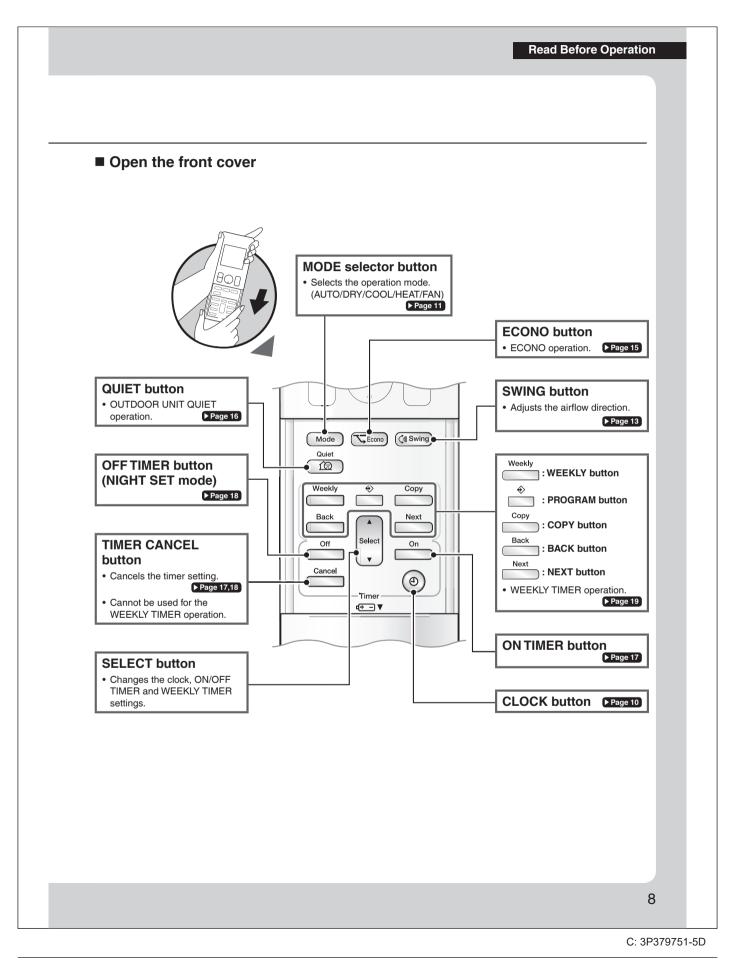
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
   Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- · Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.
- 🕂 NOTE -
- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.

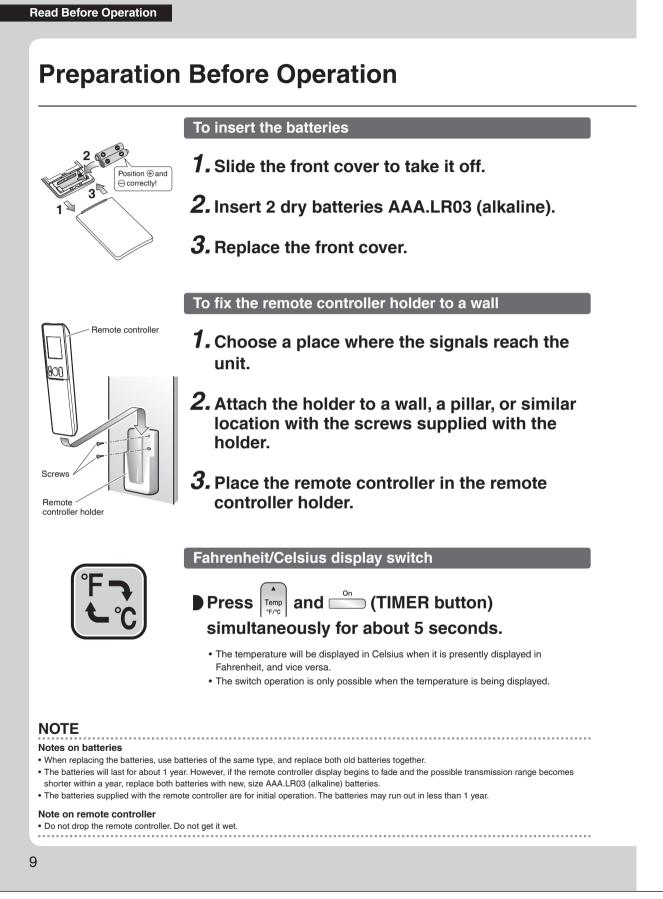
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  - a. Places with a mist of mineral oil, such as cutting oil.b. Locations such as coastal areas where there is a lot
  - of salt in the air. c. Locations such as hot springs where there is a lot of sulfur in the air.
  - Locations such as factories where the power voltage varies a lot.
  - e. In cars, boats, and other vehicles.
  - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  - g. Locations where equipment produces electromagnetic waves.
  - h. Places with an acid or alkaline mist.
  - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.
- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  - b. Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.

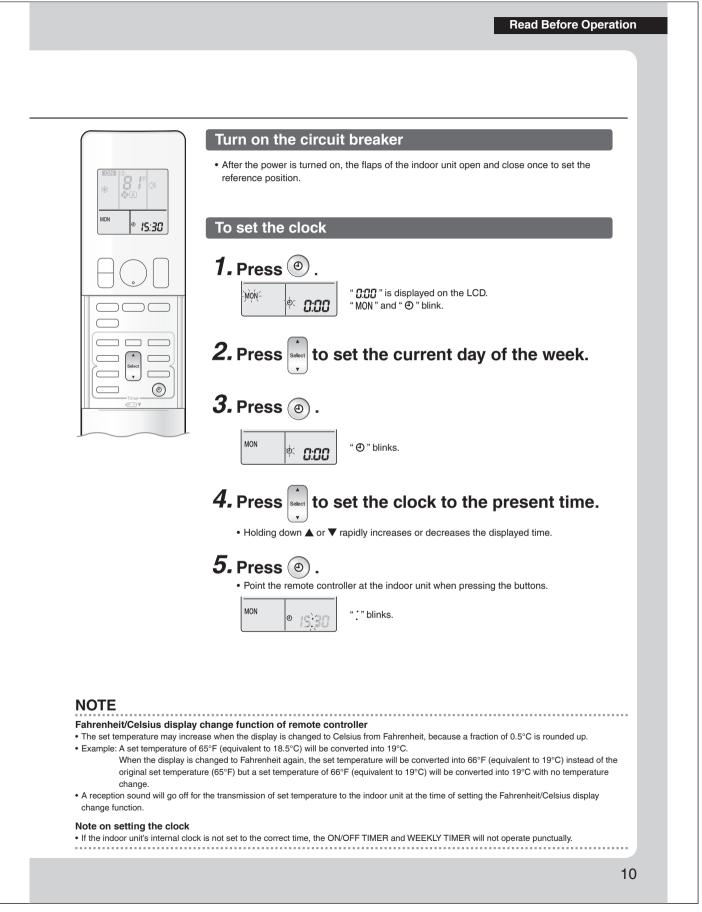




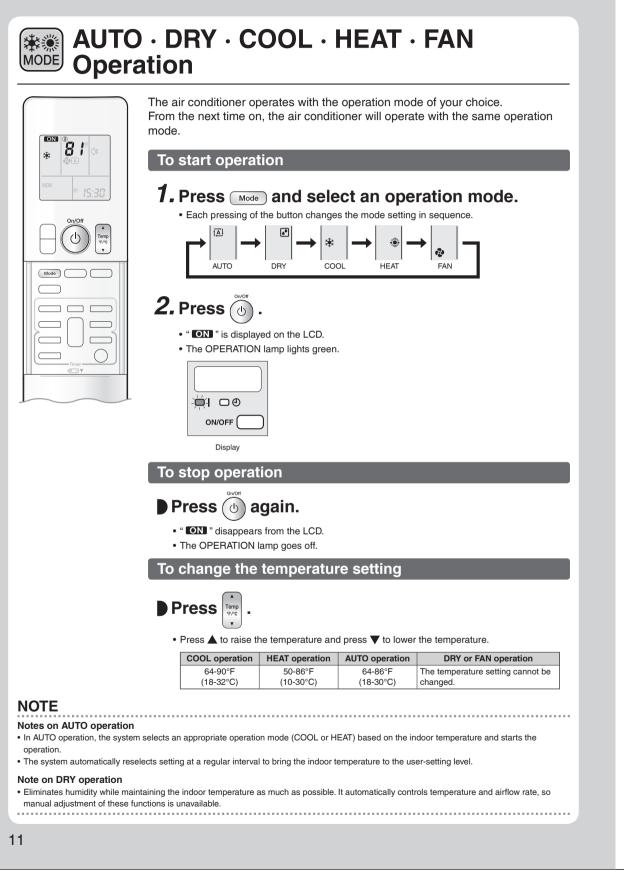


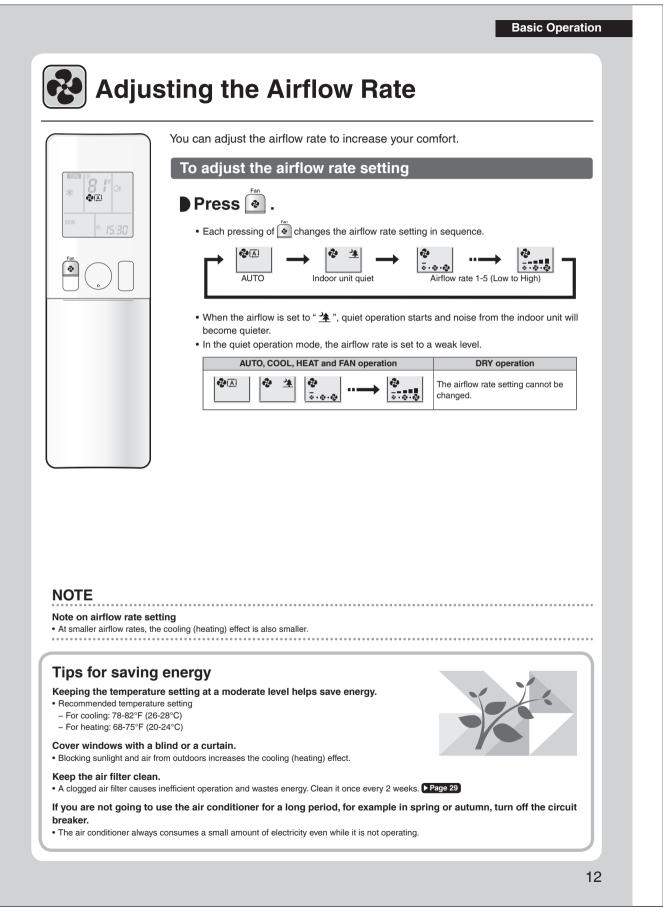


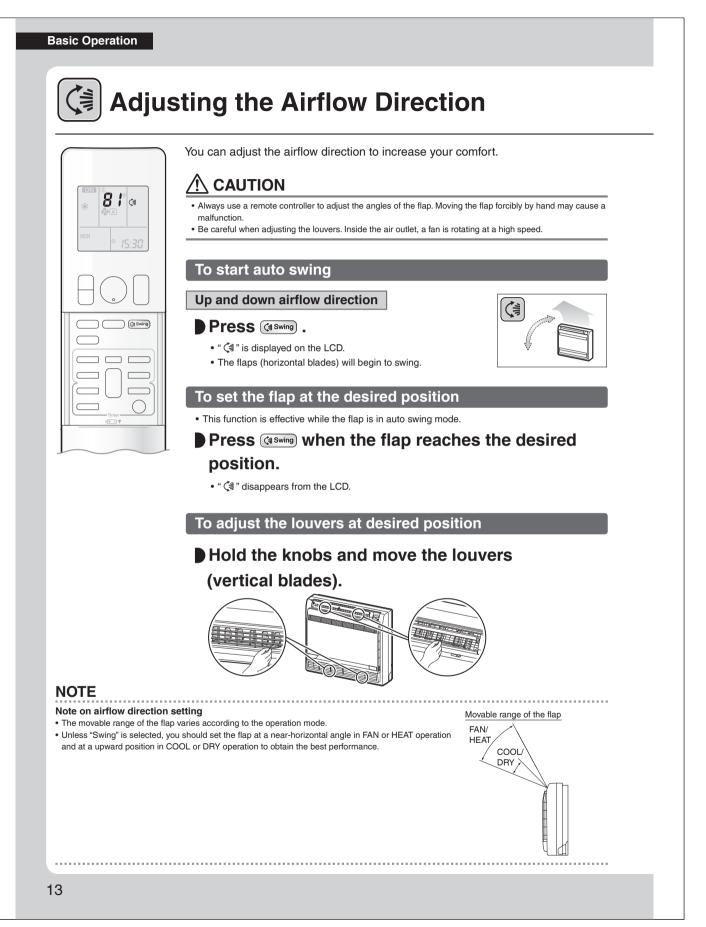




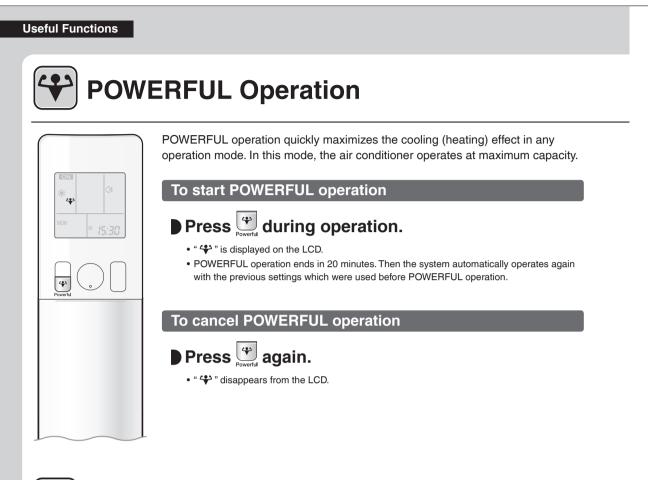
#### Basic Operation







	ing the air outlet selection switch		ng on the energing mode/situation
Mode	Situation		Blowing pattern
	When the operation is activated or when the room is not fully cooled.		Air is emitted from the upper and lower air outlets in order to reach the set temperature quickly.
COOL (禁)	When the room has become fully cool, or when 1 hour has passed since turning on the air conditioner.		Air is emitted only from the upper air outlet so that air does not come into direct contact with people and indoor temperature is equalized.
	When the operation is activated or when air emitted is of low temperature.		Air is emitted only from the upper air outlet so that air does not come into direct contact with people.
HEAT (┊)	At times other than the above situations.		Air is emitted from the upper and lower air outlets so that warm air is spread throughout the whole room.
DRY (())	Whenever in DRY mode.		Air is emitted only from the upper air outlet so that air does not come into direct contact with people.
FAN (🏞)	Whenever in FAN mode.		
AUTO ((1,4))	Operates in the actual operation mode of the air	conditioner accordin	g to the descriptions in this table. (COOL or HEAT)
hen sett	ing the air outlet selection switch	n to	
-	of the operating mode or situation, air is emitte the when you do not want air coming out of the		





ECONO operation enables efficient operation by limiting the maximum power consumption.

This function is useful to prevent the circuit breaker from tripping when the unit operates alongside other appliances on the same circuit.

### To start ECONO operation

## Press **CECONO** during operation.

- " 🏹 " is displayed on the LCD.
- Not available in FAN ONLY mode.

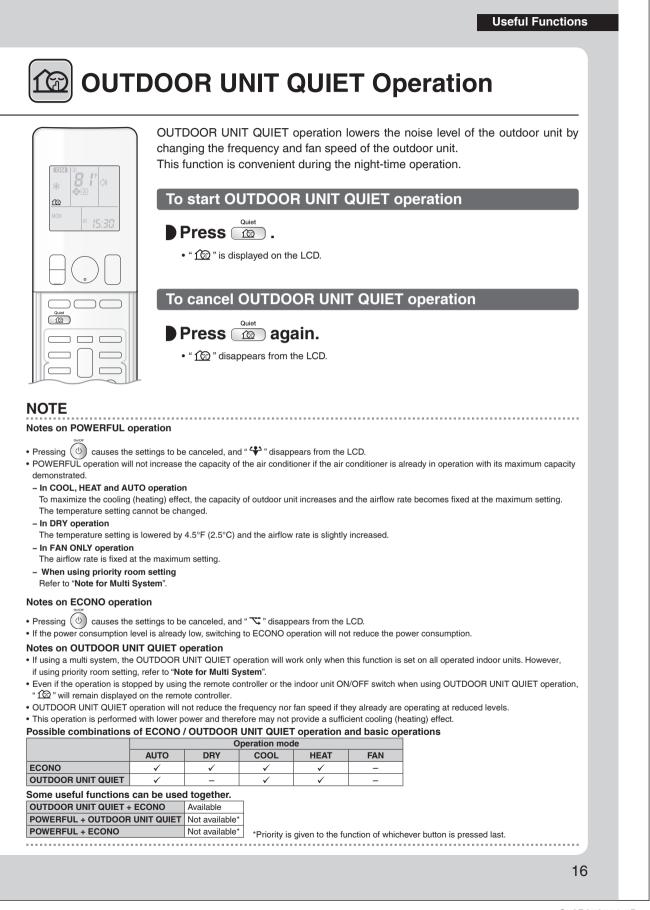
### To cancel ECONO operation

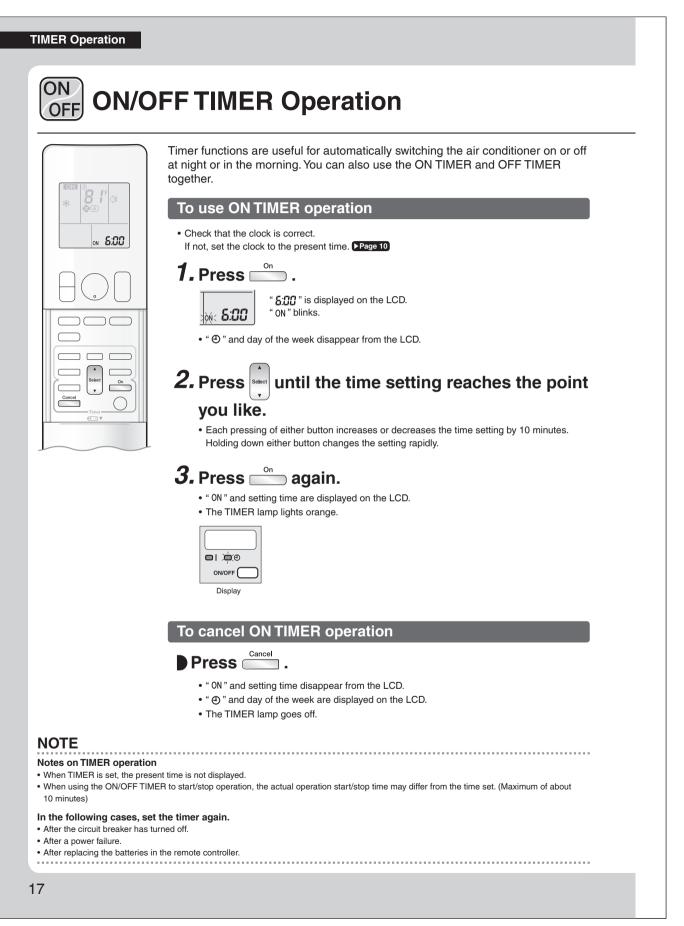
- Press 🐨 again.
  - " 🏹 " disappears from the LCD.

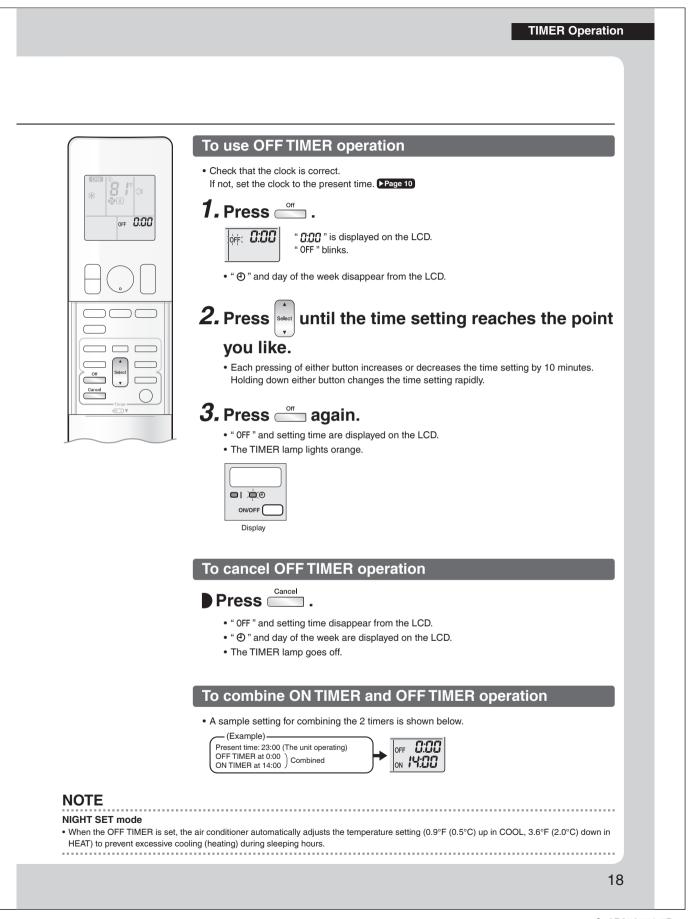
15

Econo

 $\bigcirc$ 







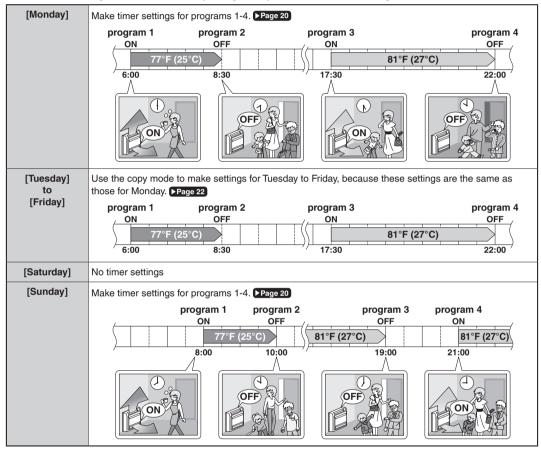
TIMER Operation

#### 

Up to 4 timer settings can be saved for each day of the week. This is convenient to adapt the WEEKLY TIMER to your family's life style.

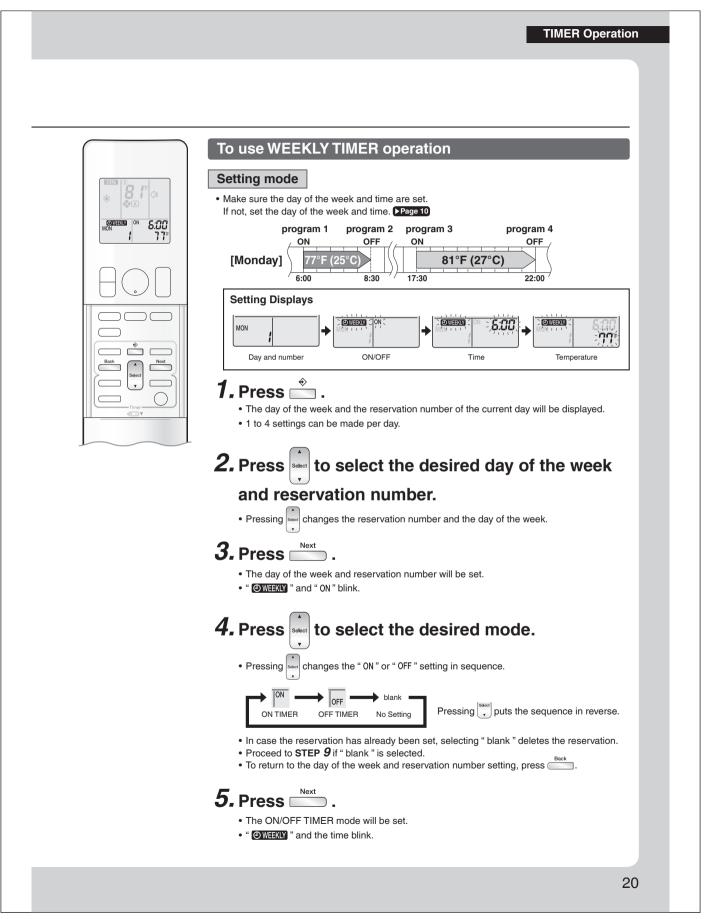
#### Setting example of the WEEKLY TIMER

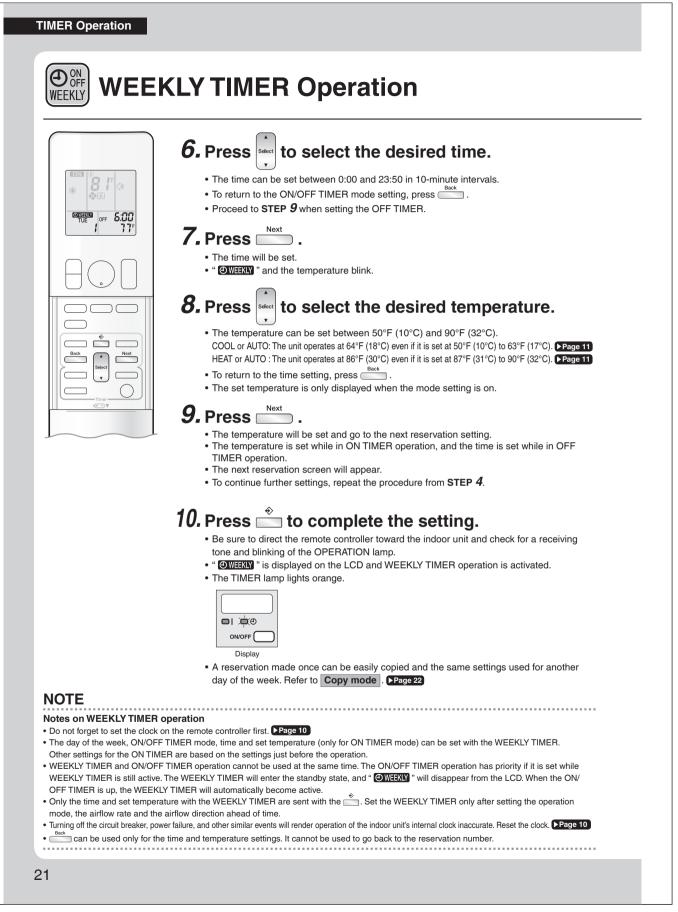
The same timer settings are used from Monday through Friday, while different timer settings are used for the weekend.

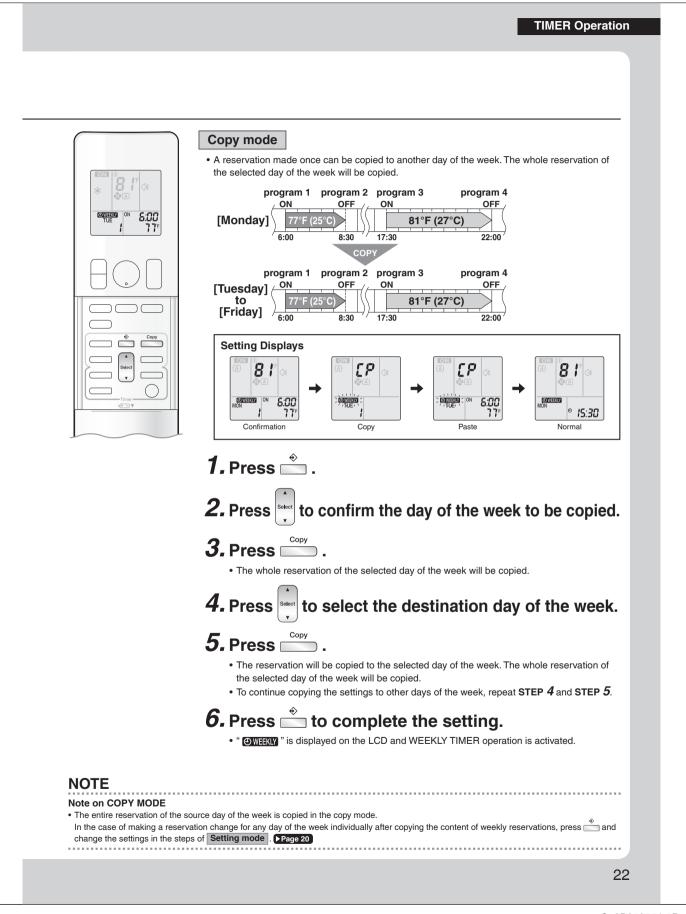


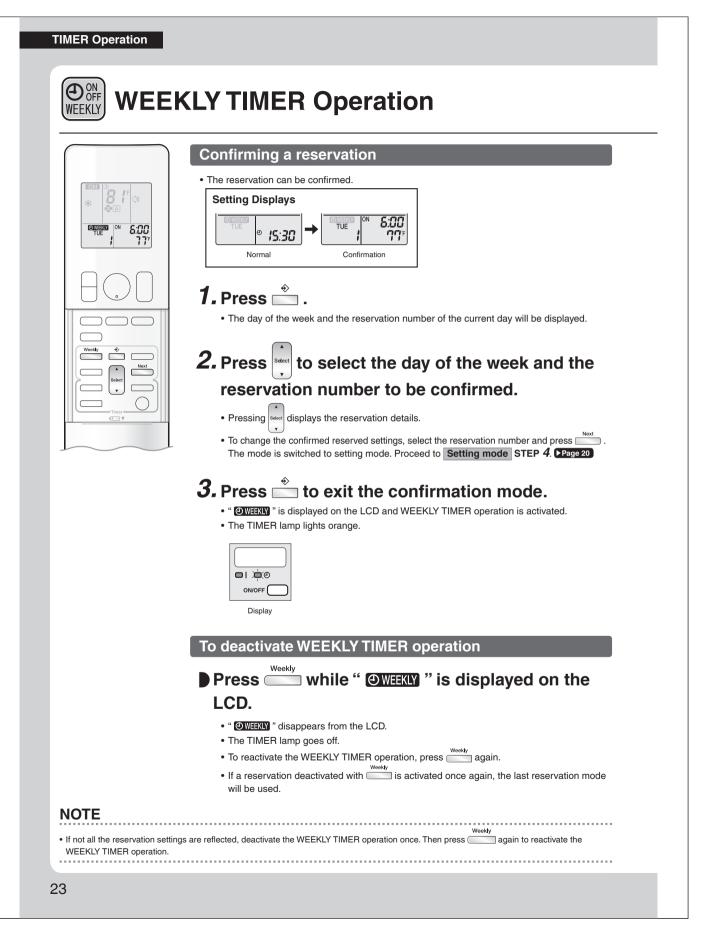
• Up to 4 reservations per day and 28 reservations per week can be set using the WEEKLY TIMER. The effective use of the copy mode simplifies timer programming.

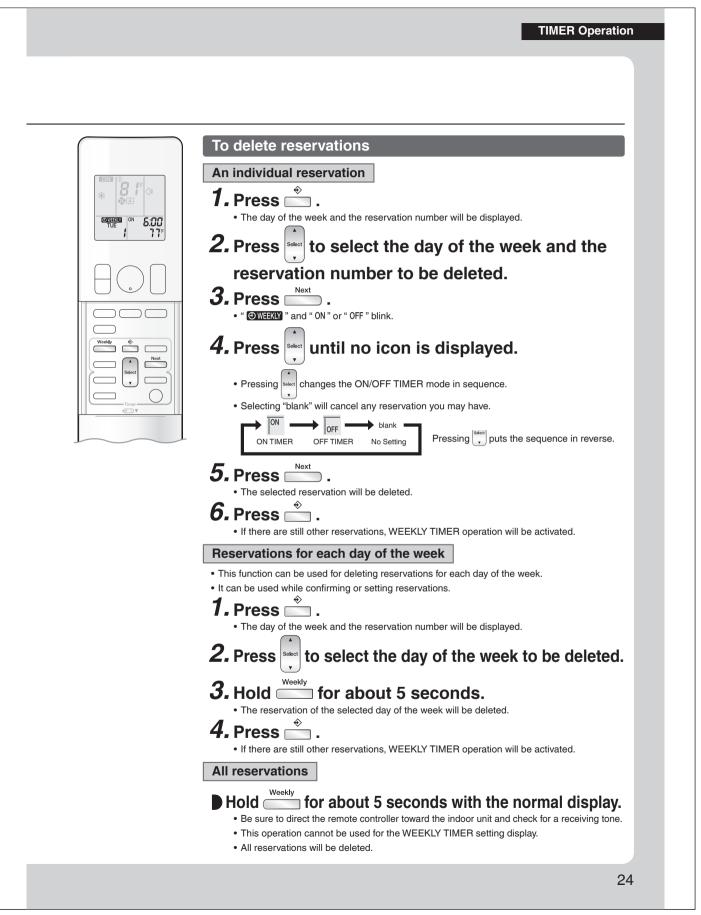
• The use of ON-ON-ON settings, for example, makes it possible to schedule operating mode and set temperature changes. Furthermore, by using OFF-OFF-OFF settings, only the turn off time of each day can be set. This will turn off the air conditioner automatically if you forget to turn it off.

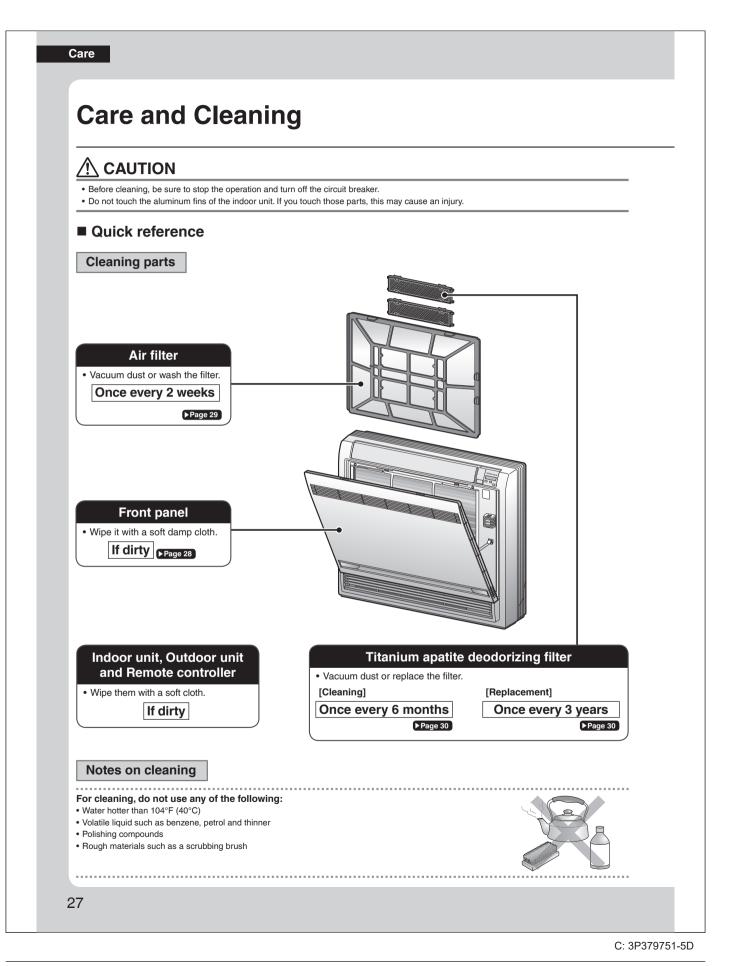


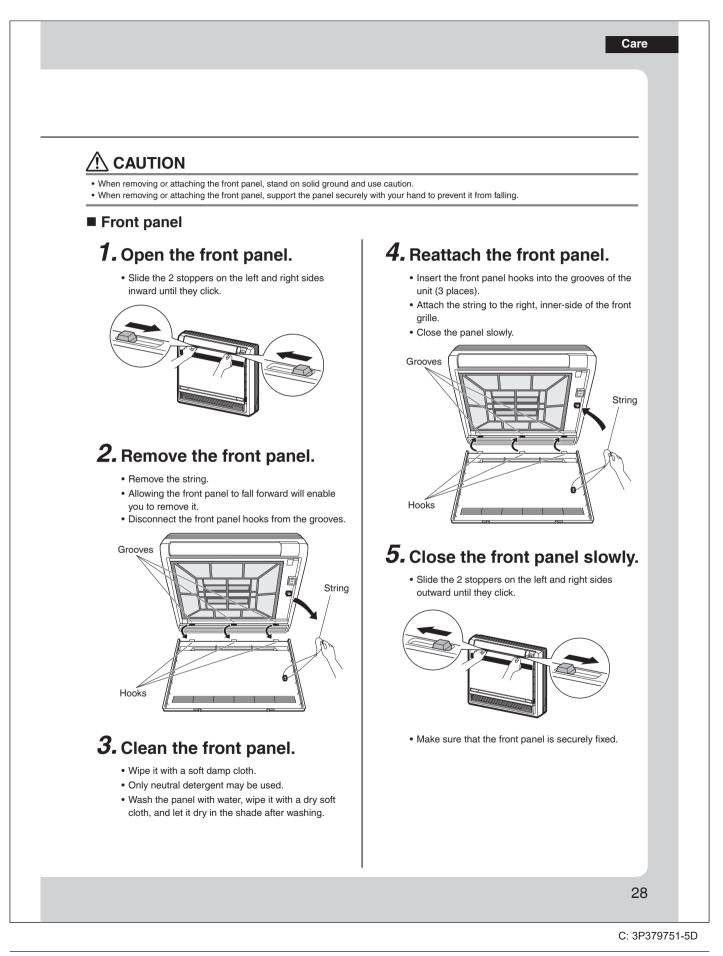


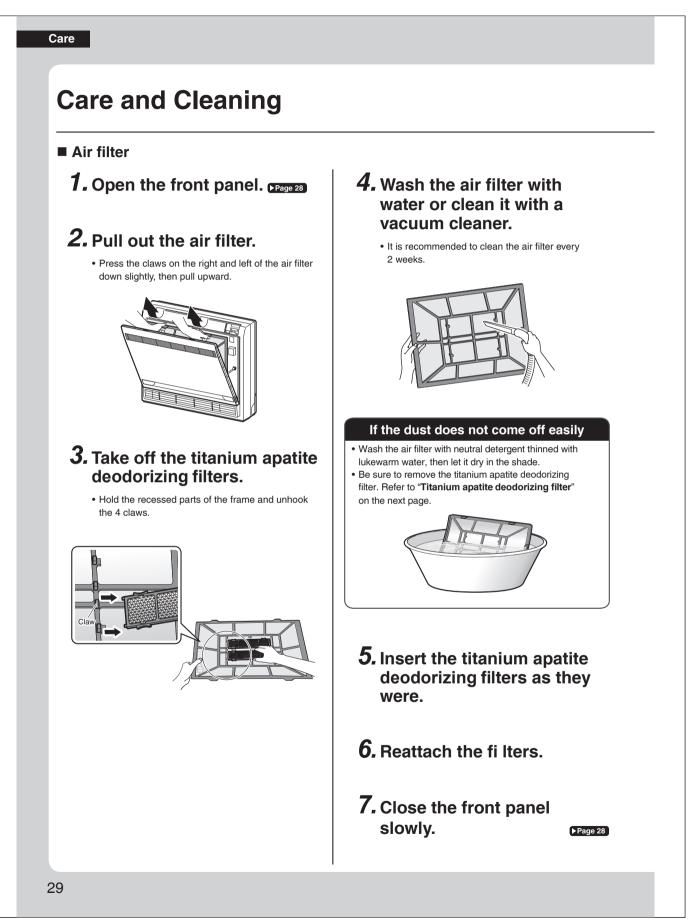


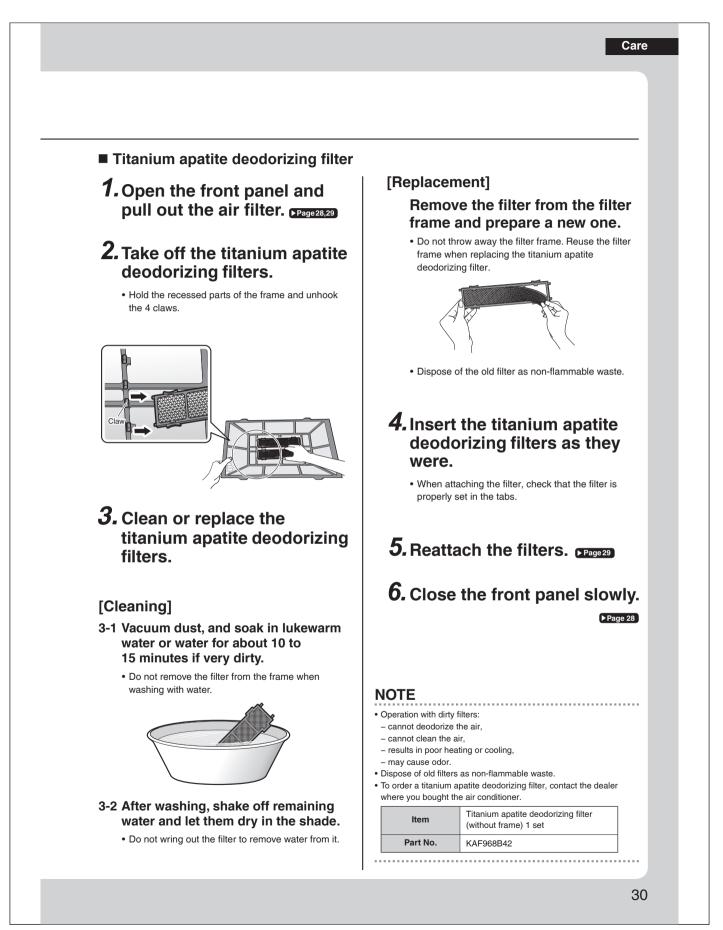


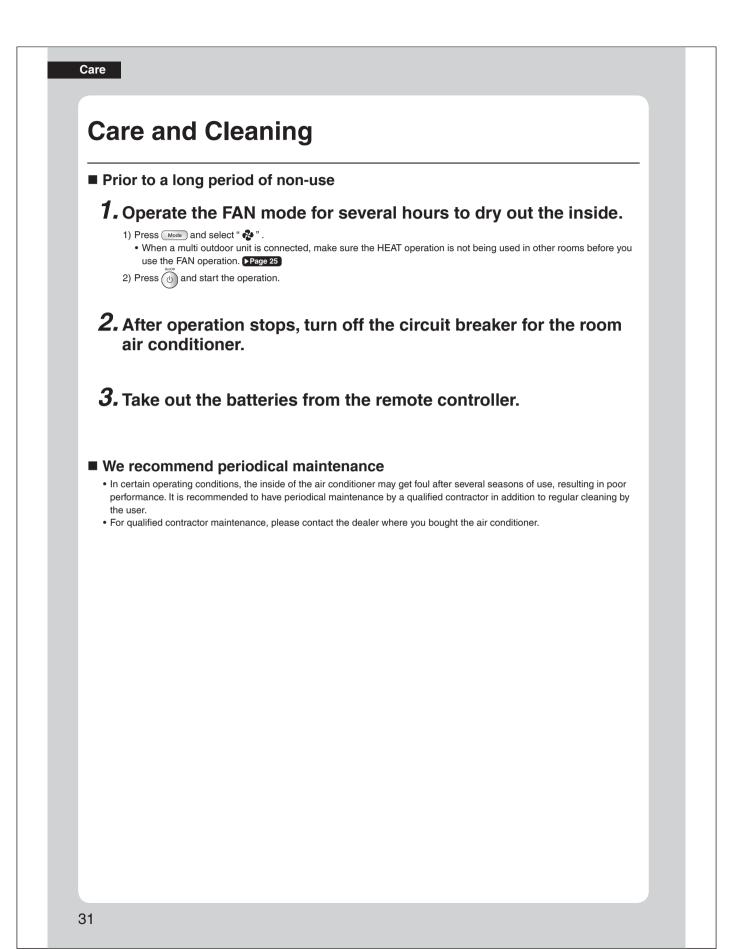


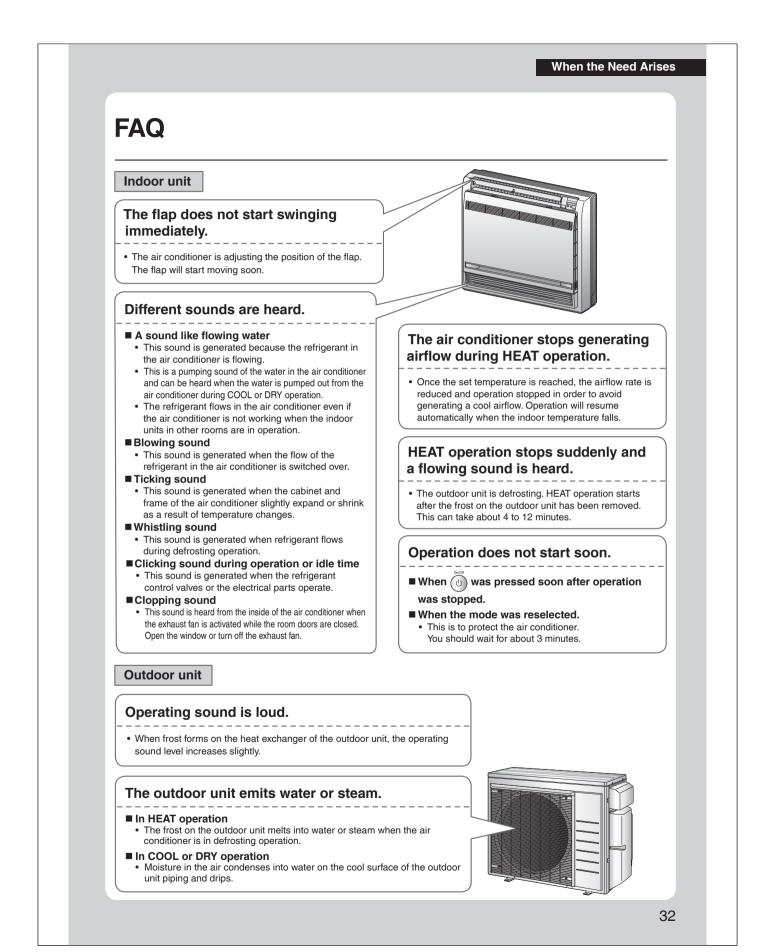












When the Need Arises

# Troubleshooting

Before making an inquiry or a request for repair, please check the following. If the problem persists, consult your dealer.

 $\checkmark$ 

Not a problem This case is not a problem.



#### песк

Please check again before requesting repairs.

### The air conditioner does not operate

Case	Description / what to check
OPERATION lamp is off.	<ul> <li>Has the circuit breaker been tripped or the fuse blown?</li> <li>Is there a power failure?</li> <li>Are batteries set in the remote controller?</li> </ul>
OPERATION lamp is blinking.	• Turn off the power with the circuit breaker and restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Page 36

#### The air conditioner suddenly stops operating

Case	Description / what to check
OPERATION lamp is on.	• To protect the system, the air conditioner may stop operating after sudden large voltage fluctuations. It automatically resumes operation in about 3 minutes.
OPERATION lamp is blinking.	<ul> <li>Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit? Stop operation and after turning off the circuit breaker, remove the obstruction. Then restart operation with the remote controller. If the OPERATION lamp is still blinking, check the error code and consult your dealer. Pages6</li> <li>Are operation modes all the same for indoor units connected to outdoor units in the multi system? If not, set all indoor units to the same operation mode and confirm that the lamps. Moreover, when the operation mode is in AUTO, set all indoor unit operation modes to COOL or HEAT for a moment and check again that the lamps are normal. If the lamps stop blinking after the above steps, there is no malfunction.</li> </ul>

#### The air conditioner does not stop operating

Case	Description / what to check
The air conditioner continues operating even after operation is stopped.	<ul> <li>Immediately after the air conditioner is stopped</li> <li>The outdoor unit fan continues rotating for about another 1 minute to protect the system.</li> <li>While the air conditioner is not in operation</li> <li>When the outdoor temperature is high, the outdoor unit fan may start rotating to protect the system.</li> </ul>

#### The room does not cool down / warm up

Case	Description / what to check
Air does not come out.	<ul> <li>In HEAT operation         <ul> <li>The air conditioner is warming up. Wait for about 1 to 4 minutes.</li> <li>During defrosting operation, hot air does not flow out of the indoor unit.</li> </ul> </li> <li>When the air conditioner operates immediately after the circuit breaker is turned on         <ul> <li>The air conditioner is preparing to operate. Wait for about 3 to 20 minutes.</li> </ul> </li> </ul>
Air does not come out / Air comes out.	<ul> <li>Is the airflow rate setting appropriate?</li> <li>Is the airflow rate setting low, such as "Indoor unit quiet" or "Airflow rate 1"? Increase the airflow rate setting.</li> <li>Is the set temperature appropriate?</li> <li>Is the adjustment of the airflow direction appropriate?</li> </ul>

The room does not cool down / warm up	
Case	Description / what to check     Is there any furniture directly under or beside the indoor unit?     Is the air conditioner in ECONO operation or OUTDOOR UNIT QUIET operation?     Page 15;     Is the air filter dirty?     Is there anything blocking the air inlet or air outlet of the indoor unit or outdoor unit?     Is a window or door open?     Is an exhaust fan turning?
Mist comes out	
Case	Description / what to check
Mist comes out of the indoor unit.	• This happens when the air in the room is cooled into mist by the cold airflow during COOL or other operation.
Remote controller	
Case	Description / what to check
The unit does not receive signals from the remote controller or has a limited operating range.	<ul> <li>The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 9</li> <li>Signal communication may be disabled if an electronic-starter-type fluorescent lamp (such as inverter-type lamps) is in the room. Consult your dealer if that is the case.</li> <li>The remote controller may not function correctly if the transmitter is exposed to direct sunligi</li> </ul>
LCD is faint, is not working, or the display is erratic.	The batteries may be exhausted. Replace both batteries with new dry batteries AAA.LR03 (alkaline). For details, refer to "Preparation Before Operation". Page 9
Other electric devices start operating.	• If the remote controller activates other electric devices, move them away or consult your dealer.
Air has an odor	
Case	Description / what to check
The air conditioner gives off an odor.	• The room odor absorbed in the unit is discharged with the airflow. We recommend you to have the indoor unit cleaned. Please consult your dealer.
Others	
Case	Description / what to check
The air conditioner suddenly starts behaving strangely during operation.	<ul> <li>The air conditioner may malfunction due to lightning or radio.</li> <li>If the air conditioner malfunctions, turn off the power with the circuit breaker and restart the operation with the remote controller.</li> </ul>
HEAT operation cannot be selected, even though the unit is heat pump model.	Check that the jumper (J8) has not been cut. If it has been cut, contact your dealer.
The ON/OFF TIMER does not operate according to the settings.	Check if the ON/OFF TIMER and the WEEKLY TIMER are set to the same time.     Change or deactivate the settings in the WEEKLY TIMER. Page 19

- A safety device may activate to stop the operation.
   (With a multi connection in COOL operation, the safety device may work to stop the operation of the outdoor unit only.)
- Dew may form on the indoor unit and drip from it when COOL or DRY operation is selected.

Mode	Operating conditions
	Outdoor temperature: [MXS, MXL models]: 14-115°F (-10-46°C)
COOL / DRY	[RXL models]: 50-115°F (10-46°C)
	Indoor temperature: 64-90°F (18-32°C)
	Indoor humidity: 80% max.
	Outdoor temperature: [MXS models]: 5-75°F (-15-24°C)
HEAT	[MXL, RXL models]: -13-75°F (-25-24°C)
	Indoor temperature: 50-86°F (10-30°C)

When the Need Arises

# Troubleshooting

### Call your dealer immediately

## 🕂 WARNING

- When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.
- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

#### Do not attempt to repair or modify the air conditioner by yourself.

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

#### If one of the following symptoms takes place, call your dealer immediately.

- The power cord is abnormally hot or damaged.
- An abnormal sound is heard during operation.
- The circuit breaker, a fuse, or the ground fault circuit interrupter cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- · Water leaks from the indoor unit.

Turn off the circuit breaker and call your dealer.



#### After a power failure

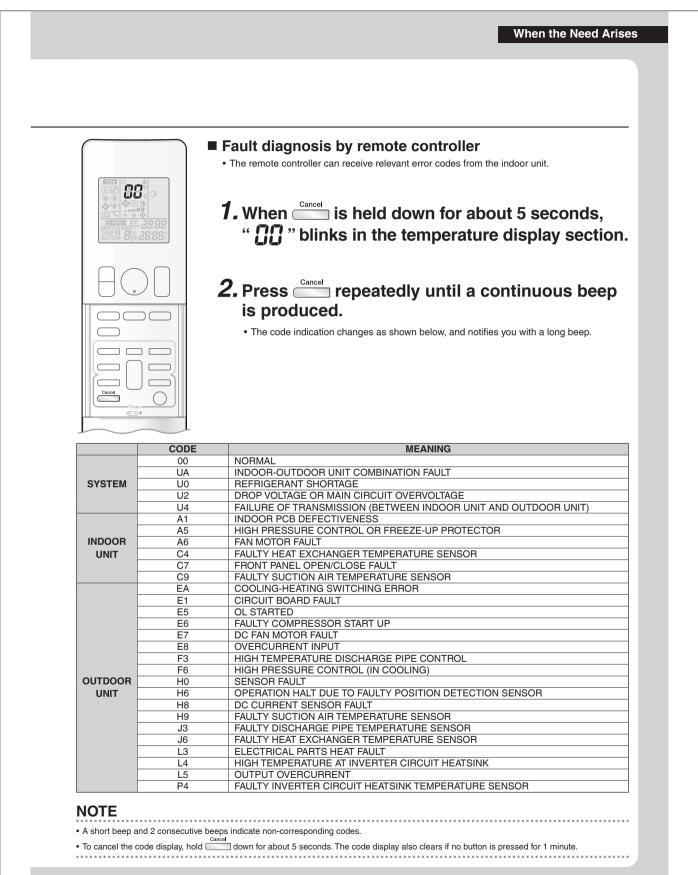
• The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

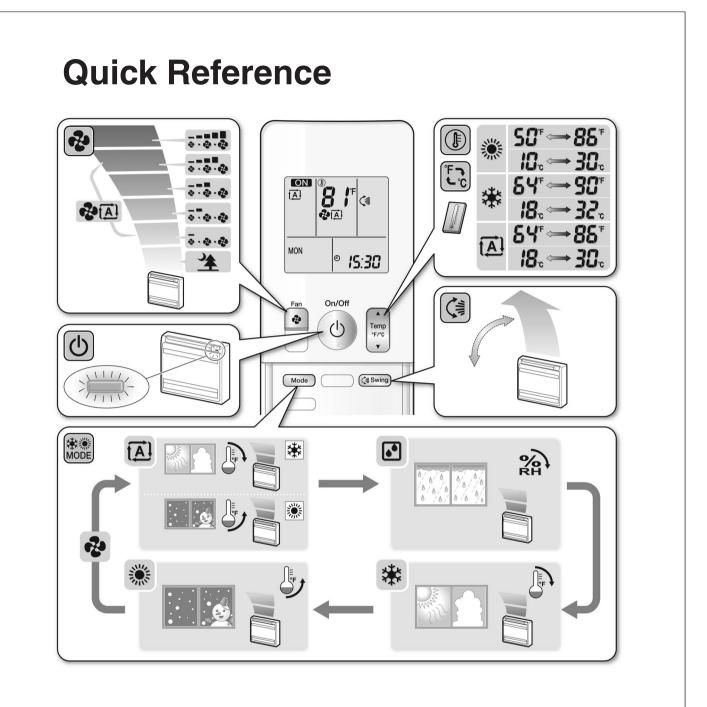
#### Lightning

• If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

### Disposal requirements

• Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.





## 13.4 FDMQ12/18/24RVJU

# Contents

Read Before Operation	
Safety Considerations	1
Names of Parts	4
Multi Connection	
Note for Multi System	5
Care	
Care and Cleaning	7
When the Need Arises	
Troubleshooting	9

# **Safety Considerations**

Read these **Safety Considerations for Operations** carefully before operating an air conditioner or heat pump. Make sure that the unit operates properly during the startup operation. Instruct the user on how to operate and maintain the unit.

Inform users that they should store this operation manual with the installation manual for future reference. Meanings of **DANGER**, **WARNING**, **CAUTION**, and **NOTE** 

Symbols:

A DANGER ·······	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
A warning	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
<u> </u>	Indicates situations that may result in equipment or property-damage accidents only.

#### - 🗥 DANGER

- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Any abnormalities in the operation of the air conditioner or heat pump, such as smoke or fire, could result in severe injury or death. Turn off the power and contact your dealer immediately.
- Refrigerant gas may produce toxic gas if it comes into contact with fire, such as from a fan heater, stove, or cooking device. Exposure to this gas could cause severe injury or death.
- For refrigerant leakage, consult your dealer. Refrigerant gas is heavier than air and replaces oxygen. A massive leak could lead to oxygen depletion, especially in basements, and an asphyxiation hazard could occur leading to serious injury or death.
- If equipment utilizing a burner is used in the same room as the air conditioner or heat pump, there is the danger of oxygen deficiency which could lead to an asphyxiation hazard resulting in serious injury or death. Be sure to ventilate the room sufficiently to avoid this hazard.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

• Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death by suffocation.

#### — \land WARNING -

- Contact your dealer for repair and maintenance. Improper repair and maintenance may result in water leakage, electric shock, and fire. Only use accessories made by Daikin that are specifically designed for use with the equipment and have them installed by a professional.
- Contact your dealer to move and reinstall the air conditioner or heat pump. Incomplete installation may result in water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. Water can cause an electric shock or a fire.
- Never use flammable spray such as hair spray, lacquer, or paint near the unit. Flammable spray may cause a fire.
- When a fuse blows out, never replace it with one of incorrect ampere ratings or different wires. Always replace any blown fuse with a fuse of the same specification.
- Never inspect or service the unit by yourself. Contact a qualified service person to perform this work.
- Turn off all electrical power before doing any maintenance to avoid the risk of serious electric shock; never sprinkle or spill water or liquids on the unit.
- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not allow children to play on or around the unit to prevent injury.
- The heat exchanger fins are sharp enough to cut. To avoid injury wear gloves or cover the fins while working around them.
- Do not put a finger or other objects into the air inlet or air outlet. The fan is rotating at high speed and will cause injury.
- Check the unit foundation for damage on a continuous basis, especially if it has been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Never touch the internal parts of the controller. To check and adjust internal parts, contact your dealer.
- Be sure to establish a ground.
   Do not ground the unit to a utility pipe, arrester, or telephone ground. Incomplete grounding may cause electrical shock, or fire. A high surge current from lightning or other sources may cause damage to the air conditioner.
- Be sure to install a ground fault circuit interrupter.
   Failure to install a ground fault circuit interrupter may result in electric shock or fire.

#### - 🗥 CAUTION -

- Do not use the air conditioner or heat pump for any other purposes other than comfort cooling or heating.
   Do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- Do not place items under the indoor unit as they may be damaged by condensates that may form if the humidity is above 80% or if the drain outlet gets blocked.
- Before cleaning, stop the operation of the unit by turning the power off or by pulling the supply cord out from its receptacle. Otherwise, an electric shock and injury may result.
- Do not wash the air conditioner or heat pump with excessive water. An electric shock or fire may result.
- Avoid placing the controller in a spot splashed with water. Water entering the controller may cause an electric shock or damage the internal electronic parts.
- Do not operate the air conditioner or heat pump when using a room-fumigation type of insecticide.
   Failure to observe this could cause the chemicals to be deposited in the unit and can endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation. Always wait for at least 5 minutes before turning off the power. Otherwise, water leakage may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be kept away from children so they cannot play with it.
- · Consult with the installation contractor for cleaning.
- Incorrect cleaning of the inside of the air conditioner or heat pump could make the plastics parts break and cause water leakage or electric shock.
- Do not touch the air inlet or aluminum fin of the air conditioner or heat pump as they can cut and cause injury.
- Do not place objects in direct proximity of the outdoor unit. Do not let leaves and other debris accumulate around the unit. Leaves are a hotbed for small animals which can enter the unit. Once inside the unit, animals can cause the unit to malfunction, and cause smoke or fire when they make contact with electrical parts.
- For care and cleaning, call service personnel.

# **Safety Considerations**

#### 

- Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller. It may cause the unit to malfunction.
- Do not place appliances that produce open flames in places that are exposed to the airflow of the unit or under the indoor unit. It may cause incomplete combustion or deformation of the unit due to the heat.
- Do not expose the controller to direct sunlight. The LCD display can become discolored and may fail to display the data.
- Do not wipe the controller operation panel with benzene, thinner, chemical dust cloth, etc. The panel may get discolored or the coating can peel off. If it is heavily dirty, soak a cloth in a water-diluted neutral detergent, squeeze it well and wipe the panel clean. Then wipe it with another dry cloth.
- Dismantling of the unit, disposal of the refrigerant, oil, and additional parts, should be done in accordance with the relevant local, state, and national regulations.
- Operate the air conditioner or heat pump in a sufficiently ventilated area and not surrounded by obstacles. Do not use the air conditioner or heat pump in the following places.
  - a. Places with a mist of mineral oil, such as cutting oil.
  - b. Locations such as coastal areas where there is a lot of salt in the air.
  - Locations such as hot springs where there is a lot of sulfur in the air.
  - Locations such as factories where the power voltage varies a lot.
  - e. In cars, boats, and other vehicles.
  - f. Locations such as kitchens where oil may splatter or where there is steam in the air.
  - Locations where equipment produces electromagnetic waves.
  - h. Places with an acid or alkaline mist.
  - i. Places where fallen leaves can accumulate or where weeds can grow.
- Take snow protection measures. Contact your dealer for the details of snow protection measures, such as the use of a snow protection hood.

This is an appliance that is not accessible to the general public.

#### Precautions relating to area surrounding the indoor and outdoor units

Be sure to follow the instructions below.

- The indoor unit is at least 3.3ft (1m) away from any television or radio set (unit may cause interference with the picture or sound).
- · Refrain from using the units in areas prone to high levels of oily smoke, such as a kitchen. Water leakage may result.

- Do not attempt to do electrical work or grounding work unless you are licensed to do so. Consult with your dealer for electrical work and grounding work.
- Pay attention to operating sound. Be sure to use the following places:
  - Places that can sufficiently withstand the weight of the air conditioner or heat pump yet can suppress the operating sound and vibration.
  - Places where warm air from the air outlet of the outdoor unit or the operating sound of the outdoor unit does not annoy neighbors.
- Make sure that there are no obstacles close to the outdoor unit. Obstacles close to the outdoor unit may drop the performance of the outdoor unit or increase the operating sound of the outdoor unit.
- Consult your dealer if the air conditioner or heat pump in operation generates unusual noise.
- Make sure that the drainpipe is installed properly to drain water. If no water is discharged from the drainpipe while the air conditioner or heat pump is in the cooling mode, the drainpipe may be clogged with dust or dirt and water leakage from the indoor unit may occur. Stop operating the air conditioner or heat pump and contact your dealer.

#### **Names of Parts Indoor Unit** а h h d g क्र Drain discharge device (built-in) Refrigerant piping а g b Drain pan inspection window h Drain piping i Model name (Model name plate) Remote controller (Wired type) С The appearance of the remote controller may differ between j Air filter (Sold separately) different models. k Suction filter chamber (Sold separately) d Wiring between the indoor and outdoor units Т Suction duct (Field supply) Air outlet grille (Field supply) Suction grille (Field supply) m е f Exhaust duct (Field supply) **Remote controller** Wired type Wireless type • For details on remote controller operation, refer to the ® ∆⊽ operation manual included with the remote controller. 0 **Outdoor Unit** • The appearance of the outdoor unit may differ between different models. **Outdoor temperature** Air inlet sensor (back) (back and side) **Drain hose Ground terminal** (inside) Air outlet Model name **Refrigerant pipes and** inter-unit wire 4

# **Care and Cleaning**

# 

- Only a qualified service person is allowed to perform maintenance.
- Before cleaning, be sure to stop the operation and turn off the circuit breaker.
- Do not touch the aluminium fins of the indoor unit. If you touch those parts, this may cause an injury.

#### How to clean the air filter

- When the remote controller indicates "Time to clean filter", clean the air filter.
- It indicates after running for a certain time.

#### NOTE

## For cleaning, do not use any of the following:

- Volatile liquid such as benzene, gasoline and thinner
- Polishing compounds
- Rough materials such as a scrubbing brush
- You may change the time of indication "Time to clean filter".

If the indoor unit is used in a space where the air is too contaminated, ask your local dealer for solution.

Contamination	Time until indication is displayed
Normal	2500 hours (equivalent to one year)
More contaminated	1250 hours (equivalent to a half year)

- If it becomes difficult to remove contamination from the air filter, replace the air filter.
- (Air filter for replacement is a separately sold accessory.)
- Do not remove the air filter except when cleaning. Unnecessary handling may damage the filter.
- (This product is not provided with an air filter as a standard accessory.)
- Do not attach objects other than the genuine air filter (e.g., kitchen paper) to the air inlet.
- Otherwise, the performance of the air conditioner will be degraded, and icing or water leakage may result.
- This product is a ceiling mounted duct type air conditioner.
- Installing under roof
- If the air filter (sold separately) is used, request a special contractor for the cleaning of the air filter.
- Not installing under roof

Always use the long-life filter chamber (sold separately). Be sure to request your dealer for the installation of the long-life chamber. For the methods of mounting, dismounting, and cleaning the air filter, refer to the manual provided with the air filter.

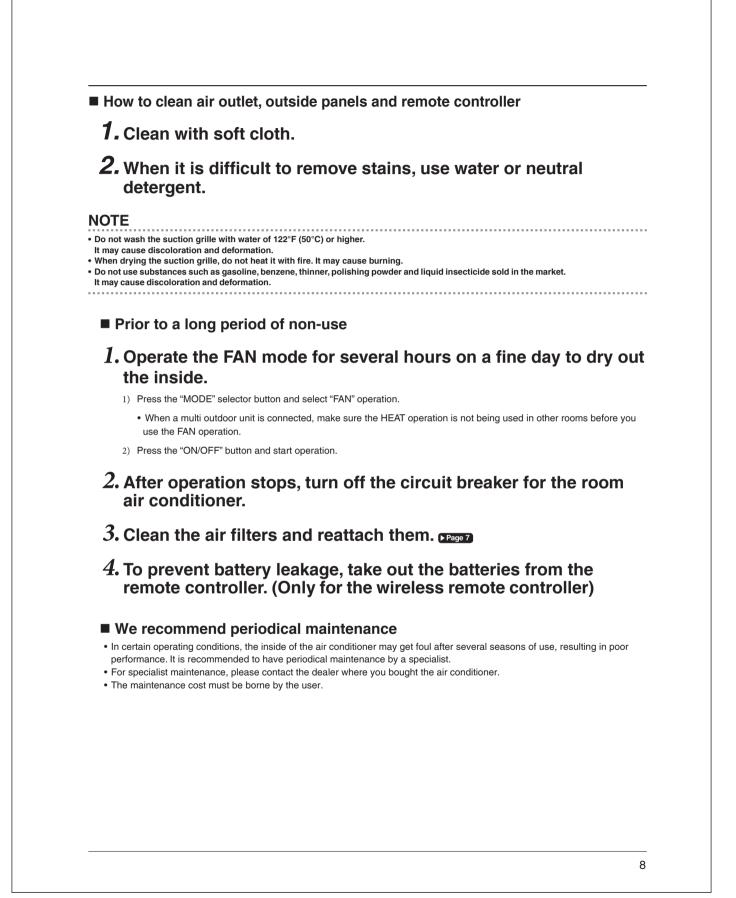
- Be sure to use the separately sold filter chamber.
- Request your dealer for the installation of the filter chamber.
- Be sure to clean the air filter at the beginning of the cooling or heating season.
- (A decrease in the airflow volume of the air conditioner will result and the performance of the air conditioner will be degraded if the air filter is clogged with dust or dirt.)

. . . . . . . . . . . . . . . .

Increase the frequency of cleaning if the unit is installed in a room where the air is extremely contaminated.

After completing cleaning and installing an air filter, turn off the indication of "Time to clean filter" on the remote controller.

- Press the FILTER SIGN RESET button.
- The indication can be turned off while the unit is either operating or stopped.



# Troubleshooting

Before making an inquiry or a request for repair, please check the following. If the problem persists, consult your dealer.

Not a This ca

Not a problem	
This case is not a problem.	



## Check

Please check again before requesting repairs.

Case	Description / what to check		
<ul> <li>Operation does not start soon.</li> <li>When ON/OFF button was pressed soon after operation was stopped.</li> <li>When the mode was reselected.</li> </ul>	• This is to protect the air conditioner. You should wait for about 3 minutes.		
Air does not come out.	<ul> <li>In HEAT operation         <ul> <li>The air conditioner is warming up. Wait for about 1 to 4 minutes.</li> <li>During defrosting operation, hot air does not flow out of the indoor unit.</li> </ul> </li> <li>When the air conditioner operates immediately after the circuit breaker is turned on         <ul> <li>The air conditioner is preparing to operate. Wait for about 3 to 20 minutes.</li> </ul> </li> </ul>		
The HEAT operation stops suddenly and a flowing sound is heard.	• The system is taking away the frost on the outdoor unit. You should wait for about 4 to 12 minutes.		
The outdoor unit emits water or steam.	<ul> <li>In HEAT mode         <ul> <li>The frost on the outdoor unit melts into water or steam when the air conditioner is in defrost operation.</li> <li>In COOL or DRY mode             <ul> <li>Moisture in the air condenses into water on the cool surface of outdoor unit piping and drips.</li> </ul> </li> </ul> </li> </ul>		
Mist comes out of the indoor unit.	This happens when the air in the room is cooled into mist by the cold airflow during cooling operation.		
The indoor unit gives out odor.	<ul> <li>This happens when smells of the room, furniture, or cigarettes are absorbed into the unit and discharged with the airflow.</li> <li>(If this happens, we recommend you to have the indoor unit washed by a technician. Consult your dealer where you bought the air conditioner.)</li> </ul>		
The outdoor fan rotates while the air conditioner is not in operation.	<ul> <li>After operation is stopped:</li> <li>The outdoor fan continues rotating for another 1 minute for system protection.</li> <li>While the air conditioner is not in operation:</li> <li>When the outdoor temperature is very high, the outdoor fan starts rotating for system protection.</li> </ul>		
The operation stopped suddenly. (OPERATION lamp is on.)	For system protection, the air conditioner may stop operating on a sudden large voltage fluctuation. It automatically resumes operation in about 3 minutes.		
The air conditioner does not operate. (OPERATION lamp is off.)	<ul> <li>Hasn't the circuit breaker turned OFF or a fuse blown?</li> <li>Isn't it a power failure?</li> <li>Are batteries set in the remote controller?</li> <li>Is the timer setting correct?</li> </ul>		
Cooling (Heating) effect is poor.	<ul> <li>Are the air filters clean?</li> <li>Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units?</li> <li>Is the temperature setting appropriate?</li> <li>Are the windows and doors closed?</li> <li>Are the airflow rate and the air direction set appropriately?</li> </ul>		
Operation stops suddenly. (OPERATION lamp flashes.)	<ul> <li>Are the air filters clean?</li> <li>Is there anything blocking the air inlet or the outlet of the indoor and the outdoor units? Clean the air filters or take all obstacles away and turn the circuit breaker OFF. Then turn it ON again and try operating the air conditioner with the remote controller. If the lamp still blinks, call your dealer where you bought the air conditioner.</li> <li>Are operation modes all the same for indoor units connected to outdoor units in the <b>multi system?</b> If not, set all indoor units to the same operation mode and confirm that the lamps blink. Moreover, when the operation mode is in "AUTO", set all indoor unit operation modes to "COOL" or "HEAT" for a moment and check again that the lamps are normal. If the lamps stop blinking after the above steps, there is no malfunction.</li> </ul>		

Case	Description / what to check
An abnormal functioning happens during operation.	• The air conditioner may malfunction with lightning or radio waves. Turn the breaker OFF, turn it ON again and try operating the air conditioner with the remote controller.

C

#### Notes on the operating conditions

 If operation continues under any conditions other than those listed in the table,

- A safety device may activate to stop the operation.Dew may form on the indoor unit and drip from it when COOL
- or DRY operation is selected.

Mode	Operating conditions	
COOL / DRY	RY Outdoor temperature: [MXS, MXL models]: 14-115°F (-10-4 [RX, RXL models]: 50-115°F (10-46° Indoor temperature: 64-90°F (18-32°C) Indoor humidity: 80% max.	
HEAT	Outdoor temperature: [MXS, RX models]: 5-75°F (-15-24°C) [MXL, RXL models]: -13-75°F (-25-24°C) Indoor temperature: 50-86°F (10-30°C)	

### Call your dealer immediately

## 🕂 WARNING

When an abnormality (such as a burning smell) occurs, stop operation and turn off the circuit breaker.

- Continued operation in an abnormal condition may result in problems, electric shock or fire.
- Consult the dealer where you bought the air conditioner.

#### Do not attempt to repair or modify the air conditioner by yourself.

- Incorrect work may result in electric shock or fire.
- Consult the dealer where you bought the air conditioner.

#### If one of the following symptoms takes place, call your dealer immediately.

• The power cord is abnormally hot or damaged.

- An abnormal sound is heard during operation.
- The circuit breaker cuts off the operation frequently.
- A switch or a button often fails to work properly.
- There is a burning smell.
- Water leaks from the indoor unit.

Turn off the circuit breaker and call your dealer.



#### After a power failure

• The air conditioner automatically resumes operation in about 3 minutes. You should just wait for a while.

#### Lightning

• If there is a risk lightning could strike in the neighborhood, stop operation and turn off the circuit breaker to protect the system.

#### Disposal requirements

• Dismantling of the unit, handling of the refrigerant, oil and other parts, should be done in accordance with the relevant local and national regulations.

### 13.5 With <BRC1E73> Wired Remote Controller

# Safety Considerations

The original instructions are written in English. All other languages are translation of the original instructions.

Read these **SAFETY CONSIDERATIONS** carefully before operating the remote controller. Train the customer to operate and maintain the remote controller.

Inform customers that they should store this Operations Manual with the Installation Manual for future reference.

Meanings of WARNING and CAUTION Symbols:

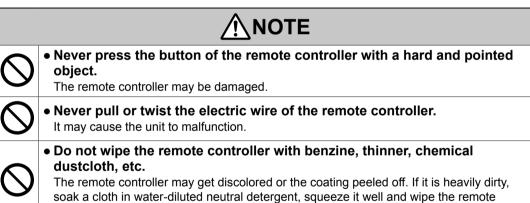
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.	
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.	
ΝΟΤΕ	Indicates situations that may result in equipment or property-damage accidents only.	

• The following pictograms are used in this manual.

$\bigcirc$	Never do.		Always follow the instructions given.
	Keep water and moisture away.	Ø	Keep wet hands away.

	WARNING				
$\bigcirc$	• Do not modify or repair the remote controller. Consult your Daikin dealer for any modification or for repairs.				
$\bigcirc$	• Do not relocate or reinstall the remote controller by yourself. Improper installation may result in electric shocks or fire. Consult your Daikin dealer to relocate or for any reinstallation.				
$\bigcirc$	• Do not use flammable materials (e.g., hairspray or insecticide) near the remote controller. Do not clean the product with organic solvents such as paint thinner. The use of organic solvents may cause cracking, damaging the product, causing electric shocks, or fire.				
0	<ul> <li>Consult the dealer if the remote controller was submerged under water due to a natural disaster, such as a flood or hurricane.</li> <li>Do not operate the remote controller at this time or a malfunction, electric shock, or fire can occur.</li> </ul>				

$\bigcirc$	• Do not allow children to play with the remote controller to avoid causing damage to the product.
$\bigcirc$	• Never disassemble the remote controller. Touching the interior parts may result in electric shocks or fire. Consult your Daikin dealer for internal inspections and adjustments.
	<ul> <li>Do not touch the remote controller buttons with wet fingers. Touching the buttons with wet fingers can cause an electric shock.</li> </ul>
	• Do not wash the remote controller. Doing so may cause electric leakage and result in electric shocks or fire.
	• Never let the remote controller to get wet. Water can cause damage to the remote controller, and may cause an electric shock or fire.



controller clean. And wipe it with another dry cloth.

## **Button Locations and Descriptions** 1. Operation mode selector button 11. LCD (with backlight) DAIKIN 4. Up button 5. Down button ▼ 6. Right button ► 7. Left button 9. Operation lamp Mode On/Off 8. On/Off button 3. Menu/OK button Menu OK Fan Cancel 10. Cancel button Speed 2. Fan speed control button

Functions other than basic operation items (i.e., On/Off, Operation Mode, Fan Speed, and Setpoint) are set from the menu screen.

## NOTE

- Do not install the remote controller in places exposed to direct sunlight, the LCD will be damaged.
- Do not pull or twist the remote controller cord, the remote controller may be damaged.
- Do not use objects with sharp ends to press the buttons on the remote controller, damage may result.

4

#### 1. Operation mode selector button

 Press this button to select the operation mode of your preference. (See page 10.)
 * Available modes vary with the indoor unit model.

#### 2. Fan speed control button

 Press this button to select the fan speed of your preference. (See page 11.)
 * Available fan speeds vary with the indoor unit model.

#### 3. Menu/OK button

- Used to enter the main menu. (See page 20 for the menu items.)
- Used to enter the selected item.

#### 4. Up button **▲**

- Used to raise the setpoint.
- The item above the current selection will be highlighted.
   (The highlighted items will be scrolled continuously when the button is

continuously pressed.)

• Used to change the selected item.

### 5. Down button **V**

- Used to lower the setpoint.
- The item below the current selection will be highlighted.
   (The highlighted items will be scrolled continuously when the button is continuously pressed.)
- Used to change the selected item.

### 6. Right button ►

- Used to highlight the next items on the right-hand side.
- Each screen is scrolled in the right-hand direction.

#### 7. Left button <

- Used to highlight the next items on the left-hand side.
- Each screen is scrolled in the left-hand direction.

#### 8. On/Off button

- Press this button and system will start.
- Press this button again to stop the system.

#### 9. Operation lamp

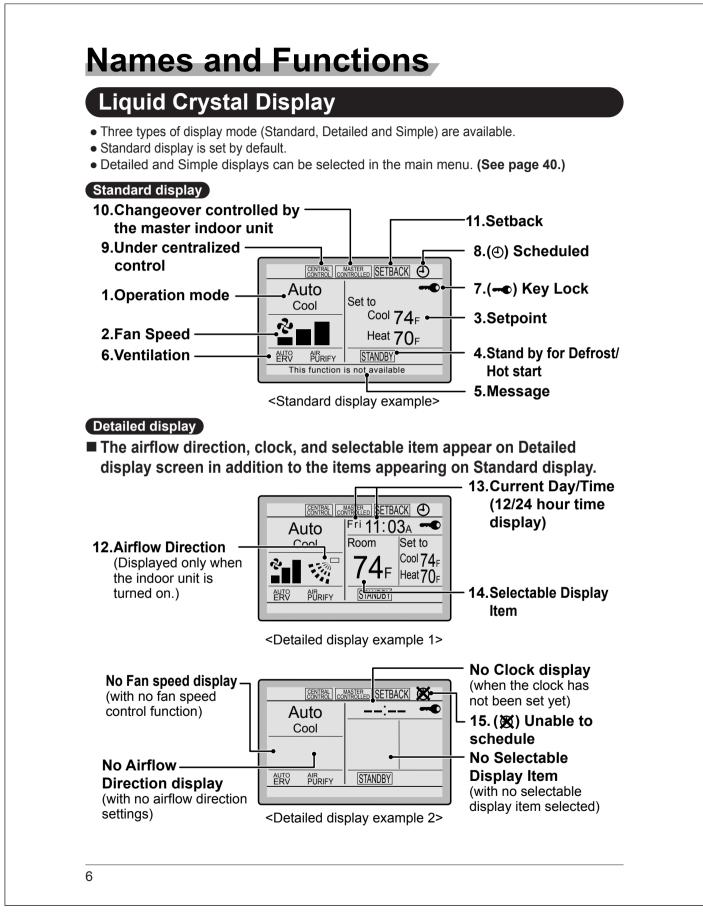
- This lamp illuminates solid green during normal operation.
- This lamp flashes if an error occurs.

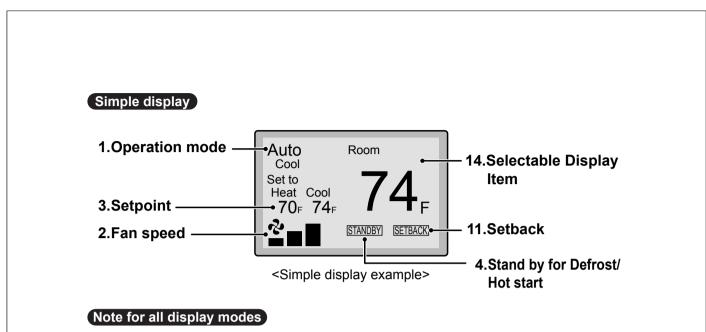
#### 10.Cancel button

• Used to return to the previous screen.

### 11.LCD (with backlight)

- The backlight will be illuminated for approximately 30 seconds by pressing any button.
- If two remote controllers are used to control a single indoor unit, only the controller accessed first will have backlight functionality.





• Depending on the field settings, while the indoor unit is stopped, OFF may be displayed instead of the operation mode and/or the setpoint may not be displayed.

# Names and Functions

#### 1. Operation mode

- Used to display the current operation mode: Cool, Heat, Vent, Fan, Dry or Auto.
- In Auto mode, the actual operation mode (Cool or Heat) will be also displayed.
- Operation mode cannot be changed when OFF is displayed.
   Operation mode can be changed after starting operation.

#### 2. Fan Speed

- Used to display the fan speed that is set for the indoor unit.
- The fan speed will not be displayed if the connected model does not have fan speed control functionality.

#### 3. Setpoint

- Used to display the setpoint for the indoor unit.
- Use the Celsius/Fahrenheit item in the main menu to select the temperature unit (Celsius or Fahrenheit).

#### 4. Stand by for Defrost/Hot start " STANDBY " (See page 12.)

- If ventilation icon is displayed in this field:
- Indicates that an energy recovery ventilator (ERV) is connected.
   For details, refer to the Operation Manual of the ERV.

#### 5. Message

The following messages may be displayed.

#### "This function is not available"

- Displayed for a few seconds when an Operation button is pressed and the indoor unit does not provide the corresponding function.
- In a remote control group, the message will not appear if at least one of the indoor units provides the corresponding function.

"Error: Push Menu button" "Warning: Push Menu button"

- Displayed if an error or warning is detected (see page 50).
- "Time to clean filter"
- "Time to clean element"
- "Time to clean filter & element"
- Displayed as a reminder when it is time to clean the filter and/or element (see page 48).

#### 6. Ventilation

- Displayed when an energy recovery ventilator is connected.
- Ventilation Mode icon." ^{AUTO} ERV BYPASS " These icons indicate the current ventilation mode (ERV only) (AUTO, ERV, BYPASS).
- Air Purify ICON "  $\#_{URIFY}$ " This icon indicates that the air purifying unit (Optional) is in operation.

### 7. ••• Key Lock (See page 19.)

• Displayed when the key lock is set.

#### 8. ④ Scheduled (See page 30.)

• Displayed if the Schedule or Off timer is enabled.

#### 9. Under Centralized control " CENTRAL "

• Displayed if the system is under the management of a multi-zone controller (Optional) and the operation of the system through the remote controller is limited.

#### 10.Changeover controlled by the master indoor unit " CONFELED " (VRV only)

• Displayed when another indoor unit on the system has the authority to change the operation mode between cool and heat.

8

#### 11. Setback " SETBACK " (See page 14.)

• The setback icon flashes when the unit is turned on by the setback control.

#### 12.Airflow Direction "..." "

- Displayed when the airflow direction and swing are set (see page 23).
- If the connected indoor unit model does not include oscillating louvers this item will not be displayed.

# 13.Current Day/Time (12/24 hour time display)

- Displayed if the clock is set (see page 42).
- If the clock is not set, "--:--" will be displayed.
- 12 hour time format is displayed by default.
- Select 12/24 hour time display option in the main menu under "Clock & Calendar".

#### 14.Selectable Display Item

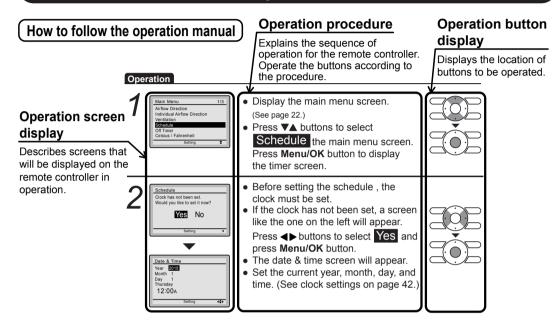
- Room temperature is selected by default.
- For other choices see page 41.

#### 15. X Unable to schedule

- Displayed when the clock needs to be set.
- The schedule function will not work unless the clock is set.

# **Basic Operation**

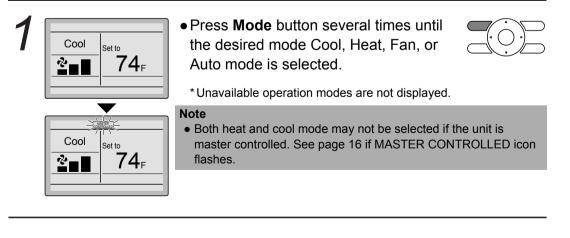
Cool/Heat/Auto/Fan Operation (SkyAir and VRV)

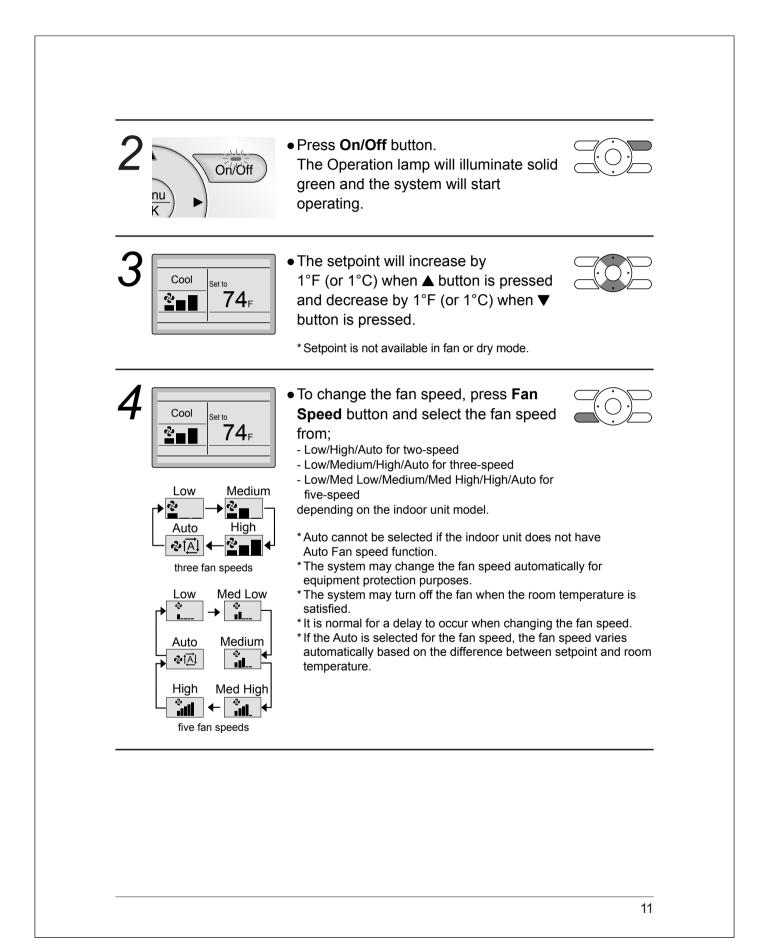


## Preparation

• For mechanical protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

#### Operation





## **Basic Operation** Adjust Airflow Direction from the main menu (see page 23). * If the connected indoor unit does not have oscillating louvers, this function will not be available. When On/Off button is pressed again, the system will stop operating and the On/Off Operation lamp will turn off. * When the system is stopped while in the heating mode, the fan will continue to operate for approximately one minute to remove residual heat from the indoor unit. Note • To prevent condensation water damage or system failure, do not shut off the power supply to the indoor unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the indoor unit.

## **Characteristics of Heat Mode**

The system automatically controls the following operating modes to prevent the reduction of heating capacity and space comfort.

Defrost operation	<ul> <li>The system will automatically go into defrost operation to prevent frost accumulation at the outdoor unit and subsequent loss of heating capacity.</li> <li>The indoor unit fan will stop, and " STANDBY " will be displayed on the remote controller.</li> <li>The system will finish the Defrost operation and return to normal usually within six to eight minutes. It won't last for more than ten minutes.</li> </ul>
Hot start	• When the system starts heating operation, the indoor unit fan will operate with a delay in order to prevent a cold draft. (In that case, " [STANDBY] " will be displayed on the remote controller.)

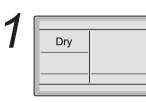
# Dry Mode

## Preparation

• For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

• The dry mode may not be selected if the remote controller is master controlled and the system is not already in the cooling mode of operation. (see page 18 for details)

#### Operation



 Press Mode button several times until the Dry mode is selected.



* The dry mode may not be available depending on the type of indoor unit.



# Press On/Off button. The Operation lamp will illuminate solid green and the system will start operating.

* In Dry mode, the system maintains automatic temperature and fan speed control. Therefore, temperature setpoint or fan speed settings are not available while the indoor unit is in the Dry mode.

3

# • Adjust Airflow Direction from the main menu (see page 23).

* If the connected indoor unit does not have oscillating louvers, this function will not be available.

# **Basic Operation**



• When **On/Off** button is pressed again, the system will stop operating and the Operation lamp will turn off.



#### Note

• To prevent condensation water damage or system failure, do not shut off the power supply to the indoor unit immediately after operation. Wait at least five minutes for the condensate pump to finish draining residual water from the indoor unit.

### Characteristic of Dry mode

The Dry mode dehumidifies the space at reduced cooling capacity to prevent the room temperature from dropping to an uncomfortable level.



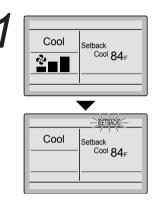
# Setback

The Setback function can be used to maintain the space temperature in an assigned range for an unoccupied period.

#### Note

- When enabled, the Setback mode becomes active when the indoor unit is turned off by either the user, a schedule event or an off timer.
- This function is not available by default. It can be enabled by the system installer.

## Operation



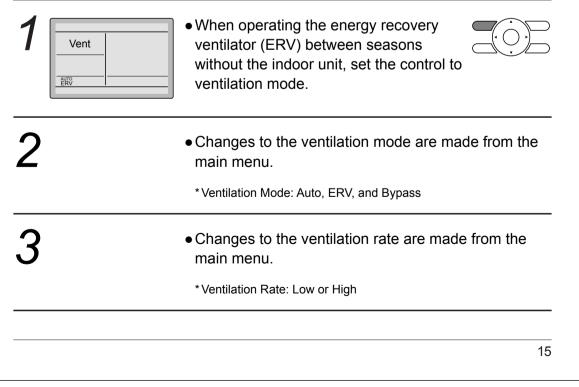
• The setback icon flashes when the unit is turned on by the setback control.

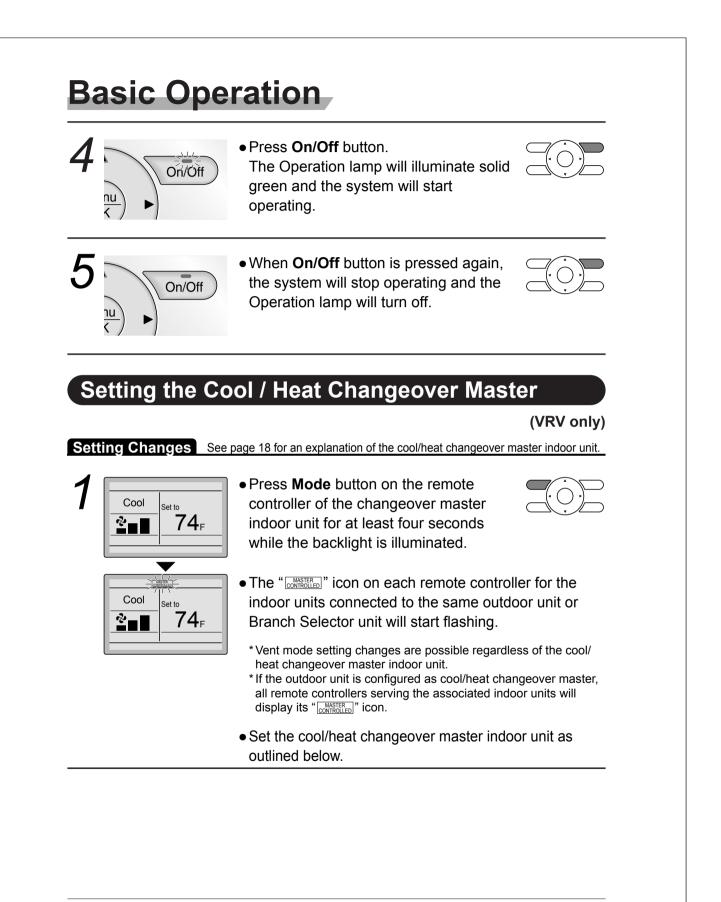
## Ventilation Mode When the Indoor Unit is Interlocked with Energy Recovery Ventilator

### **Preparation**

• For equipment protection purposes, apply power to the outdoor units at least six hours before starting the operation of the system.

#### Operation





16

## Selection Settings The icon " [MASTER] " will flash on all remote controllers when the power is turned ON for the first time. Press Mode button on the remote Cool controller of the indoor unit which is to Set to ~ 74_F serve as the cool/heat changeover master. The remote controller for the changeover master indoor unit is established and the Cool [CONTROLLED] icon is no longer displayed. Set to **74**_F 2 Other remote controllers in the system (indoor units served by the same outdoor unit or indoor units served by the same branch selector unit) will now display the CONTROLLED icon. Press Mode button on the remote Cool controller of the indoor unit designated Set to **74**⊦ as the cool/heat changeover master (the や remote controller not displaying the [COMARGERED] icon) repeatedly until the desired mode is selected. The display will change to Fan, Dry, Auto, Cool, Heat each time the button is pressed. • Simultaneously, the other indoor units on the system will follow suit and change modes to reflect the new mode selected at the changeover master remote controller.

# **Basic Operation**

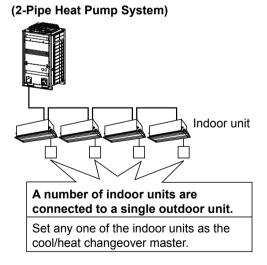
## Cool / Heat Mode Selection Availability

• "Cool", "Heat", and "Auto" are all only available for selection on the cool/heat changeover master indoor unit. The following table indicates the available operating modes of the other indoor units on the system based upon the selected mode of the master indoor unit.

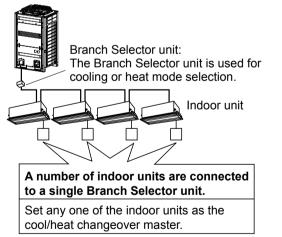
When the master indoor unit is set to	The other indoor units in the system can be set to				
	Cool	Dry	Heat	Fan	
Cool mode	1	✓		1	
Dry mode	1	✓		<ul> <li>✓</li> </ul>	
Heat mode			✓	1	
Fan mode				<ul> <li>✓</li> </ul>	
Auto mode (Cooling operation)	1	1		1	
Auto mode (Heating operation)			✓	1	

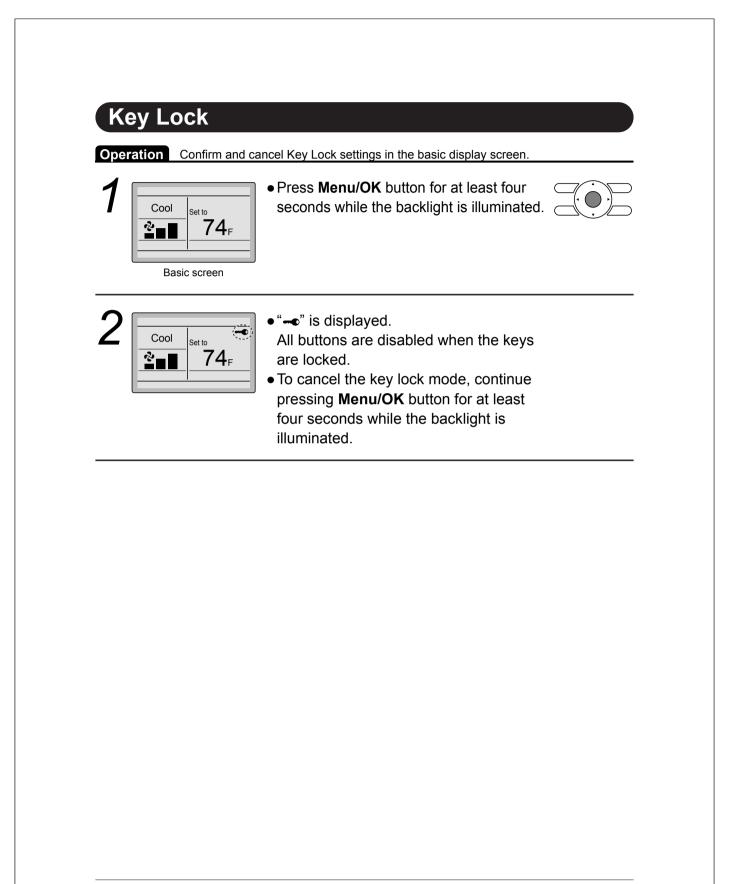
### Precautions for Selecting the Cool / Heat Changeover Master Indoor Unit

• The cool/heat changeover master must be set for a single indoor unit in the following applications



#### (3-Pipe Heat Recovery System)





# Quick Reference

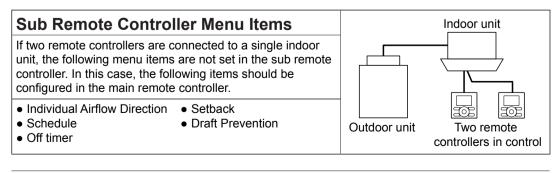
# ■The main menu has the following items.

Menu item		Description	Reference page
		<ul> <li>Used to configure airflow direction settings.</li> <li>The airflow direction louver is automatically operated up and down (left and right).</li> <li>The fixed airflow directions are configurable for five positions.</li> <li>* This function is not available on all indoor unit models.</li> </ul>	23
Individual Airflow	Louver Setting	<ul><li>Set the airflow direction individually for each of the 4 louvers.</li><li>Maximum 16 units (unit 0 till 15).</li></ul>	25
Direction (depends on	Louver Setting List	Setting table for louver.	26
indoor unit model)	Reset All Louvers Position	Reset all louvers to factory default setting.	27
Ventilation Ventilation operation settings	Ventilation Rate	Used to set "Low" or "High"	28
for energy recovery ventilator	Ventilation Mode	Used to set Auto, ERV, or Bypass.	29
Schedule Daily Patterns		<ul> <li>Day settings are selected from four patterns, i.e., "7Days", "Weekday/Sat/Sun", "Weekday/Weekend", and "Everyday".</li> </ul>	31
	Settings	<ul> <li>Set the startup time and operation stop time. ON: Startup time, cooling and heating temperature setpoints can be configured.</li> <li>OFF: Operation stop time, cooling and heating setback temperature setpoints can be configured. (: Indicates that the setback function is disabled for this time period. )</li> <li>Indicates that the temperature setpoint and setback temperature setpoint for this time period is not specified. The last active setpoint will be utilized.</li> <li>Up to five actions can be set for each day.</li> </ul>	32
Off Timer		<ul> <li>Used to set the run-time for the indoor unit using this controller.</li> <li>Possible to set in 10 minute increments from 30 to 180 minutes.</li> </ul>	35
Celsius / Fahrenheit		• Used to select whether temperature values will be displayed in Celsius or Fahrenheit.	

20

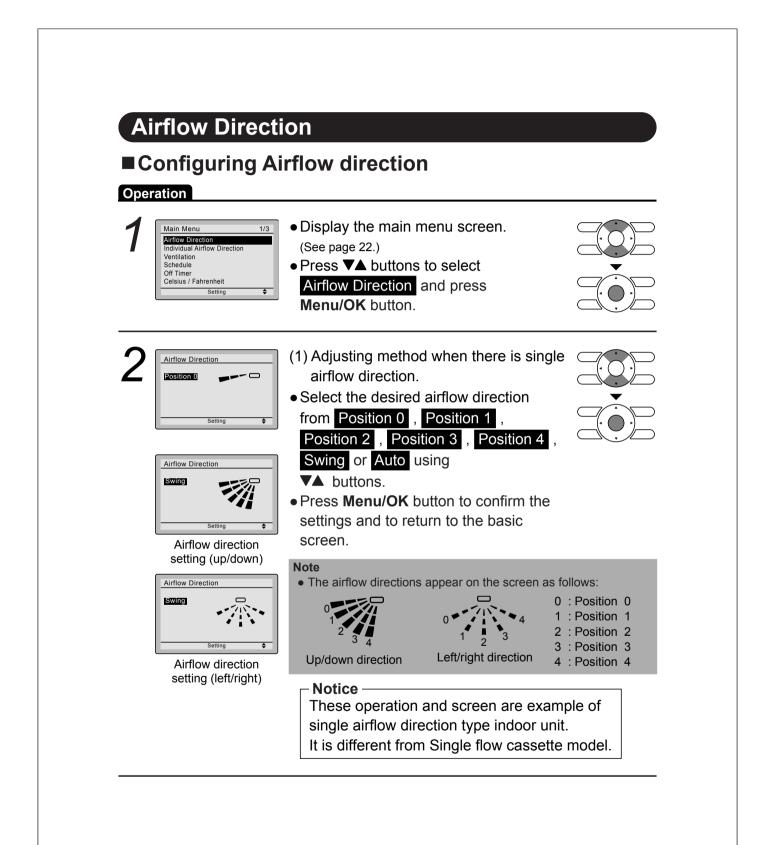
Menu item		Description	Reference page
Filter Auto Clean		Set the time when the filter needs to be automatically cleaned. For the detailed operation refer to the Operation Manual of the self cleaning decoration panel.	_
Maintenance Information		Used to display the maintenance information.	37
Configuration	Draft Prevention (Only available with Occ. sensor installed indoor unit model)	The draft prevention function can be <b>enabled</b> or <b>disabled</b> . When enabled, the Occ. sensor will adjust the louver's position to prevent air blowing directly on occupant.	38
	Contrast Adjustment	Used to make LCD contrast adjustment.	39
	Display	<ul> <li>Used to set the display mode.</li> <li>Display mode Standard, Detailed, or Simple display</li> <li>Detailed and Simple displays provide the selectable display item among Room Temp, System, None or Outside Air Temp.</li> </ul>	40
Current Settings		• Used to display a list of current settings for available items.	42
Clock & Calendar	Date & Time	<ul> <li>Used to configure date and time settings and corrections.</li> <li>The default time display is 12H.</li> <li>The clock will maintain accuracy to within ±30 seconds per month.</li> <li>If there is a power failure for a period not exceeding 48 hours, the clock will continue working with the built-in backup power supply.</li> </ul>	42
	12H/24H Clock	The time can be displayed in either a 12 hour or a 24 hour time format.	45
Daylight Saving Time		Used to adjust the clock in observance of daylight saving time.	45
Language		The display language can be selected between <b>English</b> , <b>Francais</b> , or <b>Espanol</b> .	48

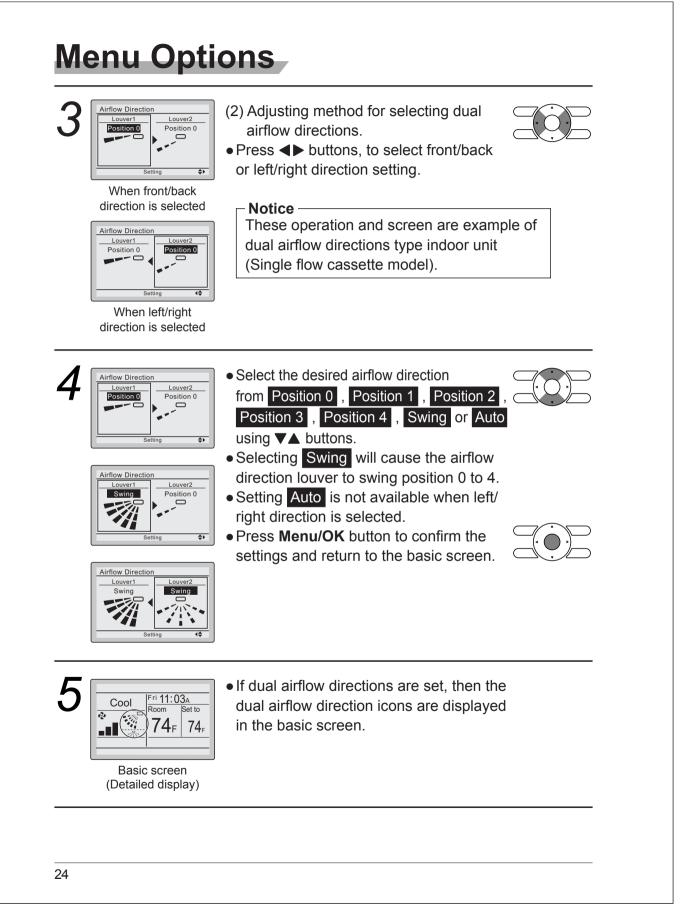
Note: Available setting items vary with the indoor unit model.

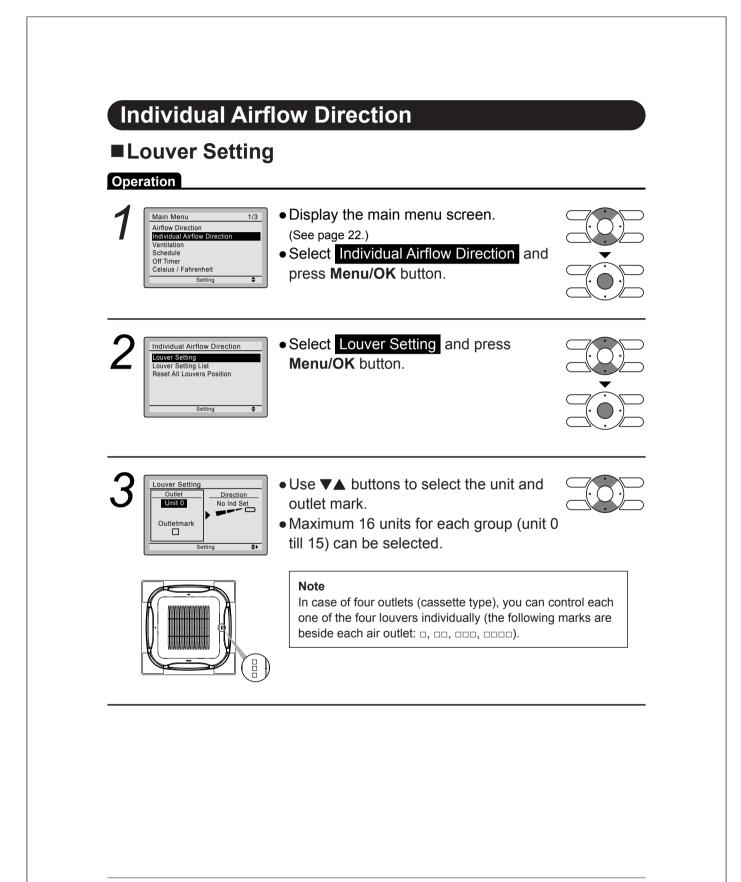


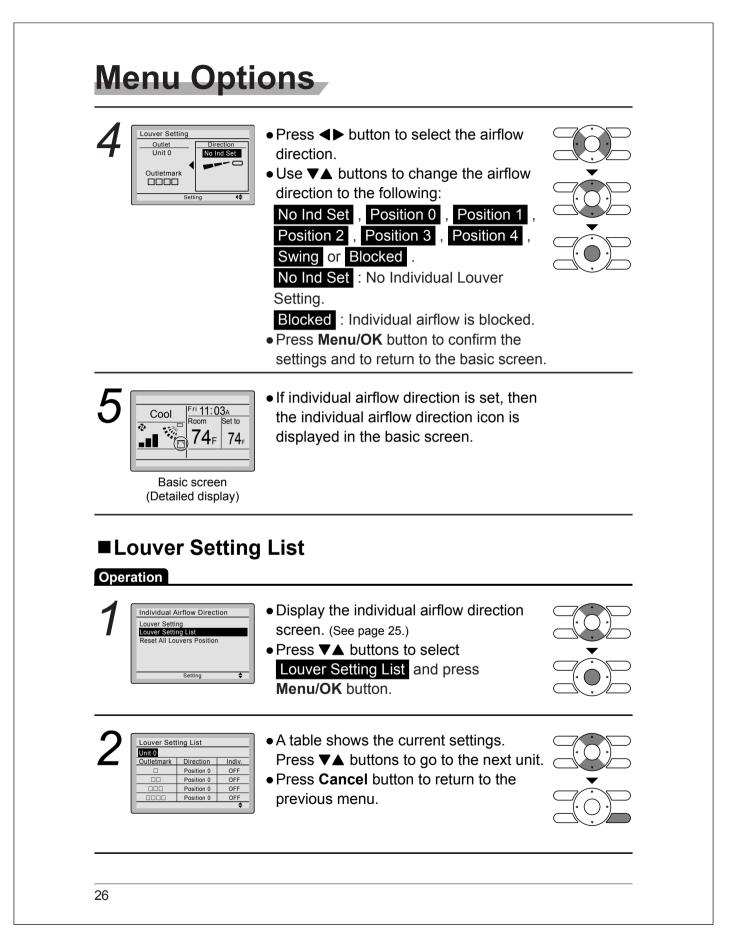
22

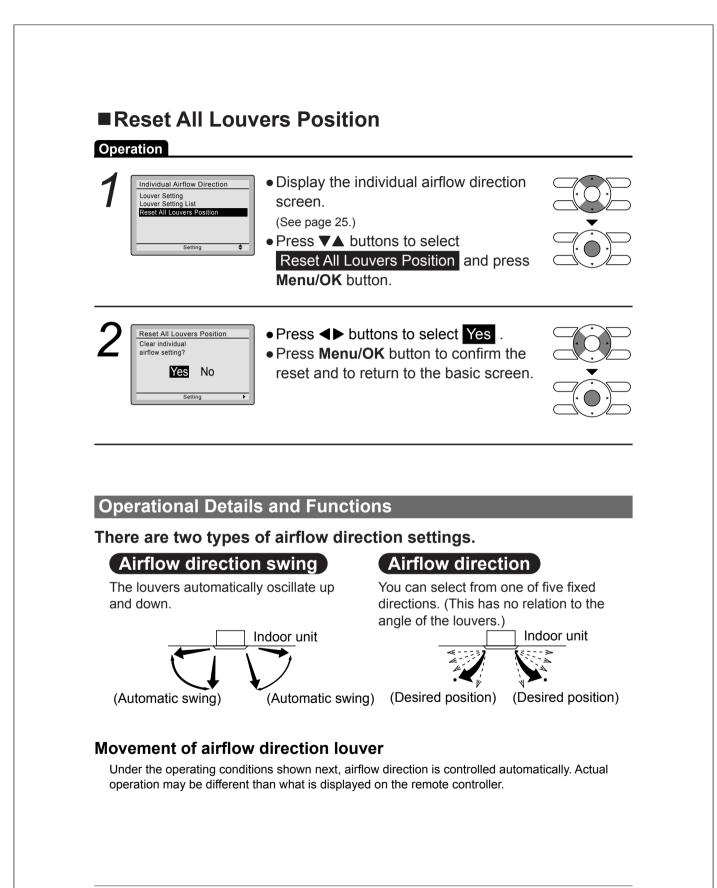
peration		
Cool Set to Cool Set to T Basic screen	• Press Menu/OK button.	
2 Main Menu Airflow Direction Individual Airflow Direct Ventilation Schedule	• The main menu screen is displayed.	
Off Timer Celsius / Fahrenheit Setting Main menu se	Creen → Instructions for navigating the main menu will appear.	
3	<ul> <li>Selecting items from the main menu.</li> <li>1. Press ▼▲ buttons to select the desired item to be set.</li> </ul>	
	<ol><li>Press Menu/OK button to display the details for the selected item.</li></ol>	
4	<ul> <li>To go back to the basic screen from the main menu, press Cancel button.</li> </ul>	
Note		
	pressed for 5 minutes during configuration, the controller will au c screen.	Itomatically











#### Menu Options • Room temperature is higher than the remote controller's setpoint (in heating operation). Operating When defrosting (in heating operation). condition (The airflow discharges horizontally to avoid creating a draft for the room occupants.) • Under continuous operation with the airflow discharging horizontally. Ventilation Ventilation screen display properties Operation Display the main menu screen. 1/3 Main Menu Airflow Direction Individual Airflow Direction (See page 22.) Ventilatio Schedule Off Timer Press ▼▲ buttons to select Ventilation Celsius / Fahrenheit on the main menu screen. (For models with no ventilation function, Ventilation will not be displayed on the main Ventilation menu screen.) Ventilation Rate ntilation Mode Press Menu/OK button to display the ventilation screen.

# Changing the ventilation rate

Operation

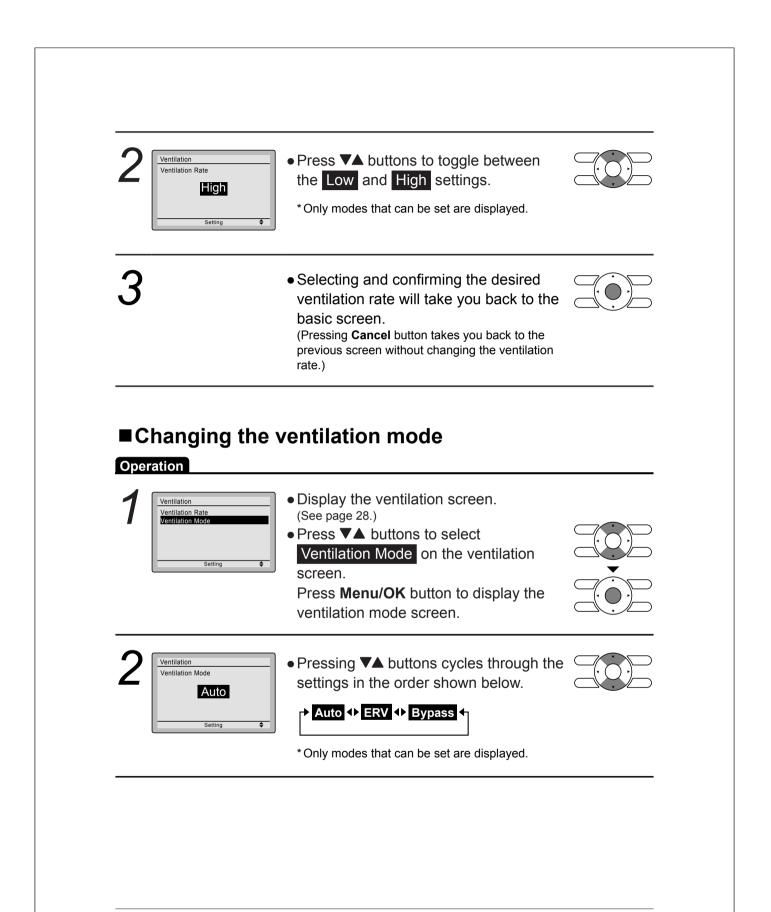
Ventilation Ventilation Rate

Setting

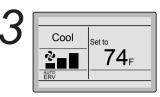
- Navigate to the ventilation screen (see above).
  - Press VA buttons to select
     Ventilation Rate on the ventilation screen.

Press **Menu/OK** button to display the ventilation rate screen.





# Menu Options



• Selecting and confirming the desired ventilation mode will take you back to the basic screen. (Pressing **Cancel** button takes you back to the previous screen without changing the ventilation mode.)

## **Ventilation Mode**

Auto mode	Using information from the indoor unit (cool, heat, fan, and setpoint) and the energy recovery ventilator unit (indoor and outdoor temperatures), the ventilation mode is automatically changed between ERV and Bypass.
ERV mode	Outside air is passed through the ERV core and is supplied to the conditioned space.
Bypass mode	Outside air is supplied to the conditioned space without passing through the ERV core.

# Schedule

# Setting the schedule

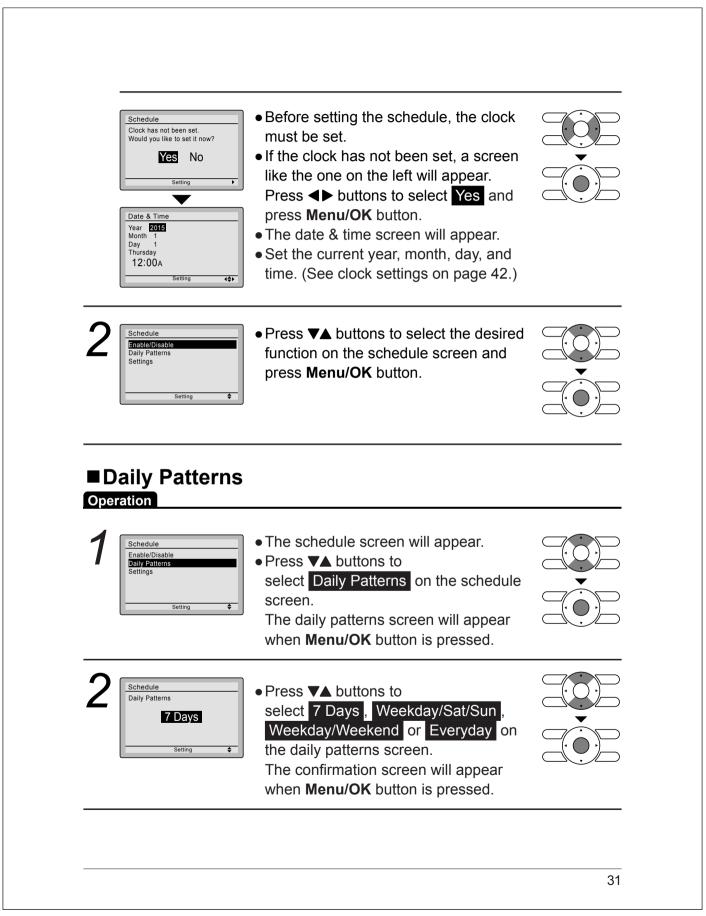
**Operation** The schedule will disappear when a multizone controller is connected, but can be re-enabled by the system installer.

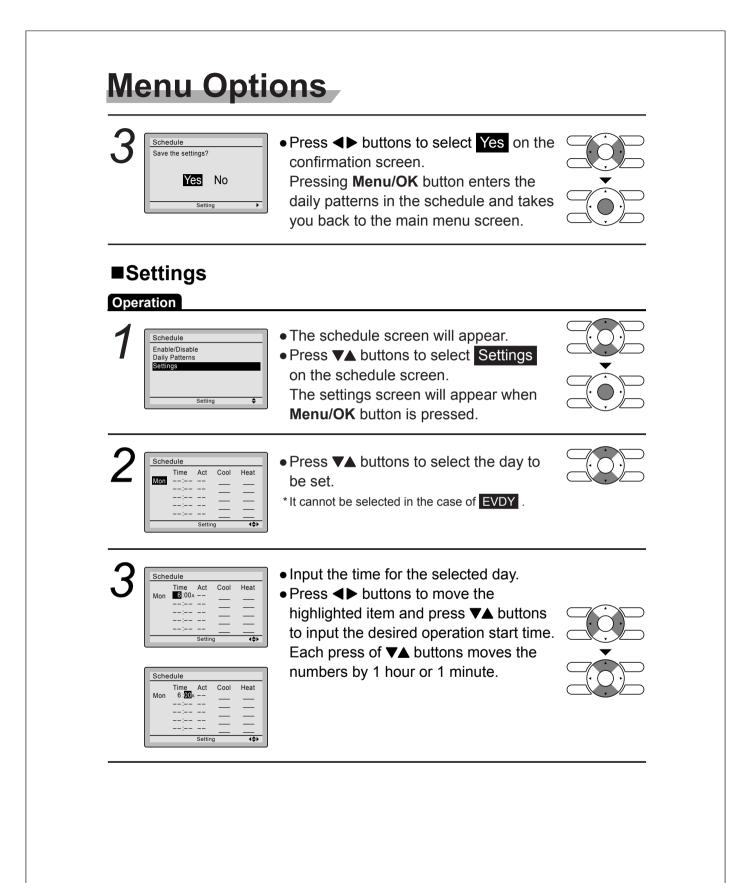


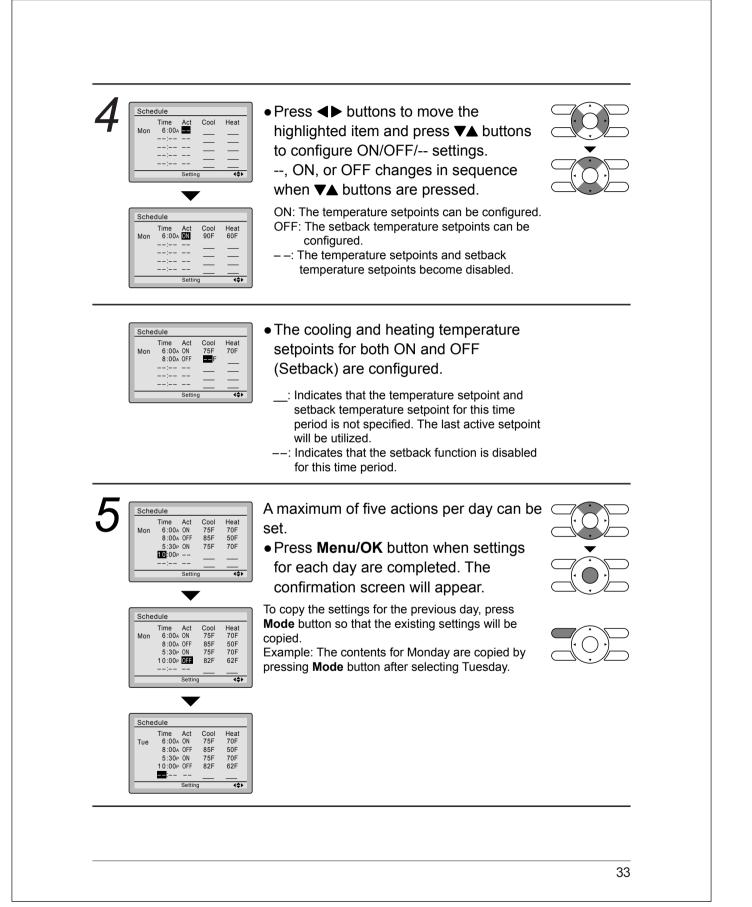
- Display the main menu screen. (See page 22.)
- Press ▼▲ buttons to select Schedule Press Menu/OK button to display the schedule screen.

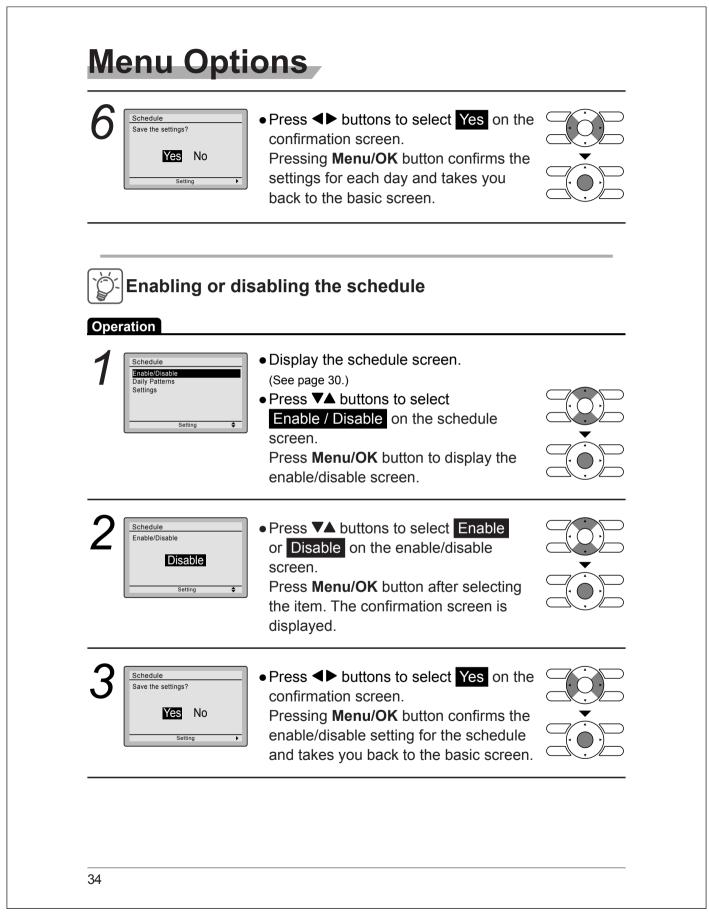


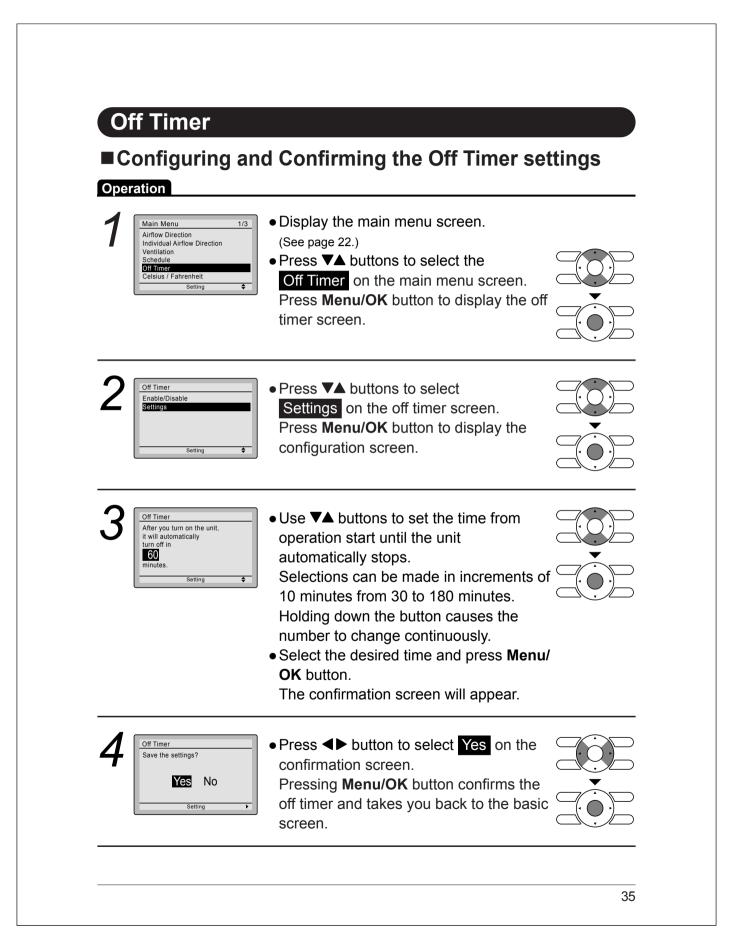




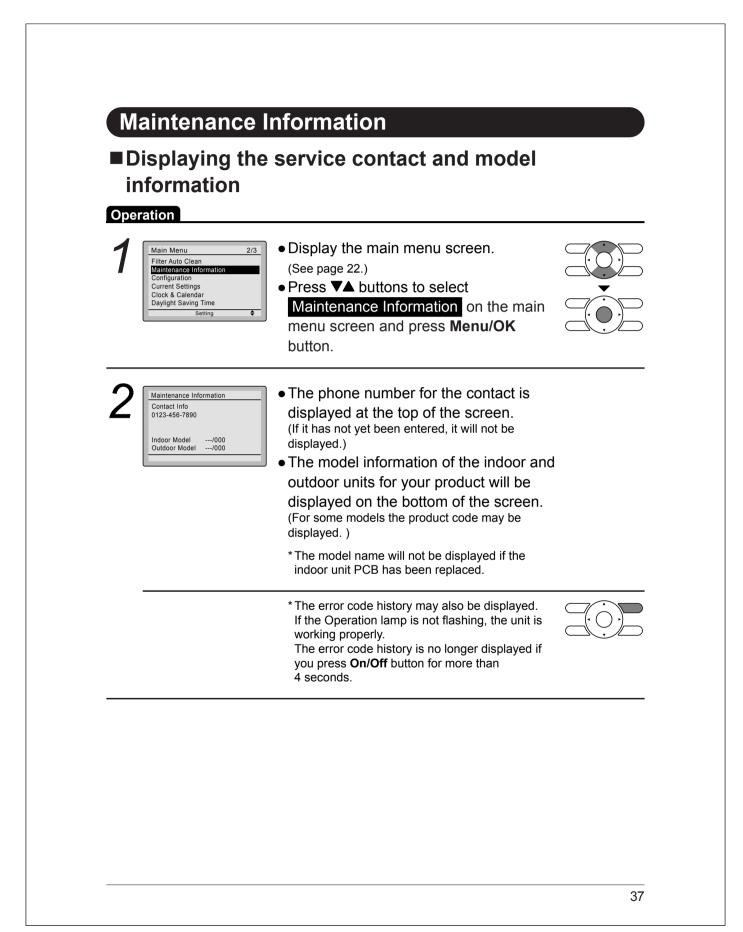






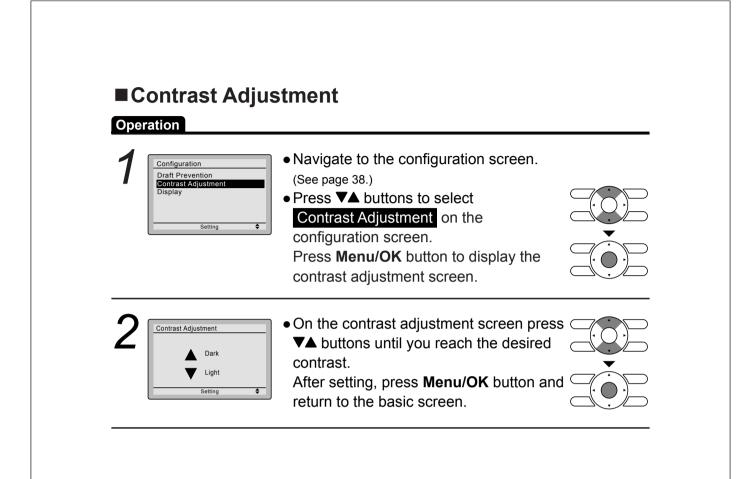


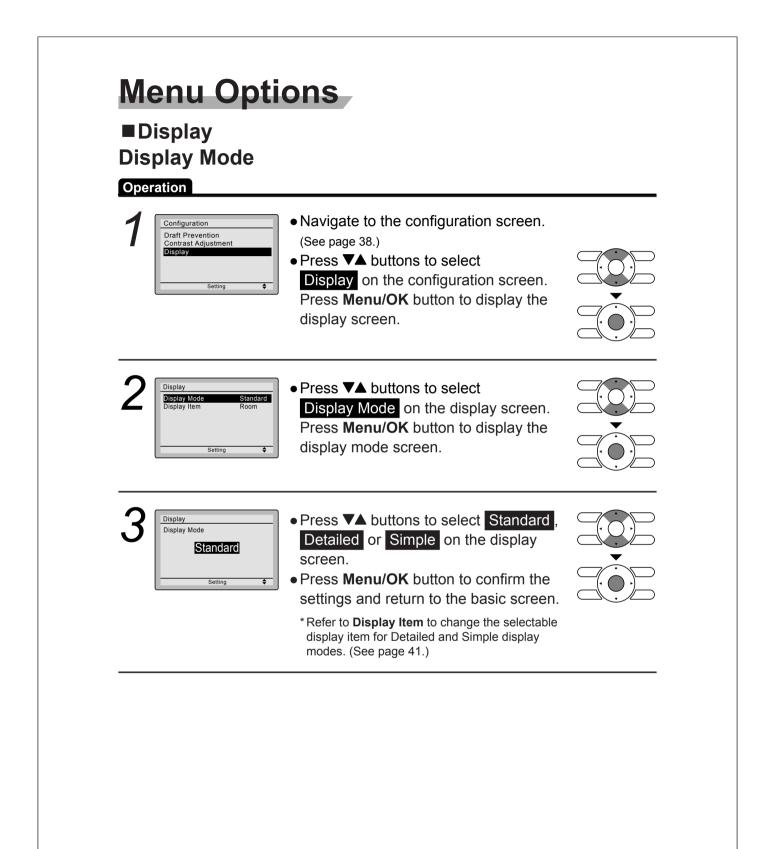
Enabling or di	sabling the off timer	
Operation		
Off Timer Enable/Disable Settings Setting \$	<ul> <li>Navigate to the off timer screen. (See page 35.)</li> <li>Press V▲ buttons to select Enable/Disable on the off timer screen. Press Menu/OK button to display the enable/disable screen.</li> </ul>	
2 Off Timer Enable/Disable Disable Setting \$	<ul> <li>Press VA buttons to select Enable or Disable on the enable/disable screen.</li> <li>Press Menu/OK button after selecting the item. Then the confirmation screen is displayed.</li> </ul>	
3 Off Timer Save the settings? Yes No Setting	<ul> <li>Press &lt; button to select Yes on the confirmation screen.</li> <li>Pressing Menu/OK button confirms the enable/disable for the off timer and takes you back to the basic screen.</li> </ul>	



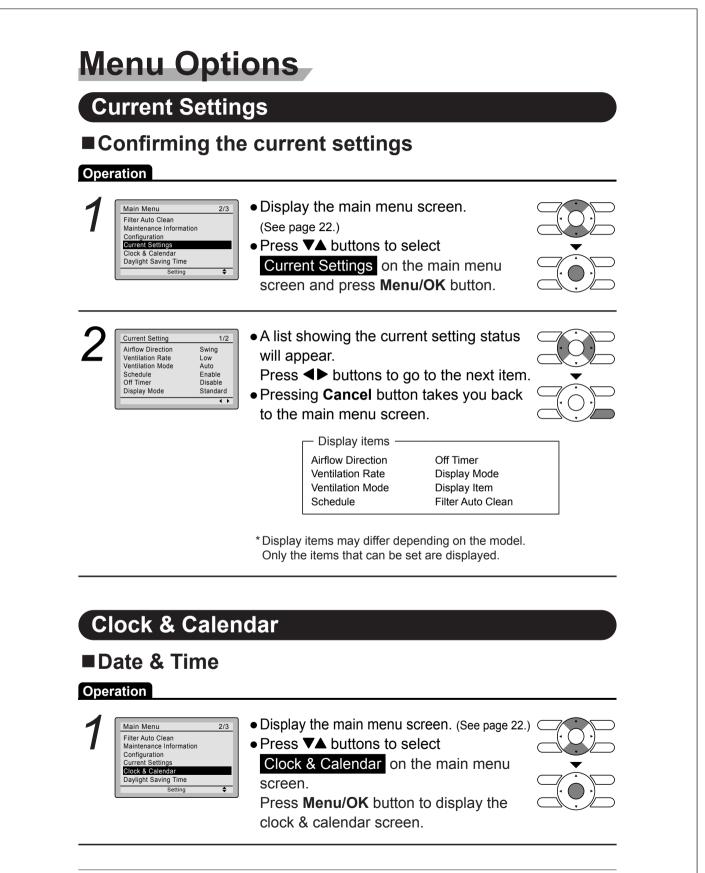
Г

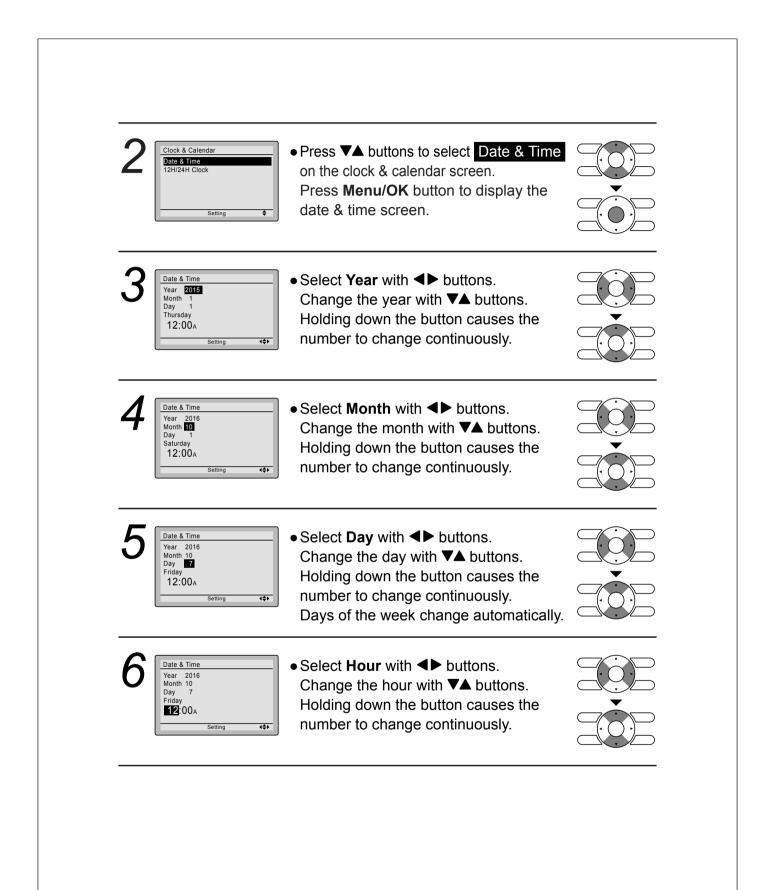
Configuratior	1	
Draft Preventi Operation	on	
Main Menu     2/3       Filter Auto Clean     Maintenance Information       Configuration     Configuration       Current Settings     Clock & Calendar       Daylight Saving Time     Setting	<ul> <li>Display the main menu screen. (See page 22.)</li> <li>Press ▼▲ buttons to select Configuration and press Menu/OK button.</li> </ul>	
2 Configuration Draft Prevention Contrast Adjustment Display Setting \$	<ul> <li>Press ▼▲ buttons to select</li> <li>Draft Prevention and press</li> <li>Menu/OK button.</li> </ul>	
3 Draft Prevention Enable/Disable Disable Setting \$	<ul> <li>Press ▼▲ buttons to select</li> <li>Enable or Disable .</li> <li>The confirmation screen will appear when Menu/OK button is pressed.</li> </ul>	
A Draft Prevention Save the settings? Yes No Setting	<ul> <li>Press &lt; buttons to select Yes.</li> <li>Press Menu/OK button to confirm the settings and to return to the basic screen.</li> </ul>	

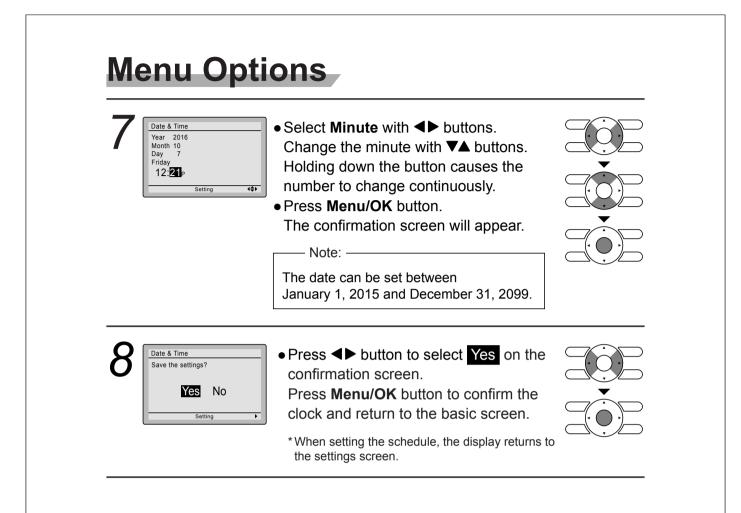




Display Item	
Operation 1 Display Display Mode Standard Display Item Room Setting \$	<ul> <li>(See page 40.)</li> <li>Press ▼▲ buttons to select</li> <li>Display Item on the display screen</li> </ul>
2 Display Display Item Room Temp	Pressing ▼▲ buttons displays the following.     Room Temp
Oting	<ul> <li>* Some models may not display these items even if they are selected.</li> <li>Be sure to read the following notes regarding display of room temperature and outside air temperature.</li> </ul>
	Room TempThe temperature at the remote controller. The temperature that is detected may be affected by the location of the
	remote controller. Outside Air Temp 
	location of the unit (for example, if it is in direct sunlight) and unit operation during defrosting.
	• After setting, press <b>Menu/OK</b> button to confirm settings and return to the basic screen.





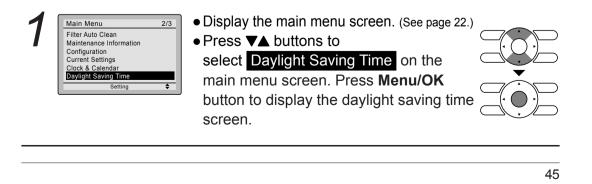


$\bullet$
•
$\sim$ $-$
<ul><li>✓</li></ul>

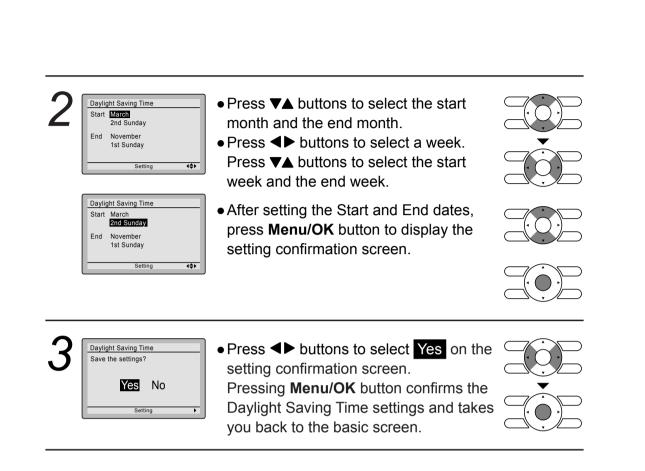
# Daylight Saving Time

# ■How to display Daylight Saving Time

# Operation



Enabling or disabling	ng Daylight Saving Time	
Operation 1 Daylight Saving Time Enable/Disable DST Dates Setting \$	<ul> <li>Display the daylight saving time screen. (See page 45.)</li> <li>Press ▼▲ buttons to select Enable/Disable on the daylight saving time screen. Press Menu/OK button to display the enable/disable screen.</li> </ul>	
2 Daylight Saving Time Enable/Disable Disable Setting \$	<ul> <li>Press VA buttons to select Enable or Disable on the enable/disable screen.</li> <li>Press Menu/OK button to display the setting confirmation screen.</li> </ul>	
3 Daylight Saving Time Save the settings? Yes No Setting	<ul> <li>Press &lt;&gt; buttons to select Yes on the setting confirmation screen.</li> <li>Pressing Menu/OK button confirms the daylight saving time enable/disable setting and takes you back to the basic screen.</li> </ul>	
Setting the date		
Daylight Saving Time Enable/Disable DST Dates	<ul> <li>Display the daylight saving time screen. (See page 45.)</li> <li>Press ▼▲ buttons to select</li> <li>DST Dates on the daylight saving time screen. Press Menu/OK button to display the duration setting screen.</li> </ul>	

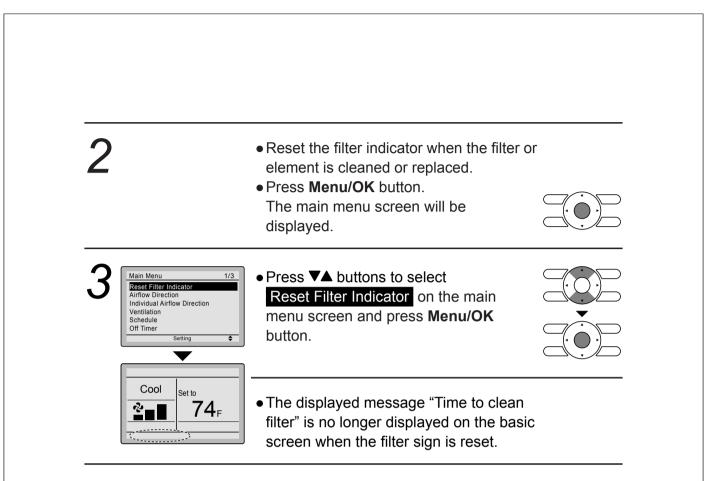


# When Daylight Saving Time is enabled

When the time in the remote controller reaches 2:00 a.m. on the specified start date, the clock is automatically set forward by one hour. When the time in the remote controller reaches 2:00 a.m. on the end date, the clock is automatically set back by one hour.

Languag	e	
Selectab	le Languages	
Operation		
Main Menu Language Setting	<ul> <li>Display the main menu screen. (See page 22.)</li> <li>Press ▼▲ buttons to select Language on the main menu screen and press Menu/OK button.</li> </ul>	
	<ul> <li>Press ▼▲ buttons to select the preferred language on the language screen.</li> <li>English/Français/Español are available</li> <li>Press Menu/OK button to confirm the</li> </ul>	

# Maintenance



# Maintaining the Unit and LCD Display

- Wipe the LCD and surface of the remote controller with a dry cloth when they become dirty.
- If the dirt on the surface cannot be removed, soak the cloth in neutral detergent diluted with water, squeeze the cloth tightly, and clean the surface. Wipe the surface with a dry cloth.

## Note

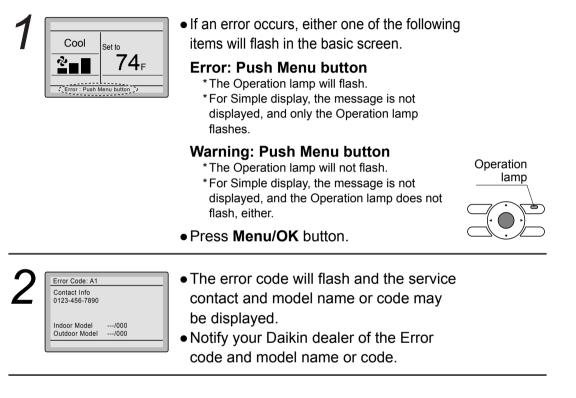
• Do not use any paint thinner, organic solvent, or strong acid.

# **Reference Information**

# Error Code Display

# Contact your Daikin dealer in the following cases

# Operation



# After-sale Service

# 🕂 Warning

• Do not relocate or reinstall the remote controller by yourself. Improper installation may result in electric shocks or fire. Consult your Daikin dealer.

# ■Advise your Daikin Dealer of the following items

- Model name
- Date of installation
- Failure conditions: As precise as possible.
- Your address, name, and telephone number

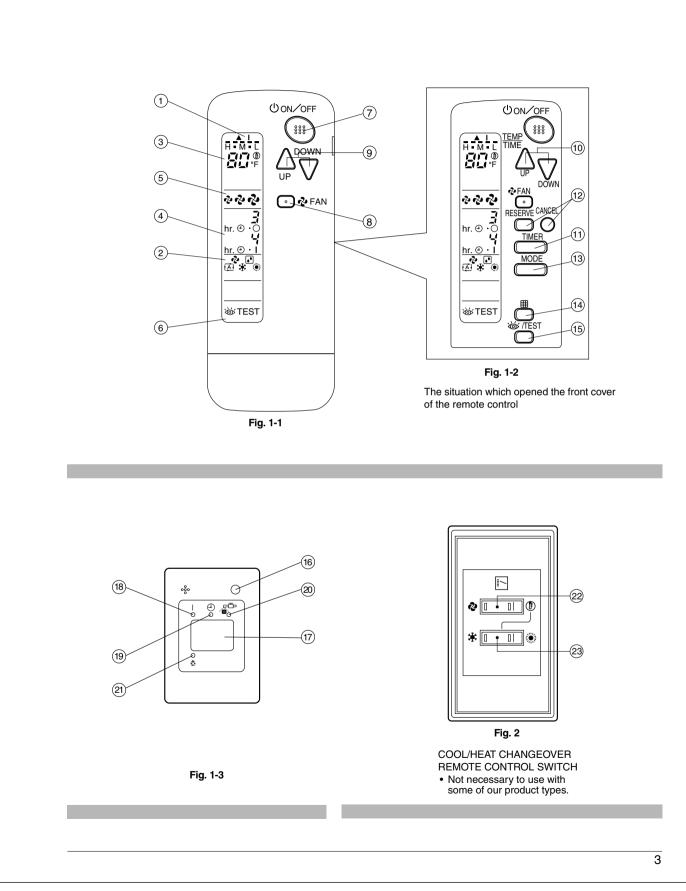
# ■ Repairs after Warranty Period

Consult your Daikin dealer.

# ■Inquiry about After-sale Service

Contact your Daikin dealer.

# 13.6 With <BRC082A43> Wireless Remote Controller



## CONTENTS

- 1. SAFETY CONSIDERATIONS ......4
- 2. NAMES AND FUNCTIONS OF THE OPERATING SECTION ......4

- 5. NOT MALFUNCTION OF THE AIR CONDITIONER ......9

# 1. SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this operation manual along with the installation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of warning, caution and note symbols.

- WARNING ...... Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION ....... Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices.
- NOTE.....Indication situation that may result in equipment or property-damage-only accidents.

Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

# -A warning

- It is not good for your health to expose your body to the air flow for a long time.
- In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.
- Ask your dealer for installation of the air conditioner. Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- Ask your dealer for improvement, repair, and maintenance. Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- Do not put a finger, a rod or other objects into the air inlet or outlet. As the fan is rotating at high speed, it will cause injury.
- Ask your dealer to move and reinstall the air conditioner. Incomplete installation may result in a water leakage, electric shock, and fire.

- Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.
- Do not operate the air conditioner with a wet hand. Otherwise, you could receive an electric shock.

## 

- Do not use the air conditioner for other purposes. In order to avoid any quality deterioration, do not use the unit for cooling precision instruments, food, plants, animals or works of art.
- To avoid oxygen deficiency, ventilate the room sufficiently if equipment with burner is used together with the air conditioner.
- Do not allow a child to mount on the unit or avoid placing any object on it.

Falling or tumbling may result in injury.

- Do not let children play on and around the unit. If they touch the unit carelessly, it may result in injury.
- Do not place a flower vase and anything containing water. Water may enter the unit, causing an electric shock or fire.
- Do not operate the air conditioner when using a room fumigation - type insecticide. Failure to observe could cause the chemicals to become deposited in the unit which cauld and agent the health of
- deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- Never use flammable spray such as hair spray, lacquer or paint near the unit.
   It may cause a fire.

## . NAMES AND FUNCTIONS OF THE OPERATING SECTION (Fig. 1-1~3, 2)

1	DISPLAY "▲""I" (SIGNAL TRANSMISSION)		
1	This lights up when a signal is being transmitted.		
2	DISPLAY " 🗞 " " 🚺 " " 🖽 " " 🗰 " " 🔅 "		
	(OPERATION MODE)		
2	This display shows the current OPERATION MODE. For		
	VRV system, " [ " is not installed.		
3	DISPLAY " 한가요 " (SET TEMPERATURE)		
	This display shows the set temperature.		
_	DISPLAY " ʰr.ː 한 친 ʰr.ː 한 친 " (PROGRAMMED TIME)		
4	This display shows PROGRAMMED TIME of the sys-		
	tem start or stop.		
5	DISPLAY " 🖓 " " 🖓 " " 🦓 " (FAN SPEED)		
-	This display shows the set fan speed.		
	DISPLAY "WTEST" (INSPECTION/ TEST OPERA-		
6	TION)		
-	When the INSPECTION/TEST OPERATION BUTTON		
	is pressed, the display shows the system mode is in.		
_	ON/OFF BUTTON		
7	Press the button and the system will start. Press the button again and the system will stop.		

	FAN SPEED CONTROL BUTTON		
8	Press this button to select the fan speed, HIGH, MEDIUM or LOW, of your choice.		
	TEMPERATURE SETTING BUTTON		
9	Use this button for SETTING TEMPERATURE. (Operates with the front cover of the remote controller closed.)		
	PROGRAMMING TIMER BUTTON		
10	Use this button for programming "START and/or STOP" time. (Operates with the front cover of the remote controller opened.)		
11	TIMER MODE START/STOP BUTTON		
••	Refer to page 7.		
12	TIMER RESERVE/CANCEL BUTTON		
12	Refer to page 7.		
13	OPERATION MODE SELECTOR BUTTON		
15	Press this button to select OPERATION MODE.		
	FILTER SIGN RESET BUTTON		
14	Refer to the section of MAINTENANCE in the operation manual attached to the indoor unit.		
	INSPECTION/TEST OPERATION BUTTON		
15	This button is pressed for inspection or test operation. Do not use for normal operation.		
	EMERGENCY OPERATION SWITCH		
16	This switch is readily used if the remote controller does not work.		
17	RECEIVER		
17	This receives the signals from the remote controller.		
	OPERATING INDICATOR LAMP (Red)		
18	This lamp stays lit while the air conditioner runs. It flashes when the unit is in trouble.		
19	TIMER INDICATOR LAMP (Green)		
19	This lamp stays lit while the timer is set.		
20	AIR FILTER CLEANING TIME INDICATOR LAMP (Red)		
20	Lights up when it is time to clean the air filter.		
	DEFROST LAMP (Orange)		
21	Lights up when the defrosting operation has started. (For cooling only type this lamp does not turn on.)		
	FAN/AIR CONDITIONING SELECTOR SWITCH		
22	Set the switch to " 🎝 " (FAN) for FAN and " 🅞 " (A/C) for HEAT or COOL.		
	COOL/HEAT CHANGEOVER SWITCH		
23	Set the switch to " 🔆 " (COOL) for COOL and " 🔅 " (HEAT) for HEAT.		

## 

- For the sake of explanation, all indications are shown on the display in Fig. 1-1 contrary to actual running situations.
- Fig. 1-2 shows the remote controller with the front cover opened.
- Fig. 2 shows this remote controller can be used in conjunction with the one provided with the VRV system.
- If the air filter cleaning time indicator lamp lights up, clean the air filter as explained in the operation manual provided with the indoor unit.
- After cleaning and reinstalling the air filter, press the filter sign reset button on the remote controller. The air filter cleaning time indicator lamp on the receiver will go out.
- The DEFROST lamp will flash when the power is turned on. This is not a malfunction.

## 3. HANDLING FOR WIRELESS REMOTE CONTROLLER

- Precautions in handling remote controller
- Direct the transmitting part of the remote controller to the receiving part of the air conditioner.
   If something blocks the transmitting and receiving path of the indoor unit and the remote controller as curtains, it will not operate.

Receiver 2 short beeps from the receiver indicates that the transmission is properly done.

- Transmitting distance is approximately 23 ft..
- Do not drop or get it wet. It may be damaged.
- Never press the button of the remote controller with a hard, pointed object.

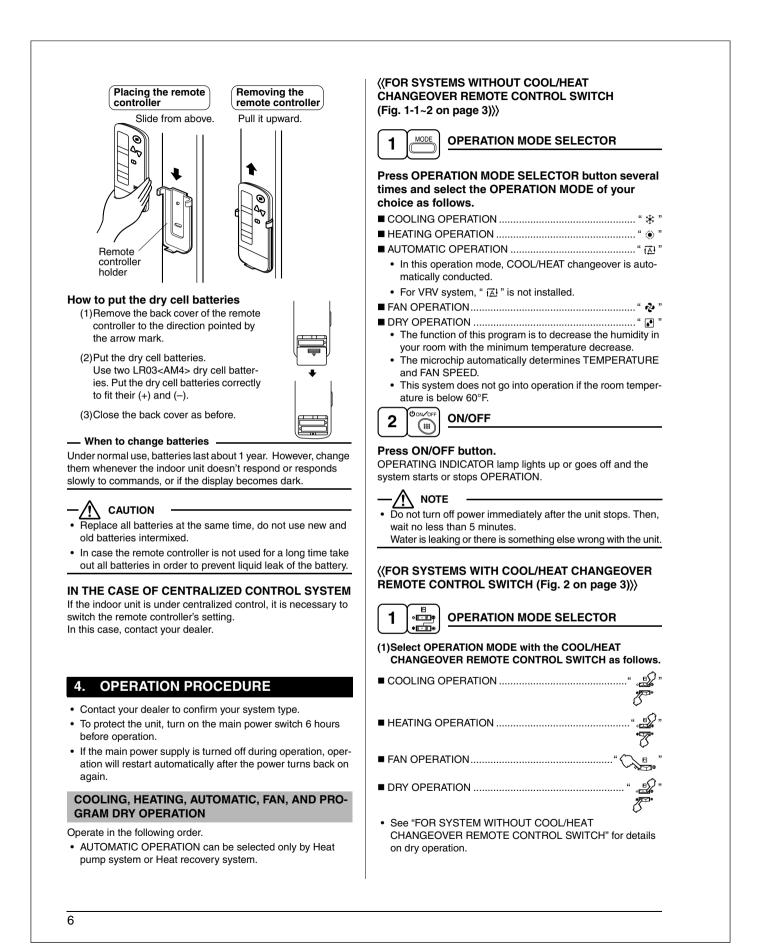
The remote controller may be damaged.

• Installation site

It is possible that signals will not be received in rooms that have electronic fluorescent lighting. Please consult with the salesman before buying new fluorescent lights. If the remote controller operated some other electrical apparatus, move that machine away or consult your dealer.

# Placing the remote controller in the remote controller holder

Install the remote controller holder to a wall or a pillar with the attached screw. (Make sure it transmits.)



## (2) Press OPERATION MODE SELECTOR button several

times and select " 💽 ".

(This operation is only available during dry operation.)



#### Press ON/OFF button.

OPERATING INDICATOR lamp lights up or goes off and the system starts or stops OPERATION.

 Do not turn off power immediately after the unit stops. Then, wait no less than 5 minutes.

Water is leaking or there is something else wrong with the unit.

#### [EXPLANATION OF HEATING OPERATION] DEFROST OPERATION

- As the frost on the coil of an outdoor unit increase, heating effect decreases and the system goes into DEFROST OPERATION.
- The fan operation stops and the DEFROST lamp of the indoor unit goes on.
- After 6 to 8 minutes (maximum 10 minutes) of DEFROST OPERATION, the system returns to HEATING OPERATION.

#### Heating capacity & Outdoor air temperature

- Heating capacity drops as outdoor air temperature lowers. If feeling cold, use another heater at the same time as this air conditioner.
- Hot air is circulated to warm the room. It will take some time from when the air conditioner is first started until the entire room becomes warm. The internal fan automatically turns at low speed until the air conditioner reaches a certain temperature on the inside. In this situation, all you can do is wait.
- If hot air accumulates on the ceiling and feet are left feeling cold, it is recommended to use a circulator. For details, contact the place of purchase.

#### ADJUSTMENT

For programming TEMPERATURE and FAN SPEED, follow the procedure shown below.



## TEMPERATURE SETTING

Press TEMPERATURE SETTING button and program the setting temperature.



Each time this button is pressed, setting temperature rises 1°F.

Each time this button is pressed, setting temperature lowers  $1\,{}^\circ\text{F}.$ 

#### In case of automatic operation



Each time this button is pressed, setting temperature shifts to "H" side.

Each time this button is pressed, setting temperature shifts to "L" side.

					[°F]
	Н	•	М	•	L
Setting temperature	77	73	71	70	66

• The setting is impossible for fan operation.

The setting temperature range of the remote controller is 60°F to 90°F.



#### Press FAN SPEED CONTROL button.

High, Medium or Low fan speed can be selected. The microchip may sometimes control the fan speed in order to protect the unit.

#### **PROGRAM TIMER OPERATION**

Operate in the following order.

- The timer is operated in the following 2 ways.
   Programming the stop time (⊕ ○)
   .... The system stops operating after the set time has elapsed.
- Programming the start time  $(\bigcirc \cdot |)$
- .... The system starts operating after the set time has elapsed.
- The timer can be programmed a maximum of 72 hours.
- The start and the stop time can be simultaneously programmed.



## TIMER MODE START/STOP

# Press the TIMER MODE START/STOP button several times and select the mode on the display.

The display flashes. For setting the timer stop .... " $\oplus \cdot \bigcirc$ " For setting the timer start .... " $\oplus \cdot |$ "



## PROGRAMMING TIMER

# Press the PROGRAMMING TIMER button and set the time for stopping or starting the system.



3

4

 $\cap$ 

When this button is pressed, the time advances by 1 hour.

When this button is pressed, the time goes backward by 1 hour.

#### 

#### Press the TIMER RESERVE button.

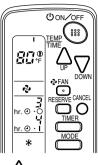
The timer setting procedure ends.

The display changes from flashing light to a constant light.

## TIMER CANCEL

Press the TIMER CANCEL button to cancel programming. The display vanishes.

## For example.



When the timer is programmed to stop the system after 3 hours and start the system after 4 hours, the system will stop after 3 hours and then 1 hour later the system will start.

## 

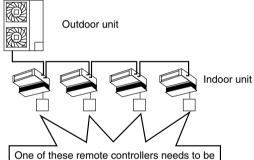
After the timer is programmed, the display shows the remaining time.

#### HOW TO SET MASTER REMOTE CONTROLLER (For VRV system)

• When the system is installed as shown below, it is necessary to designate the master remote controller.

#### For Heat pump system

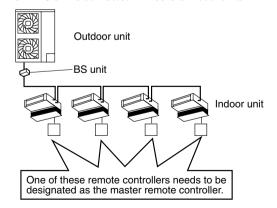
When 1 outdoor unit is connected with several indoor units.



designated as the master remote controller.

#### For Heat recovery system

When 1 BS unit is connected with several indoor units.



• Only the master remote controller can select HEATING, COOLING or AUTOMATIC OPERATION.

When the indoor unit with master remote controller is set to "COOL", you can switch over operation mode between "FAN", "DRY" and "COOL".

When the indoor unit with master remote controller is set to "HEAT", you can switch over operation mode between "FAN" and "HEAT".

When the indoor unit with master remote controller is set to "FAN", you cannot switch operation mode.

1 long beep ......When attempting settings than that consented above. Only with Heat recovery system, you can

set the indoor unit to AUTOMATIC. Attempting to do so.

#### How to designate the master remote controller Operate in the following order.



#### Continuously press the OPERATION MODE SELEC-TOR button for 4 seconds.

The displays showing " ④ " of all slave indoor unit connected to the same outdoor unit or BS unit flash.



Press the OPERATION MODE SELECTOR button to the indoor unit that you wish to designate as the master remote controller. Then designation is completed. This indoor unit is designated as the master remote controller and the display showing " $\oplus$ " vanishes.

• To change settings, repeat steps (1) and (2).

#### EMERGENCY OPERATION

When the remote controller does not work due to battery failure or the absence there of, use this switch which is located beside the discharge grille on the indoor unit. When the remote controller does not work, but the battery low indicator on it is not lit, contact your dealer.



#### [START]



# Press the EMERGENCY OPERATION switch.

The machine runs in the previous mode.

## [STOP]



Press the EMERGENCY OPERATION switch again.

PRECAUTIONS FOR GROUP CONTROL SYSTEM OR 2 REMOTE CONTROLLERS CONTROL SYSTEM

This system provides 2 other control systems beside individual control (1 remote controller controls 1 indoor unit) system. Confirm the following if your unit is of the following control system type.

- Group control system 1 remote controller controls up to 16 indoor units. All indoor units are equally set.
- 2 remote controllers control system
   2 remote controllers control 1 indoor unit. (In case of group control system, 1 group of indoor units) The unit follows individual operation.

# 

- Cannot have 2 remote controllers control system with only wireless remote controllers. (It will be a 2 remote controllers control system having 1 wired and 1 wireless remote controllers.)
- Under 2 remote controllers control system, wireless remote controller cannot control timer operation.
- Only the operating indicator lamp out of 3 other lamps on the indoor unit display functions.
- Contact your dealer in case of changing the combination or setting of group control and 2 remote controllers control systems.

## 5. NOT MALFUNCTION OF THE AIR CONDITIONER

The following symptoms do not indicate air conditioner malfunction.

- THE SYSTEM DOES NOT OPERATE
- The system does not restart immediately after the ON/ OFF button is pressed.

If the OPERATING INDICATOR lamp lights, the system is in normal condition. It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.

• The system does not restart immediately when TEM-PERATURE SETTING button is returned to the former position after pushing the button.

It does not restart immediately because a safety device operates to prevent overload of the system. After 3 minutes, the system will turn on again automatically.

- If the reception beep is rapidly repeated 3 times. (It sounds only 2 times when operating normally.) Control is set to the optional controller for centralized control.
- If the DEFROST lamp on the indoor unit's display is lit when heating is started.

This indication is to warn against cold air being blown from the unit. There is nothing wrong with the equipment.

- The unit stops operation from time to time.
- With "U4" "U5" displayed on the remote controller, the unit stops, but it resumes operation in a few minutes. Since electric noises produced from other equipment than the air conditioner interrupt communication between the units, the unit stops operation.

If these electric noises subside, operation is restarted automatically.

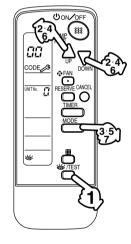
- COOLING / HEATING changeover is impossible.
- If the indoor unit emits a receiving sound "1 long beep". It is because the indoor unit under the control of operation changeover is set to the mode that cannot be selected.

- Display Indicates only a part.
- Even if the unit is in operation, the display shows only operational indication. Even if the indication is shown, the indication other than operation disappears after a while. It is because the remote controller is set to multi-system.
- Display disappears or shows all indication.
- It happens when the button of the remote controller is pressed.
- It is because the battery is dead.
- No favorable cooling is achieved.
- The unit is in DRY OPERATION.
   DRY OPERATION is carried out to perform operation such that the room temperature is not decreased as much as possible.

## 6. HOW TO DIAGNOSE TROUBLE SPOTS

#### EMERGENCY STOP

When the air conditioner stops in emergency, the run lamp on the indoor unit starts blinking. Take the following steps yourself to read the malfunction code that appears on the display. Contact your dealer with this code. It will help pinpoint the cause of the trouble, speeding up the repair.





# Press the INSPECTION/TEST OPERATION button to select the inspection mode " 🖓 ".

" 👖 appears on display and blinks. "UNIT No." lights up.

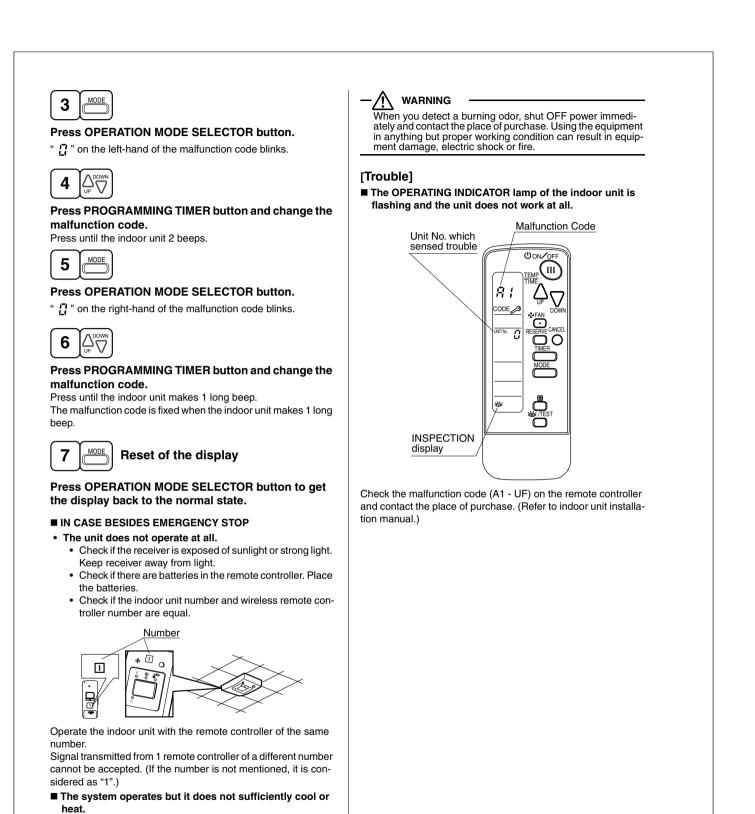


# Press PROGRAMMING TIMER button and change the unit number.

Press to change the unit number until the indoor unit beeps and perform the following operation according to the number of beeps.

## Number of beeps

- 3 short beeps ...... Perform all steps from (3) to (6).
- 1 short beep..... Perform  $\textcircled{\textbf{3}}$  and  $\textcircled{\textbf{6}}$  steps.
- 1 long beep ..... Normal state



If the set temperature is not proper. (See page 7)
If the FAN SPEED is set to LOW SPEED. (See page 7)

Contact the place of purchase in the following case.

# 14. Options14.1 Option List14.1.1 Indoor Unit

#### FTX Series

	Option Name		09/12 Class	15 Class	18/24 Class	
1	Wireless LAN connection adaptor		BRP072A43 + KRP067A41	BRP072A43 + KRP980B2	BRP072A43	
2	Wired remote controller ★1		BRC944B2 + KRP067A41	BRC944B2 + KRP980B2	BRC944B2	
3	Wired remote controller cord Length 9.8 ft (3m)		BRCW901A03			
3	(shielded wire)			BRCW901A08		
4	Wiring adaptor for timer clock / remote controller ★2 (normal open pulse contact / normal open contact)		KRP413BB1S + KRP067A41	KRP413BB1S + KRP980B2	KRP413BB1S	
5	Central remote controller ★3		DCS302C71			
6	Unified ON/OFF controller ★3		DCS301C71			
7	Schedule timer controller ★3		DST301BA61			
8	Interface adaptor for DIII-NET (residential air conditioner)		KRP928BB2S + KRP067A41	KRP928BB2S + KRP980B2	KRP928BB2S	
9	Interface adaptor for residential air conditioner		KRP067A41	KRP980B2	—	
10	10 Titanium apatite deodorizing filter (without frame)		KAF970A46 ★4			
11	Remote controller loss prevention with chain		KKF9	36A4	KKF910A4	

Notes: ★1 A wired remote controller cord BRCW901A03 or BRCW901A08 is necessary.

- $\star$ 2 Timer clock and other device ; obtained locally.
- ★3 An interface adaptor (KRP928BB2S) is also required for each indoor unit.
- ★4 Standard accessory.

#### **FVXS Series**

	Option Name	Model Name
1	Wireless LAN connection adaptor	BRP072A43
2	Wiring adaptor for timer clock / remote controller ★1 (normal open pulse contact / normal open contact)	KRP413BB1S
3	Central remote controller ★2	DCS302C71
4	Unified ON/OFF controller ★2	DCS301C71
5	Schedule timer controller ★2	DST301BA61
6	Interface adaptor for DIII-NET (residential air conditioner)	KRP928BB2S
7	Titanium apatite deodorizing filter (without frame)	KAF968A42 or KAF968B42
8	Remote controller loss prevention with chain	KKF910A4

**Notes:**  $\star 1$  Timer clock and other device ; obtained locally.

★2 An interface adaptor (KRP928BB2S) is also required for each indoor unit.

#### **FDMQ Series**

	Option Name		Model Name	
1	Remote controller (required)	Wired type1 ★1	BRC1E73	
		Wireless type	BRC082A43	
2	Central remote controller		DCS302C71	
3	Unified ON/OFF controller		DCS301C71	
4	Schedule timer controller		DST301BA61	
5	Remote sensor		KRCS01-4B	
6	Remote controller loss prevention with chain		KKF910A4	
7	Wiring adaptor ★2		KRP1C74	
8	Installation box for adaptor PCB		KRP4A98	

**Notes:**  $\star$ 1 Wiring for wired remote controller should be obtained locally.

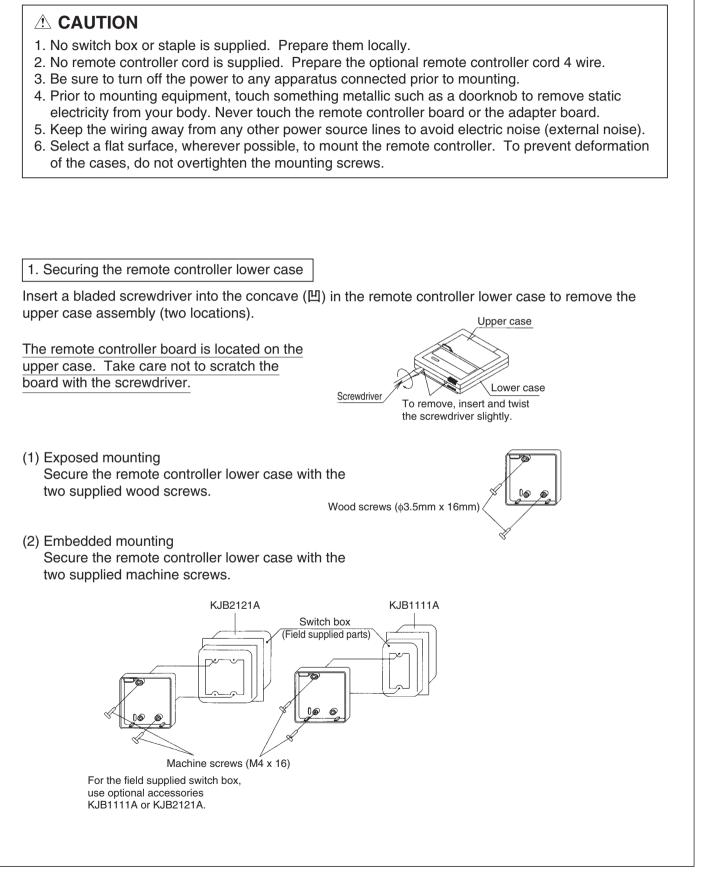
 $\bigstar 2$  Installation box for adaptor PCB (KRP4A98) is necessary.

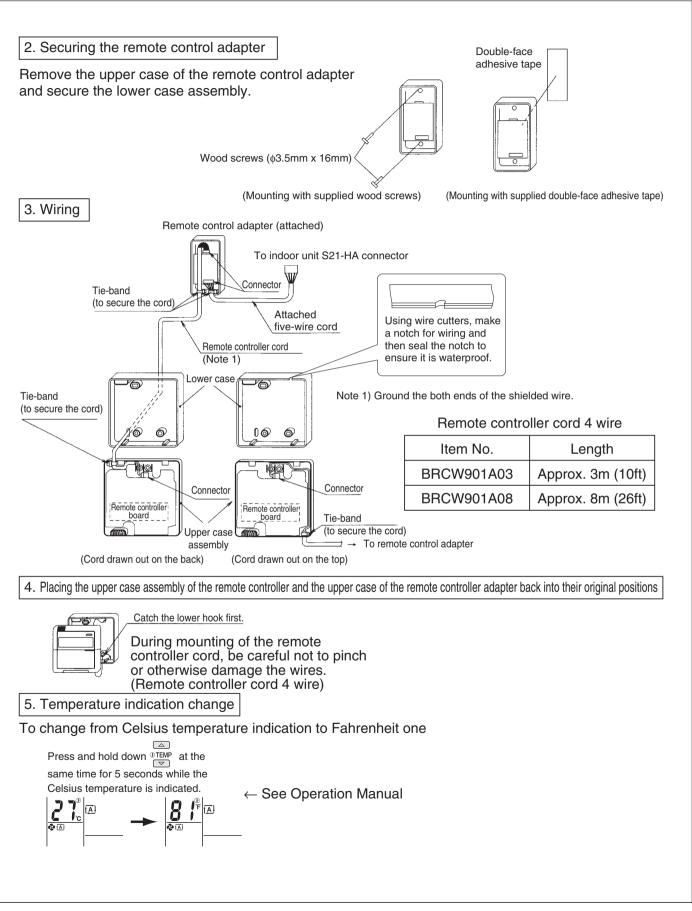
## 14.1.2 Outdoor Unit

	Option Name	09/12 Class	15/18/24 Class
1	Air direction adjustment grill	KPW937F4	KPW063B4
2	Back protection wire net	KKG067A41	KKG063A42
3	Drain plug ★	KKP937A4	
4	Drain pan heater	FTDBHMS, KEH067A41E	FTDBHML, KEH063A4E
5	Snow hood (intake side plate)	KPS067A41	KPS063A41
6	Snow hood (intake rear plate)	KPS067A42	KPS063A44
7	Snow hood (outlet)	KPS067A44	KPS063A47

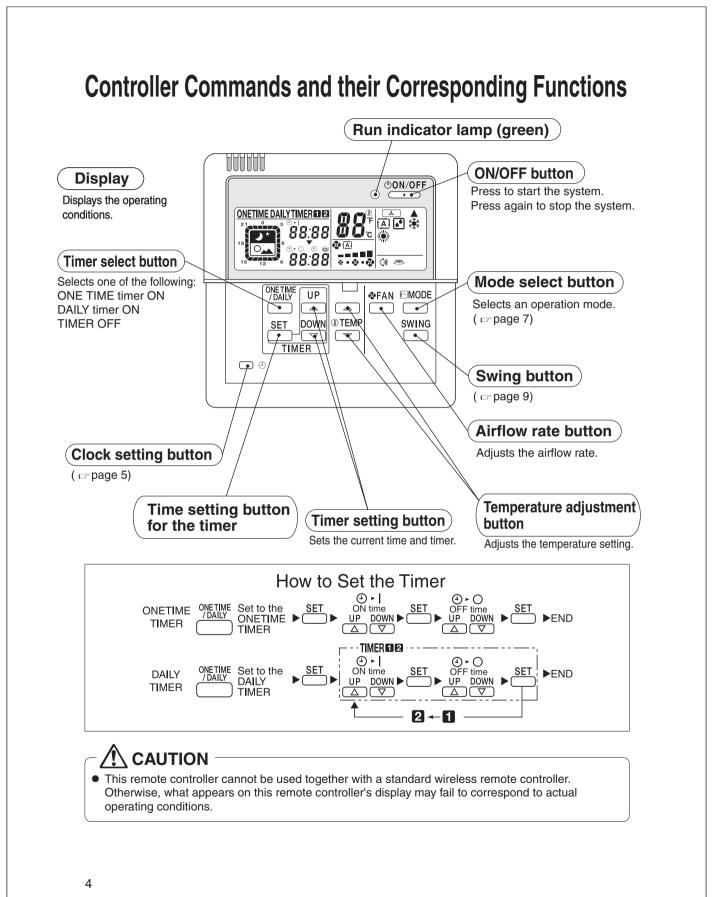
Notes: ★ Standard accessory

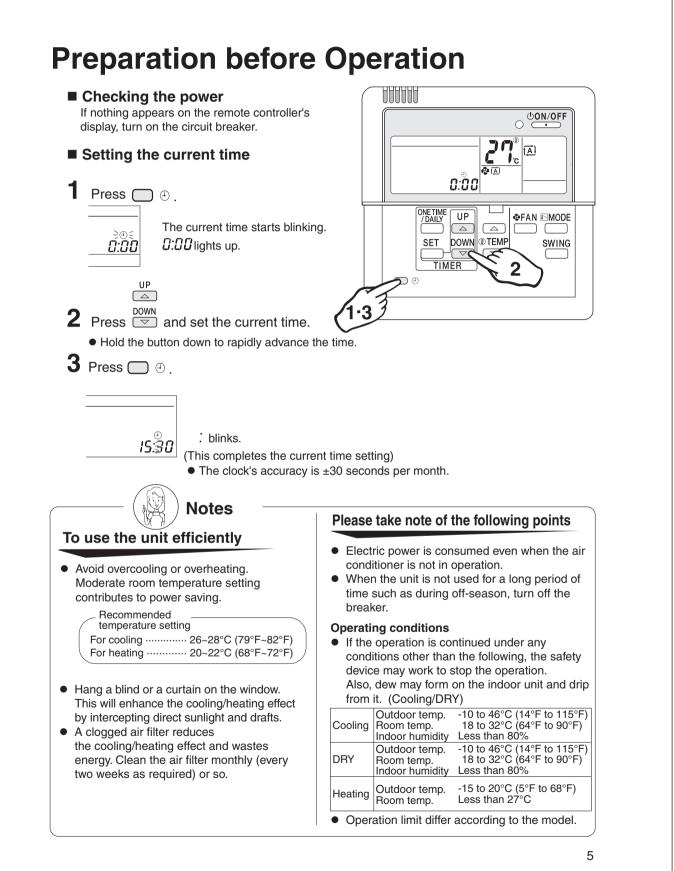
# 14.2 <BRC944B2> Wired Remote Controller Installation Manual

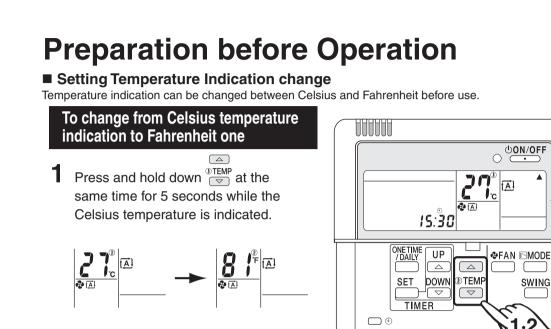




# 14.3 <BRC944B2> Wired Remote Controller Operation Manual



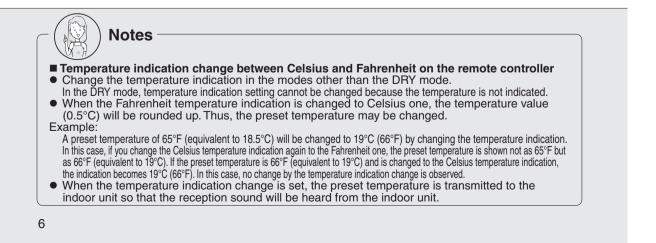




# To change from Fahrenheit temperature indication to Celsius one

2 Press and hold down ^{® TEMP} at the same time for 5 seconds while the Fahrenheit temperature is indicated.



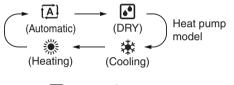


# Automatic.DRY.Cooling.Heating Operation

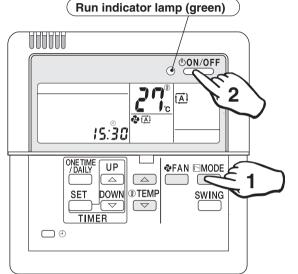
Select your desired operation mode.

Once preset, the system can get restarted in the same operation mode.

- Press to select your desired operation mode.
  - Each time the button is pressed, the mode changes as follows.







- The system does not have the FAN mode.
- 2 Press ON/OFF

The run indicator lamp lights up.

## To stop the operation:

Press ON/OFF again.

The run indicator lamp goes out.

# Automatic operation

 In Automatic, the temperature setting and operation mode (DRY, Cooling or Heating) are automatically selected according to the room temperature and outdoor temperature at the time of starting operation.

# **DRY** operation

- In this mode, humidity is removed from the air.
- While running in the DRY mode, you may feel cool or warm air from the air outlet. In this case, readjust the airflow direction with the vertical airflow direction louvers. (except Duct Connected type)

### ■ To adjust the temperature and airflow rate:

Operation Setting mode to be adjusted	Automatic	Cooling	Heating	DRY
<pre></pre>	Temperat Reco Cooling Heating	Temperature cannot be adjusted.		
<pre></pre>	from " 👼	Five levels of airflow rate setting from " 👼 " to " 👼 " plus " 🔂 " are available.		

• When the unit runs in the cooling or heating mode at a low airflow rate, the cooling or heating effect may be insufficient.

# To adjust the airflow direction:

( 🖙 page 9)

## Heating operation

- Since the heating operation is performed by taking the heat from outdoor into the room, the heating capacity decreases as the outdoor temperature lowers. If the room is not heated sufficiently, it is recommended to use other heating appliance at the same time.
- Since the air conditioner heats the whole room by circulating hot air, it takes some time to heat the entire room completely.
- If the outdoor unit gets frosted during heating operation, the heating capacity is decreased. In this case, the unit starts defrosting operation.
- No hot air comes out of the indoor unit during defrosting operation.

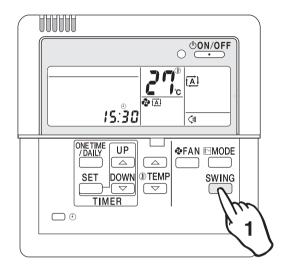
# **Adjusting Airflow Direction**

Adjust the airflow direction for maximum comfort.

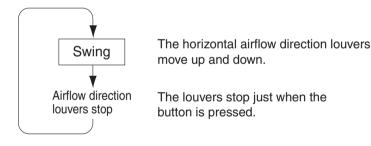
### To adjust the Airflow Direction

Press during operation.

• Each time the button is pressed, the airflow direction louvers change their movement.



# ■ Wall Mounted Types (without horizontal swing function)



## Adjustment of horizontal airflow direction

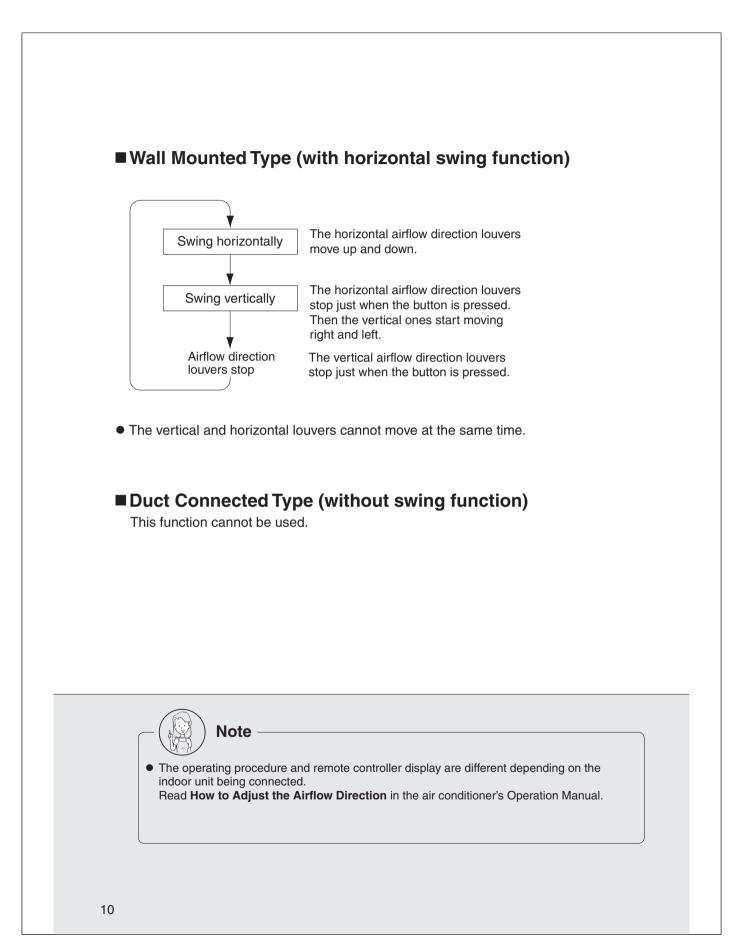
The automatic moving range of the horizontal airflow direction louvers varies depending on the operation mode.

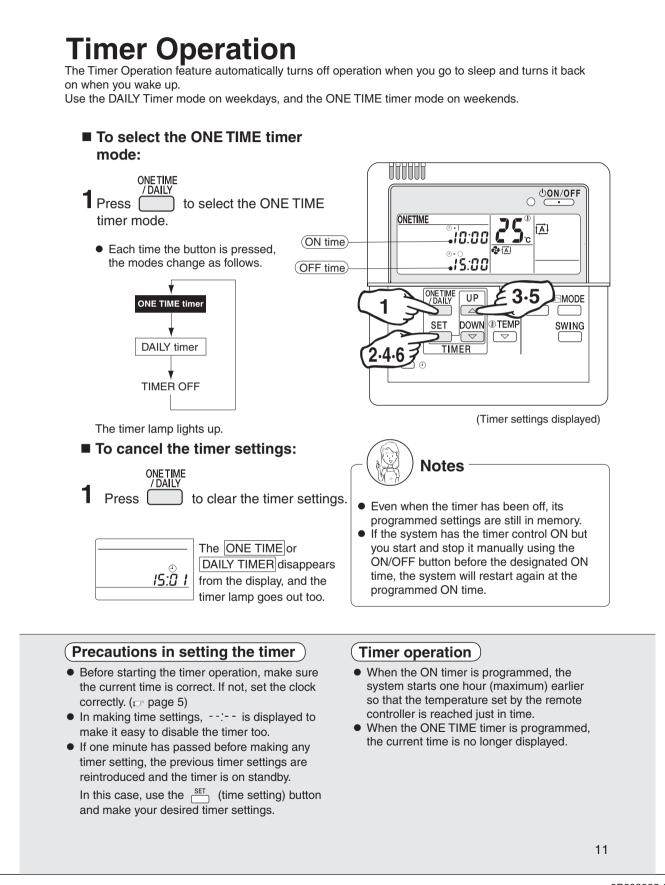


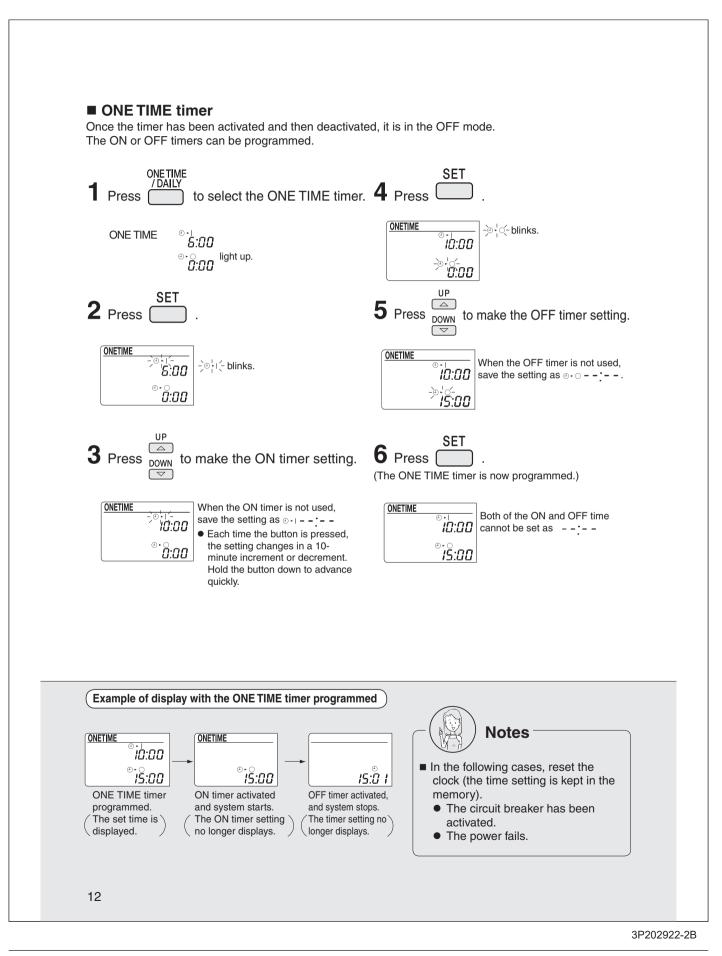
#### In fixing the horizontal airflow direction, keep the horizontal airflow direction louvers tilted downward in the heating mode, and keep them nearly horizontal level in the cooling or DRY mode. This will enhance the cooling and heating effect.

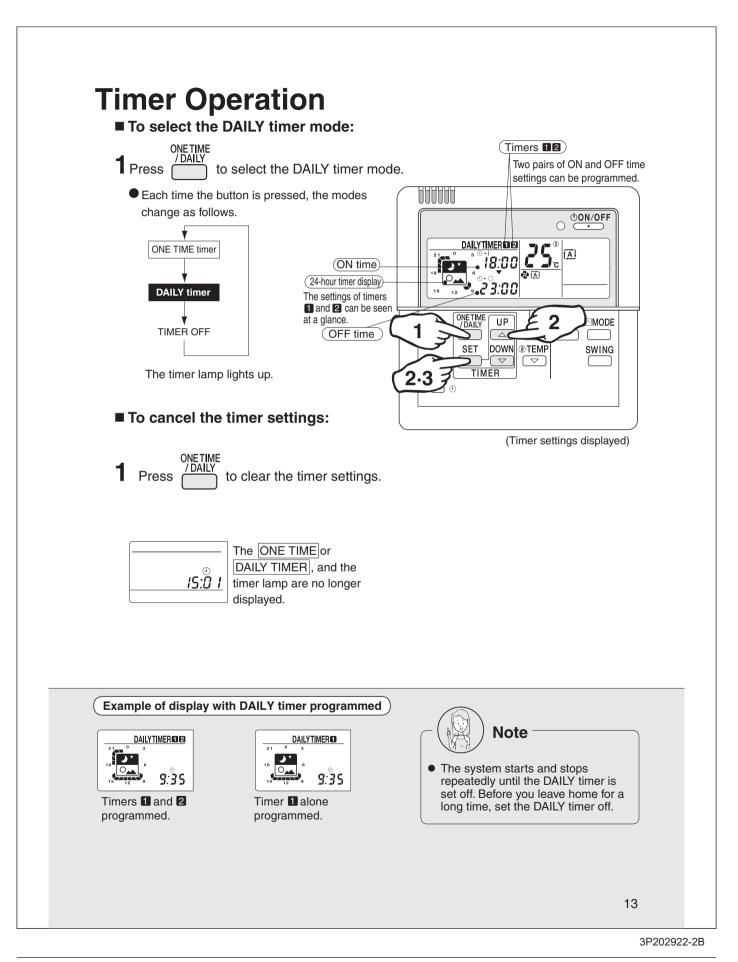
On the air conditioners with vertical and horizontal swing function, be sure to adjust the airflow directions using the remote controller. Do not forcibly adjust louvers by hand or a malfunction may occur.

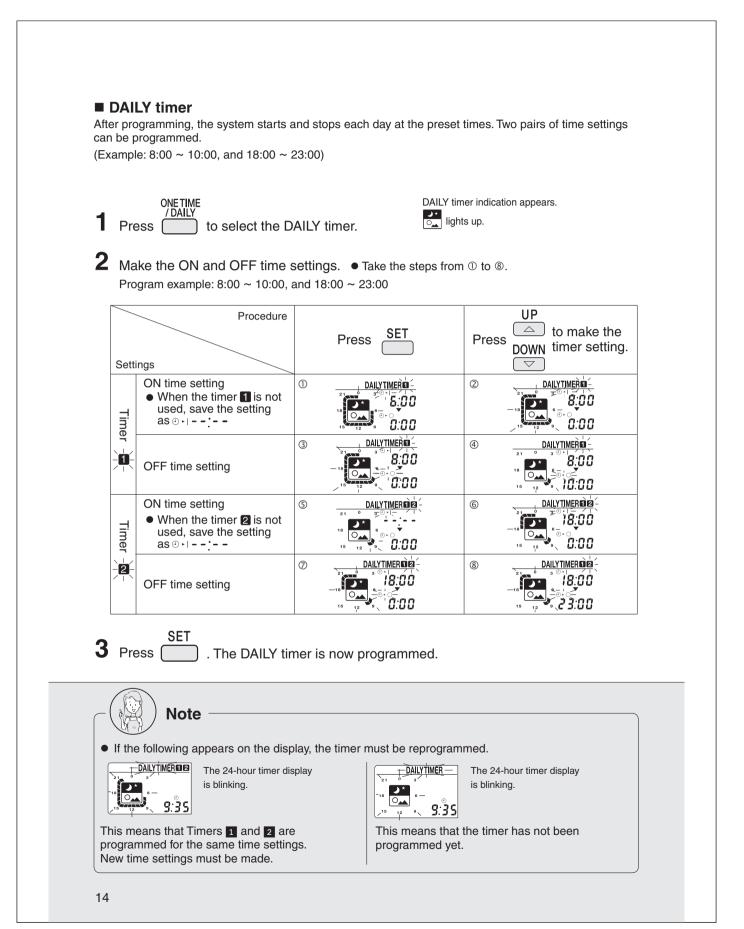
9

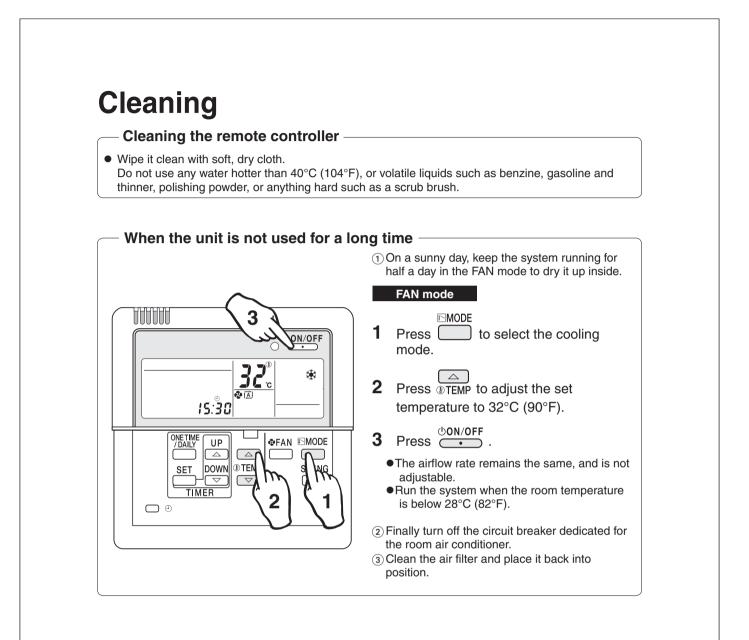












printed-circuit

*2 Do not use extension or other cords.

[About the SSID and KEY]

board (HA PCB) *3

wireless LAN.

1

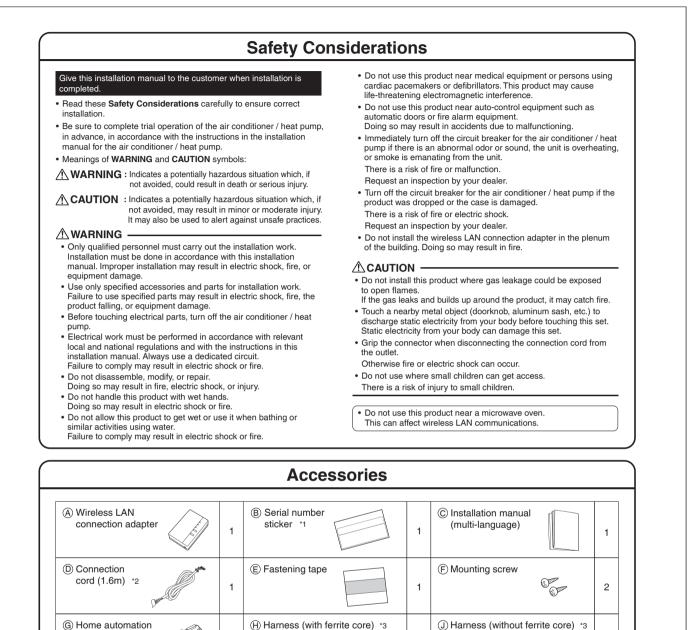
*1 Attach to the sticker attachment area on this document and keep safe.

*3 Not used with air conditioners fitted with an S21 connector.

• The [SSID] and [KEY] shown on the (B) serial number sticker are

necessary when connecting the air conditioner and a smartphone via

# 14.4 <BRP072A43> Wireless LAN Connection Adapter



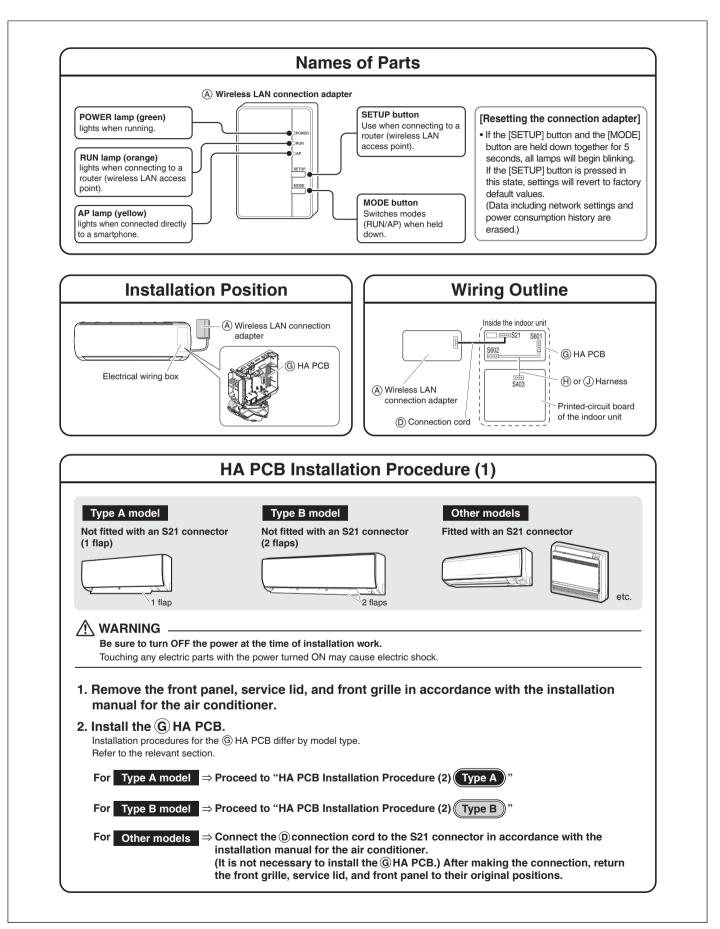
1

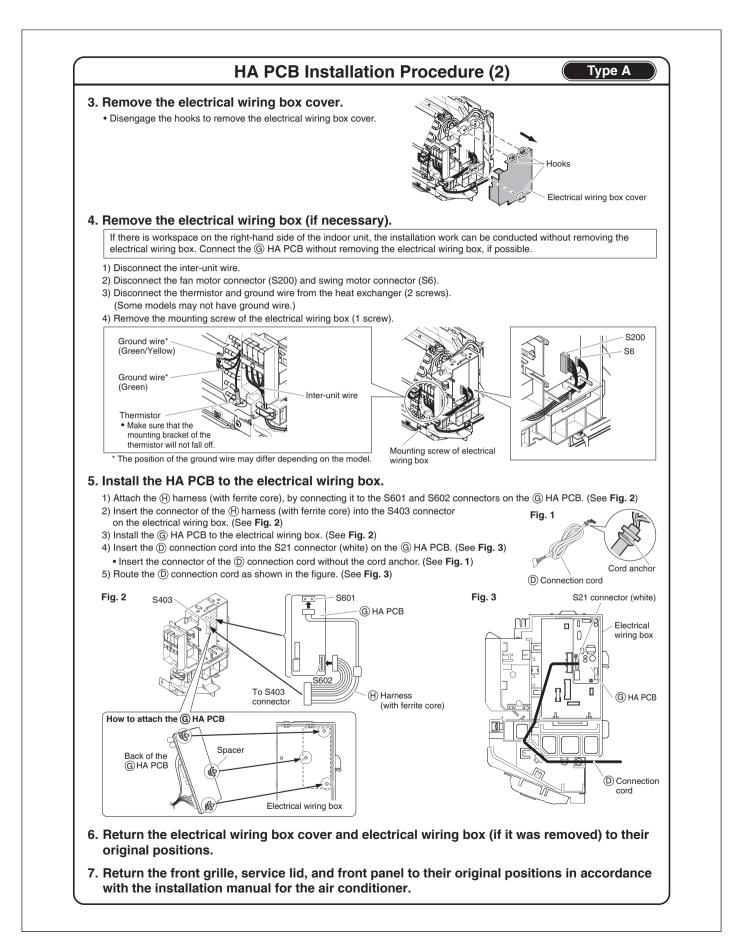
[Sticker attachment area]

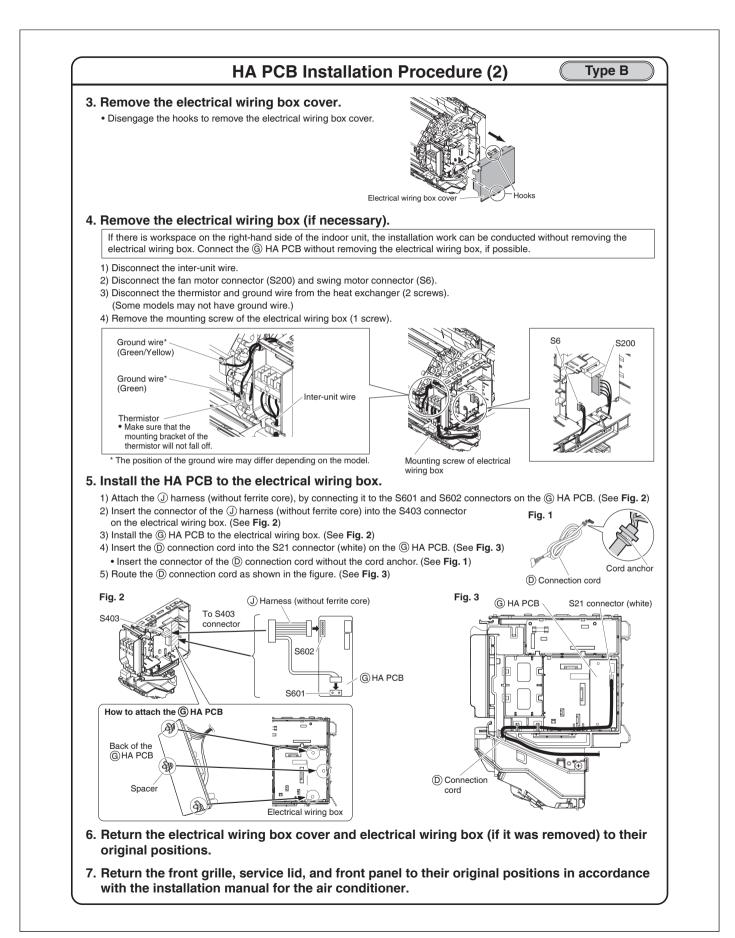
Attach the (B) serial number sticker to the

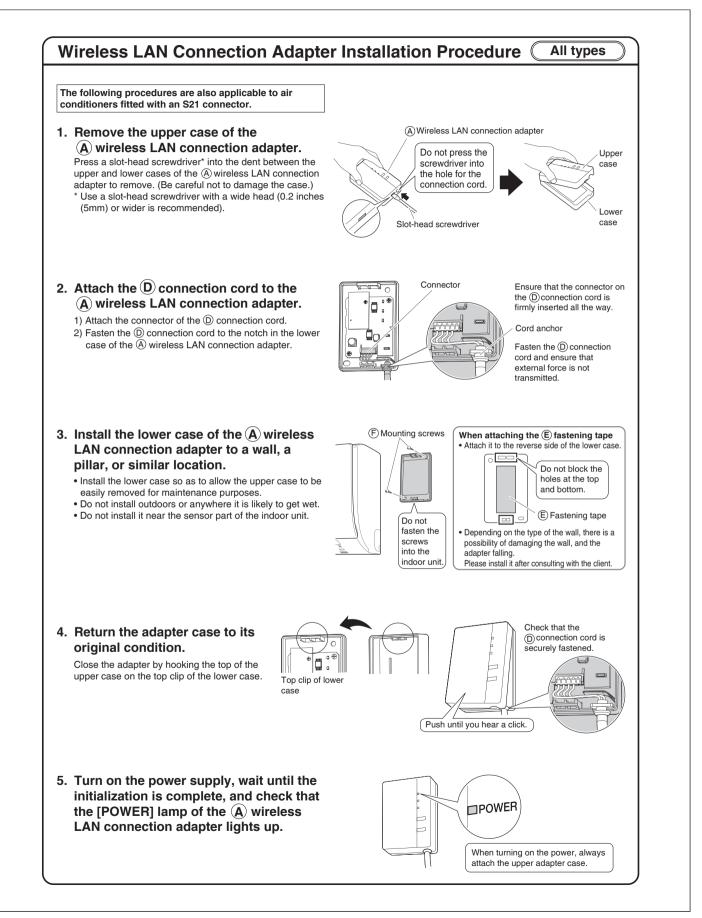
sticker attachment area and keep safe.

1

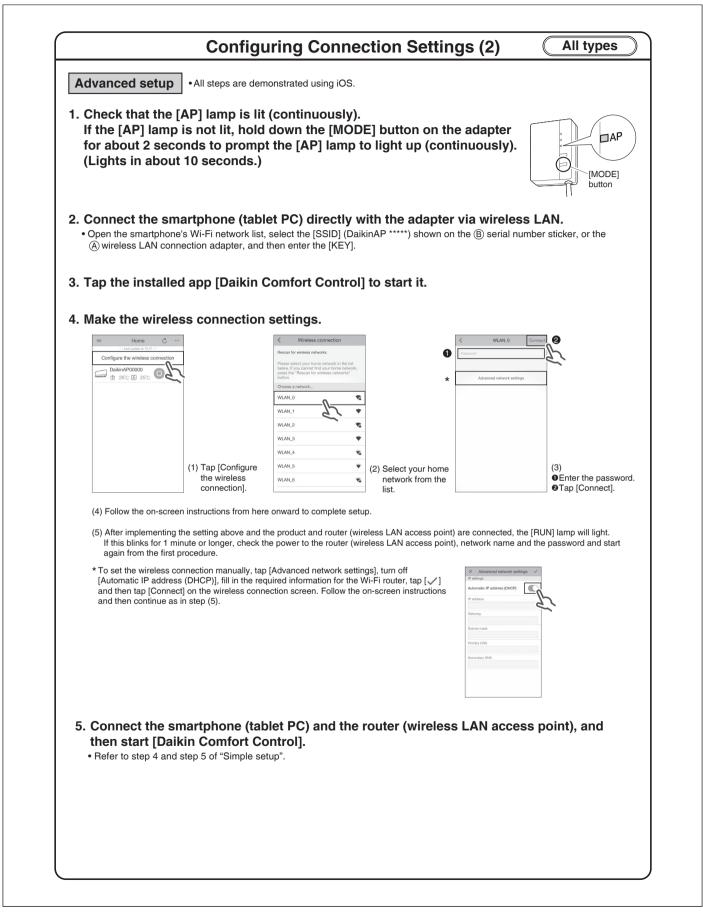








<ul> <li>The customer is responsible for providing the followi</li> <li>Smartphone or tablet PC (Supported OS: Android 4.0.3 or later; iOS 7.0 d</li> <li>Internet line and communicating device (Modem/router or a similar device)</li> <li>Wireless LAN access point (The corresponding channel for the wireless LA [DAIKIN Mobile Controller] (No Cost)</li> </ul>	or later.)
Installation method of online controller	
For Android Phones/Tablets	For iPhones/iPads
<ol> <li>(1) Open the [Google Play].</li> <li>(2) Search for [Daikin Comfort Control].</li> <li>(3) Follow the directions on the screen to install.</li> </ol>	<ol> <li>(1) Open the [App Store].</li> <li>(2) Search for [Daikin Comfort Control].</li> <li>(3) Follow the directions on the screen to install.</li> </ol>
Configuring C	Connection Settings (1) All types
If WPS is supported ⇒ Proceed to Simple setup If N Simple setup 1. Check that the [POWER] lamp is contin is blinking. • If the [POWER] lamp is lit and the [RUN] lamp is not adapter for about 2 seconds to prompt the [RUN] lam about 30 seconds.)	lit, hold down the [MODE] button on the
<ul> <li>2. Press the [WPS] button on the router ( • Operation procedures for the [WPS] button vary by re For details, refer to the instruction manual for the rou </li> <li>3. Hold down the [SETUP] button on the a </li> <li>• The [RUN] lamp will begin to blink more rapidly, and connection between the router (wireless LAN access established. </li> <li>If a connection fails to establish, repeat procedures fi </li> <li>If a connection still cannot be established, follow the (In some cases, a connection cannot be established)</li> </ul>	outer (wireless LAN access point). ter. <b>adapter for about 2 seconds.</b> will change to a continuous light once a point) and the adapter has been rom step 1 of "Simple setup". procedures in "Advanced setup". using the steps in "Simple setup" owing
to compatibility issues.)	
	urtphone's Wi-Fi network list, selecting Control] to start it.
<ul> <li>to compatibility issues.)</li> <li>4. Connect the smartphone (tablet PC) at access point).</li> <li>A connection can be established by opening the sma the [SSID] for the router and entering its password.</li> <li>5. Tap the installed app [Daikin Comfort]</li> </ul>	urtphone's Wi-Fi network list, selecting Control] to start it. verview screen, setup is complete.



# Troubleshooting

The following table provides brief descriptions of how to handle problems or uncertainties when you install the product or make connection settings. Check our website for details.

#### URL

http://daikincomfort.com/DuctlessWireless/FAQ



• FAQ can be viewed via smartphone (tablet PC). To access, please scan the 2D barcode.

When this happens	Explanation and where to check				
[RUN] lamp does not light up (continuously).	<ul> <li>The [RUN] lamp blinks.</li> <li>→ Perform Simple setup or Advanced setup again.</li> <li>→ Check that the [SSID] and password for the adapter are entered correctly.</li> <li>→ Move the router (wireless LAN access point) closer to the adapter.</li> <li>→ The smartphone or router (wireless LAN access point) in use may not be supported. Check our website for details.</li> </ul>				

# **After-sale Service**

For inquiries concerning after-sale service, contact your dealer and advise them of the following details:

- Model name
- Date of installation
- Conditions at the time of failure (as precisely as possible)
- Your address, name, and telephone number

This telecommunication equipment is in compliance with FCC/IC requirements.

#### FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

This device complies with Part 15 of FCC Rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of this device.

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules. This equipment should be installed and operated keeping the radiator at least 8 inches (20cm) or more away from person's body.

Contains FCC ID:VPYLBYD Contains IC: 772C-LBYD

# 14.5 <KRP413BB1S> Wiring Adaptor for Timer Clock/Remote Controller

Cofoty	Precautions
Jaiely	FIECAULIONS

- Read these safety precautions carefully before installing the unit, and be sure to install the unit properly.
- This manual classifies precautions to the user into the following two categories. These warnings and cautions are for your safety. Follow them.

Faulty installation can result in death or serious injury.
Faulty installation can result in serious injury, damage to property, or other serious consequences.

 After installation is complete, test the unit to confirm that it is working properly, and instruct the owner its proper use.

#### 🕂 WARNING

- Installation should be left to the dealer from whom you purchased the unit, or another gualified professionals.
- Install the unit securely according to the installation manual. Faulty installation may lead to electric shock or fire.
- Be sure to use the supplied or specified parts. Using other parts may lead to electric shock or fire.
- Install the unit securely in a location that will support its weight. If installed in a
- poor location or improperly installed, the unit may not work as intended. • For electrical work, follow local electric standards and the installation manual.
- Foulty installation may lead to fire or electric shock.
- Do not bundle the power cord, or attempt to extend it by splicing it with another cord or by using an extension cord. Do not place any other load on the power circuit used for the unit. Improper wiring may lead to electric shock, heat generation or fire.
- Use dedicated wiring for all electrical connections, and be sure to arrange the wiring so that force applied to the wiring will not damage the terminals. Poor wiring or installation may cause electric shock, heat generation or fire.

#### 

- Before installation, unplug the air conditioner to ensure safety. Failure to do so may cause electric shock.
- Static electricity may damage electric components. Before connecting cables and communication lines, and operating the switches, be sure to discharge any electrical charge from your body (by, for example, touching the earth line)
- Do not install the unit in a location where it may be exposed to flammable gases. If gas leaks and build up around the unit, it may catch fire.
- Do not place the wiring close to the power cord, inter-unit cable, or pipes which generate noise. Treat the wiring with care.

#### 1. Functions and Features

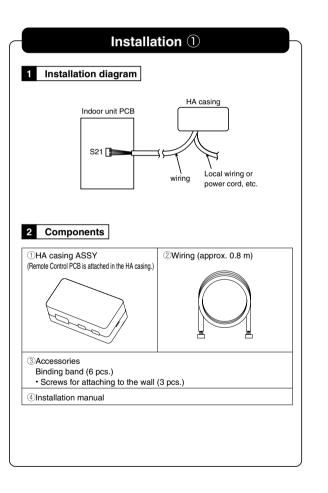
- On/Off setting
- Switching between Instantaneous Contact/Normal Contact
- Connection with five-room central controller (KRC72 for oversea model)
- Connection with fan coil remote controller
- Automatic reset after power failure
- Output of normal operation signals/malfunction signals

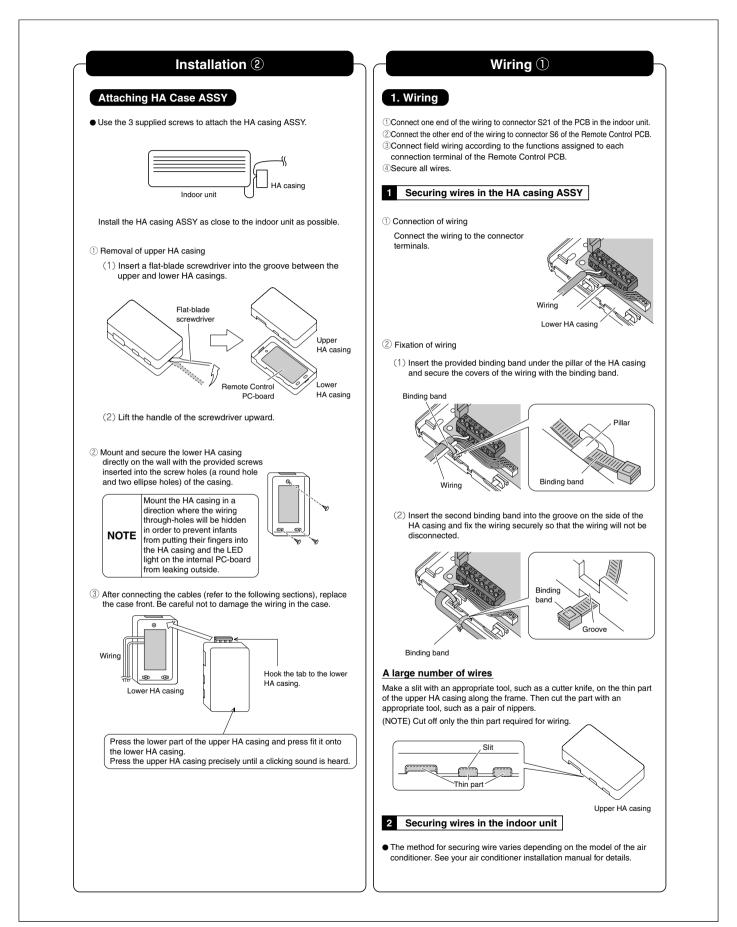
### 2. Field Wiring

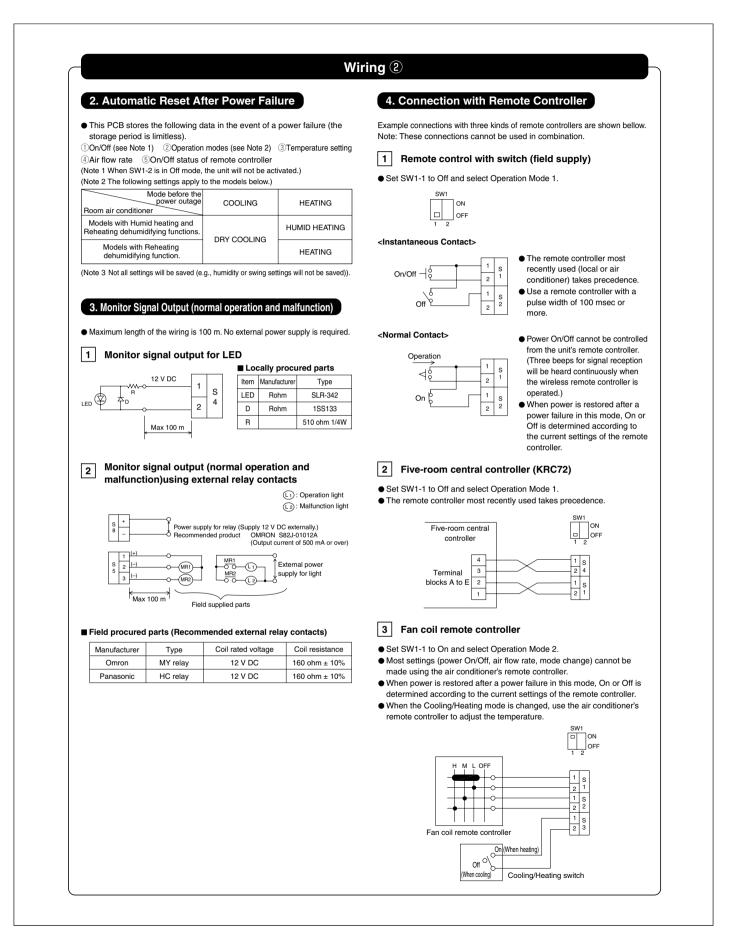
For interconnecting wiring, use Daikin KDC100A12 cable (not supplied) or other similar cable. Use a vinyl-covered wire or cable with four conductors each with a thickness of 0.2 to 1.25 mm².

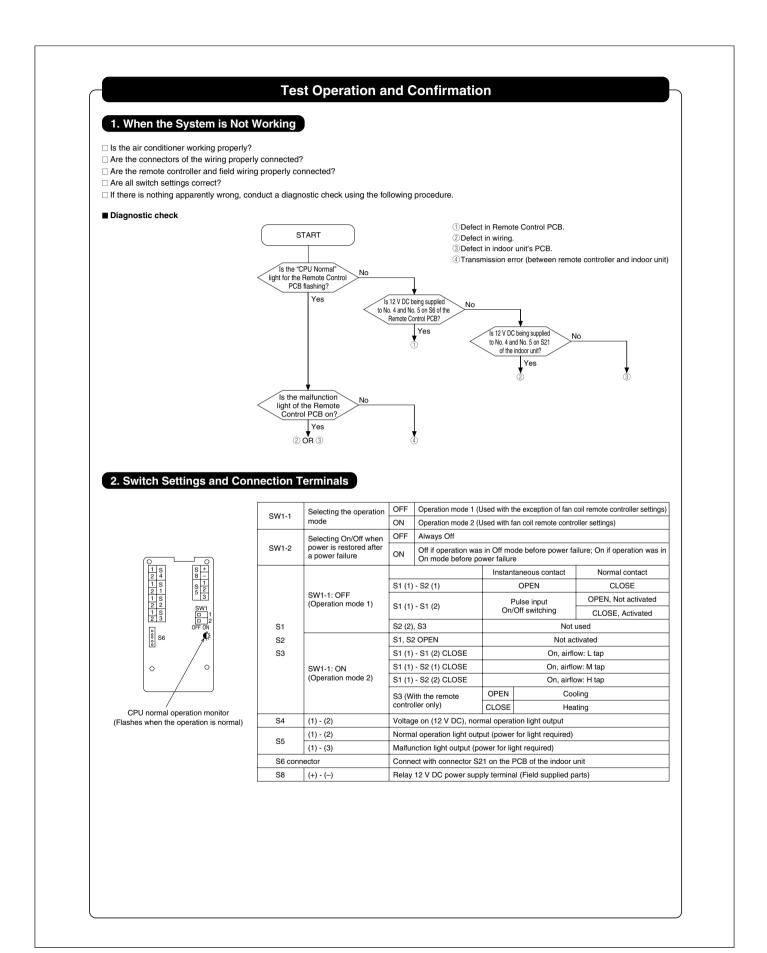
Optional cable KDC100A12 (without connectors)

- Specifications:  $0.2 \text{ mm}^2 \times 4 \text{ core (sheathed)}$ Outer diameter:  $\phi 5.3$
- Length: 100 m Colour: Grev
- Note : Keep any wiring for the control unit away from the power cord to prevent electrical noise.









# 14.6 <KRP928BB2S> Interface Adaptor for DIII-NET

Do not install the set in a location where there is danger of exposure to

To prevent damage due to electrostatic discharge, touch your hand to a

nearby metal object (doorknob, aluminum sash, etc.) to discharge static

Lay this cable separately from other power cables to avoid external electrical noises. · After installation is complete, test the operation of the PCB set to check for problems, and explain how to use the set to the end-user

Gas accumulated around the unit at the worst may cause fire.

electricity from your body before touching this kit.

inflammable gas.

Static electricity can damage this kit.

#### Safety Precautions 1. Overview, Features and Compatible Models This kit is the interface required when connecting the central controller · Read these Safety Precautions carefully to ensure correct installation. and a Room Air Conditioner. Use of the central controller makes it This manual classifies precautions into WARNING and CAUTION possible to perform the following monitoring and operations. It is compatible with room air conditioners which have an HA connector S21. WARNING : Failure to follow WARNING is very likely to result in such grave consequences as death or serious injury. 1.Run / stop for the central controller and wired remote controller, operating mode selection, and temperature can be set. CAUTION : Failure to follow CAUTION may result in serious injury or 2. The operating status, any errors, and the content of those errors can be monitored property damage, and in certain circumstances, may result in from the central controller and wired remote controller. a grave consequence. 3.Run / stop for the central controller and wireless remote controller, operating mode selection, and the temperature setting can be limited by the central controller. 4.Zone control can be performed from the central controller. Be sure to follow all the precautions below ; they are all important for ensuring safety. 5. The unit can remember the operating status of the air conditioner before a power outage and then start operating in the same status when the power comes back on. 6.Card keys, operating control panels, and other constant / instantaneous connection-compatible equipment can be connected. Installation should be left to the dealer or another qualified professional. The Operating / error signals can be read Improper installation by yourself may cause malfunction, electrical shock, o 8. The indoor temperature can be monitored from the Intelligent Touch Controller Install the set according to the instructions given in this manual. Precaution Incomplete or improper installation may cause malfunction, electrical shock, or fire. When reading the Operating / error signals, a separate external power source 1. Be sure to use the standard attachments or the genuine parts. (12 V DC) is needed (12 V DC) is needed. A separate timer power source (16 V DC) is needed when using the schedule timer independently, and not in conjunction with other central controllers. The range of temperatures that can be set from the central controller is 18°C to 32°C in cooling and 14°C to 28°C in heating. Fan operation cannot be selected from the central controller or wired remote controller. Group control (i.e., control of multiple indoor units with a single remote controller) is not available. Use of other parts may cause malfunction, electrical shock, or fire 2. Disconnect power to the connected equipment before starting installation. 3. Failure to do so may cause malfunction, electrical shock, or fire A ground fault circuit interrupter / an earth leakage circuit breaker should 5. be installed. If the breaker is not installed, electrical shock may occur. not available. Monitoring is not available of the thermo status, compressor operating status, indoor fan operating status, electric heater, or humidifier operating status. Forced thermo off, filter sign display and reset, fan direction and speed settings,

# air conditioning fee management, energy savings instructions, low-noise instructions, and demand instructions cannot be made.

#### 2.Component Parts

This kit includes the following components. Check to ensure that none of these are missing.

Parts	Q'ty	Parts	Q'ty
Kit assy		Connection harness (about 1.6m)	1
PCB is in the housing.	1	Mounting screws	3
		Binding band	6
		Installation manual	2

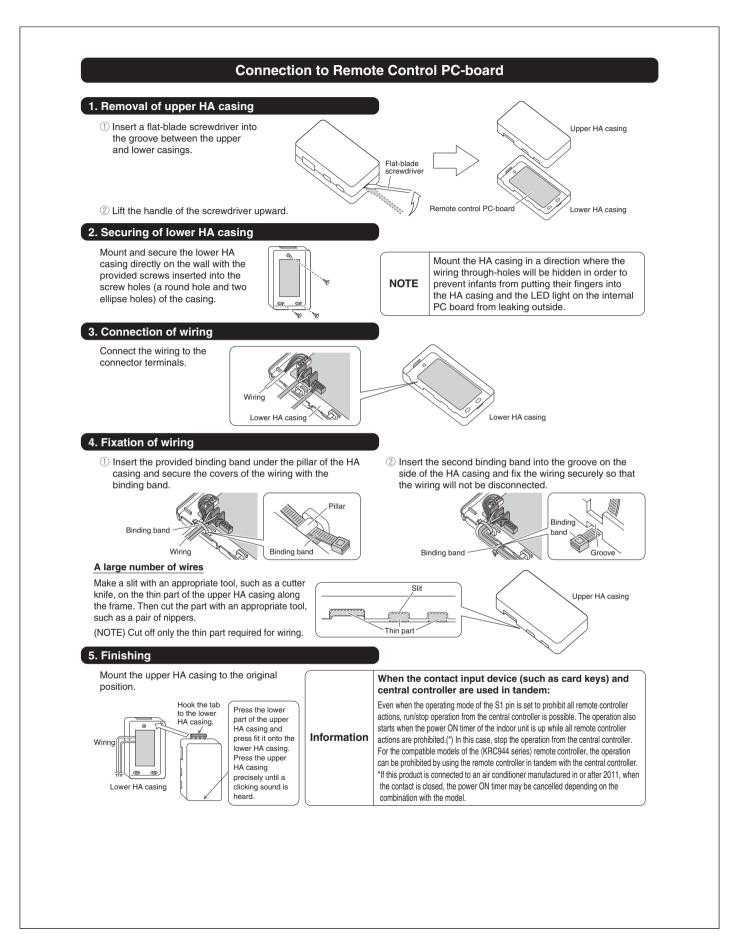
#### 3.Names of Parts and Electric Wiring

#### <Wiring procedure> Reading the Operating / error Display Connecting a Momentary / constant Connecting a Wired In case that a central Contact Input Equipment Remote Controller* controller is cont mote controller Central controller DCS302 Series Operating monitoring Card key (field supply) equipment (field supply) **BRC944 Series** Operating control panel BRC073 Series DCS301 Series (field supply) DCS601 Series DST301 Series The adapter included with the remote controller is not used. KRC65, KRC72. KDC100A10, and KDC101B Series cannot be connected. û Separately sold remote A cable field supply ontrol code (quadplex) KRCW101A Series Cable available field supply (See the installation manual of Non polarity the central controller) Û Û $\otimes \otimes \otimes$ $\otimes \otimes \otimes \otimes$ 619 Room air conditioner indoor unit $\otimes \otimes$ P cc 10 Remote control all prohibition/permission setting switch (SW3-1) Supplied connection harne SMSOFFL Power supply terminal (S8) ant contact Momentary contact / cons Selection switch (SW3-2) Connect an external 12 V DC power supply only when reading the To HA connector (S21) Japanese unit / Overseas unit Setting switch (SW3-3) sws Operating / error display. Operation when recovering from a power outage mode switch (SW2-R) Service monitor (LED1: green) Upper group number switch (SW2-5 to 7) Lower group numbe switch (SW1) *For wired remote controller compatible models When the CPU is working properly, the LED flashes. see the list of products which are sold separately

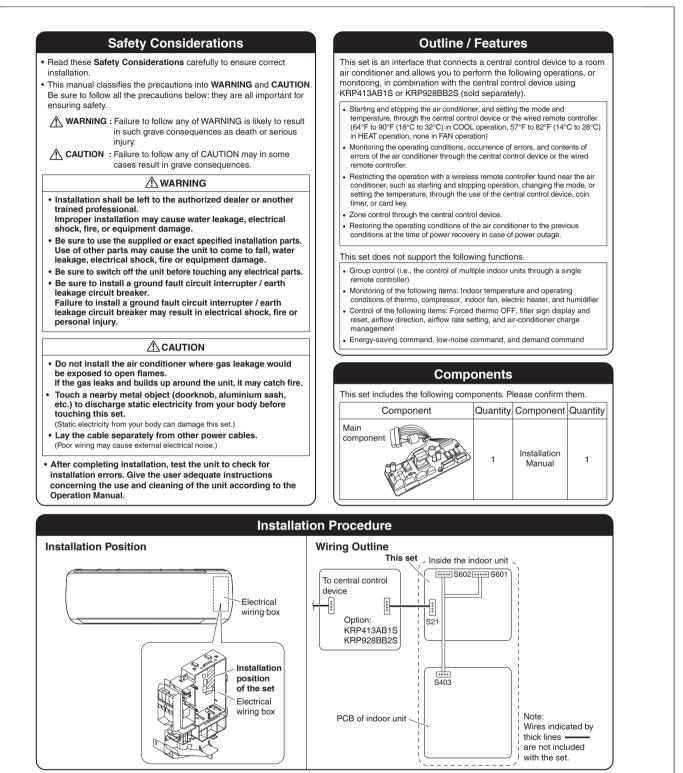
#### 3P248024-1F

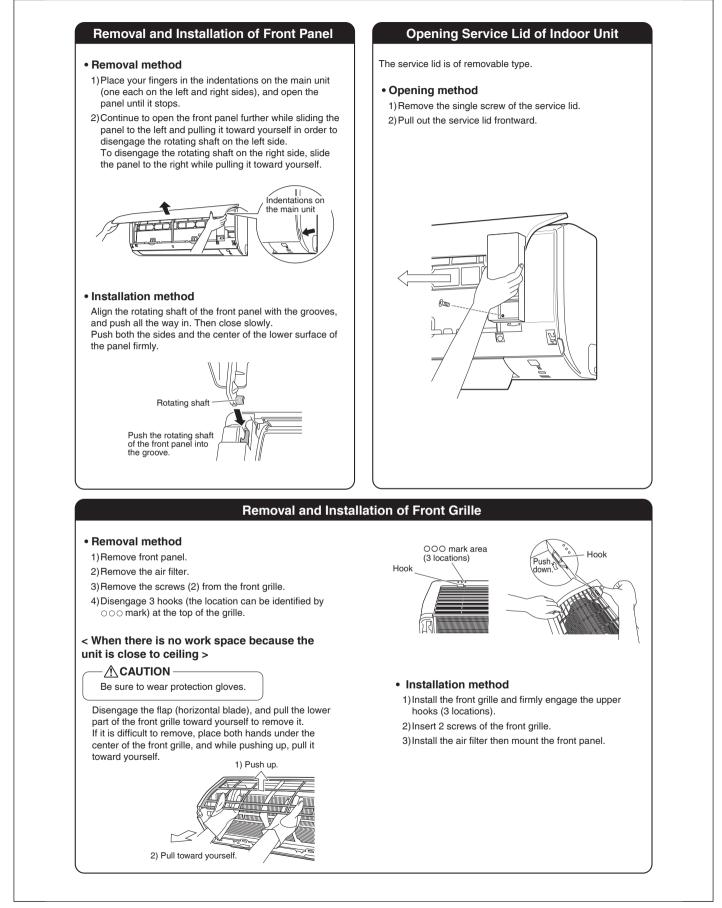
#### 380

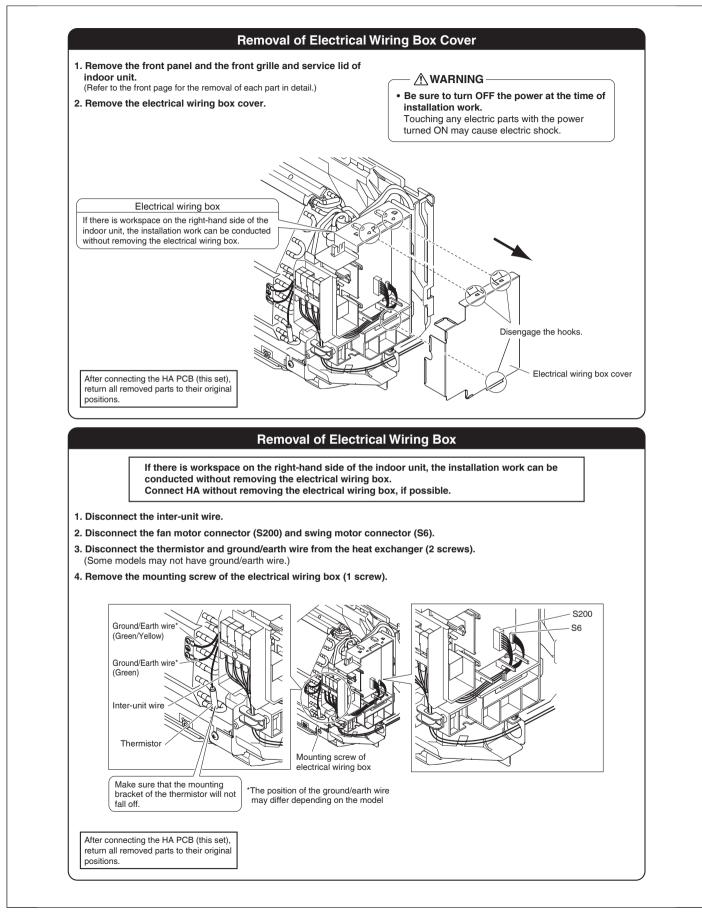
		4.5	Switch Settings				5.	Con	rol C	odes	s		
					When using a	central rer	mote cont	roller, th	e operat	ing cod	des car	n be used	to limit
NOTE			n after all the switches ha nile the power is on are in		operation from continuously w	wireless i hen the w	remote co vireless re	ntrollers	s. Three I	beeps	for sign	al recept	ion will
			witches on the circuit boa	ard.	<ul> <li>: permitted;</li> </ul>	×:prohi	bited		Ope	rations	from the	e remote c	ontroller
Room ai	conditione	rs, differe		setting the temperature in				Operations from the remote controller "Run" control from the "Stop" control from th central controller					
Destination	sW3-3 se		h needs to be set. What Ha	annens	S1 operating	Control	mode	Control code	timer C too	don de	on	Stop	at ode
Destination	0110 0 30	• •	"Automatic" operation is not ava	ilable from the central controller.	mode				Run / timer	Operating mode temperature	direction	Run / timer Stop	Operating mode temperaturet
Japan	OFF (Factory se	tting)	When using "automatic" operation controller, the central controller	displays automatic cooling						£ 0	Fan		0 -
	(i dotory se	÷.	(heating) and 25°C. Even if the t return to 25°C after a while.	temperature is changed, it will		ON / OFF is rejected	d	0,1,3	× ×	< 0 < X		× × × ×	0 ×
Overseas	ON			ble from the central controller.		Only OFF is accepte	control ed	2 12–19	× C			× O	×
Set thes	e when usir	ng the cer		side.) Do not set more	Instantaneous contact mode	Central pr		4		0 (	1	× 0 × ×	× 0
	2-R for (3)		mber. vhen recovering from a po	ower outage.		Timer ope	and priority eration	6,7 8		) () )* ()*	0	0 0 X 0	0 ×
independent	tly.		eed to be made when us	-		is accepte remote co	ontroller	9 2,10-19	0* (	D* 0*		××	0 ×
central cont	oller.)		ised in conjunction with a		Constant			0,1,3,5-7		0	1		0
			rms an auto address after th Settings made using the sw	e power is turned on, so new itches will be overwritten.	contact mode			4 8	×	O*		×××	×
Group NO. Se	tings table (Er	larged sect	ion SW1 and SW2 in "3. Names	of Parts and Electrical Wiring")	All remote	ŕ		9		0*			0
Group NO. Up	per settings S	W2	Group NO. Lower	settings SW1	controller actions are prohibited	Only during	n timor or -	ration	××	< ×	×	××	×
	5- A 7 6	5 00		B 4 3 2 1 12 4 3 2 1	The remote contr		sion / prohib		ngs using	the Inte	lligent To	ouch Contro	oller are a
2-	6-	01	05 05 09	9 13 13	<ul> <li>: permitted;</li> </ul>	×.proni	ulled						
3-	7-	02			S1 pin	Intellig	ent Touch (	Controller	settings			rations from note contro	
A 4	8_ 800	5 03		4 3 2 1 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	operating mode	Start / stop	Change operating mo	de te	nange set mperature	Rur		Operating mod temperature	e Fan direo and fan s
. [2]	R 7 6	5	4321 4321	4 3 2 1 4 3 2 1	Instantaneous contact mode	ON / OFF	permitte		tted/prohibi			0	
Use with	power failure re	ecovery setti	ngs Set to the <b>side</b>	:ON û OFF	Constant contact mode	control is rejected	prohibite	d perm	itted/prohib	ited ×	×	×	1
			r power source is needed	I when using the	Instantaneous contact mode	Only OFF	permitte		ermitted rohibited	× ×		0 ×	-
Power sour	dule timer independently. er source specs:16 V DC, +10%, -15%, 200mA.				Constant	control is accepted	prohibite	a F	tted/prohib ermitted	ited ^		0	- 0
(3) Settings This sele	when recov	ering fron to restart	n a power outage (SW2-F operation when the powe	R) r comes back on after a	contact mode		prohibite	d perm	rohibited tted/prohib			×	
power ou	tage occurre	ed during	operation. This setting is g		Instantaneous contact mode	Last command	permitte prohibite	d perm	tted/prohib tted/prohib tted/prohib	ited ×	0	0 ×	
of whethe	er switch SV	/2-R is on	or off, the operating mod s, and remote control pro	e (NOTE), set temperature,	Constant contact mode All remote	priority			tted/prohib			0 ×	1
	setting		What Hap	pens	controller actions are prohibited	D	loes not aff	ect settir	ngs	×	×	×	×
	ory setting) N		after recovering from a p the unit was stopped before the pow	-	6	.Read	Onera	tina	/ Frrc	n Di	snla	v Sian	al
		- ·	pply to the models below.	er oatage and fano in it was fanning.	The Operating		-						
$\sim$	Mod	de before	the	HEATING	Output specs		-					.put (00).	
Room air c	onditioner			HEATING	M1: Turn MF M2: Turn MF	R 2 when a	a commur	nication	error ha	s occu	rred be		
	ith humid h nidifying fur		DRY COOLING	HUMID HEATING		air conditi not turne				the uni	it has s	topped a	fter an
	Models with midifying fu		DRT COOLING	HEATING	KRP928BB2S	7							
(4) Contact i	nput functio	n settings	s (SW3-1 to SW3-2)		S8 ⊕	-	P	ower su	oply for re	lay (Su	pply 12	V DC exte	rnally.)
	-		), choose one of the follow	wing functions.			8						
S1 operating n		SW3-2 setting	What Happens	Control mode	MC (+	)		ig contro	ol panel (F	-ieid su	рру)	Relay sp	ecs (MR1
Instantaneous c input (factory se		OFF is	he operating status of the air conditioner s reversed by an instantaneous input of 00 msec or more.	Last command priority	S5 M1 (-		1)— <b>•</b> •—ō	R1 0p	erating Displa	vh Is	Power source for	Coil vol	tage: 12
	OFF	C	Contact - Open to close: air condition runs.	ON / OFF control is rejected (operate / stop / timer prohibition)	M2 (-		<    ⊻	R2	ormality displa	- I I I I	display	Wiring lei Max: 10	ngth
Constant contac Remote control		()	Nose to open: air conditioner is stopped NOTE 1).	(NOTE 2).					_			J	
prohibition/perm input		Invalid a	Contact - Open to close: ir condition stops. Close to open: to change in operating status.	All remote controller actions are prohibited when the contact is closed. (NOTE 3)			7.Con						
NOTE1: Sin	ce central c	ontroller u	uses last command priori	ty, the contact status and	The central co	ontroller c	an be cor	L .	L .	L .			r
	ample: If the	unit is run f		e the air conditioner is stopped				Central Remote Controlle	ON / OFF controlle	Schedule time	D-BIPS	Contact input	Remote Controller
NOTE2: Op	erating mod	e and fan	tact, the contact will be open direction and speed sett	ings can be changed.				ote Ci	FF oc	chedu		Conta	ote Co
fun	ction is still	operating	while the ON timer is set, the operation starts at t	he time specified by the				I Rem	N/ C	N N		-	Rem
(KF	P413AB1S	> remote	on of the power ON times control PC-board set is re	commended. However,				entral	0				Wired
lf th	nis product i	s connect	ed in tandem with the ce ted to an air conditioner r	nanufactured in or after	Central Remo	te Controlle	er	0	0	0	0	0	> 0
201	1, when the	e contact	is closed, the power ON ination with the model.		ON / OFF con			0	0	0	0	0	0
	-		Run / stop Input		Schedule time D-BIPS	er -		0	0	×	×	0	0
S1	CA		Contact specs No-voltage minute ele	ectric current contact	Contact input			0	0	0	0	×	0
	СВ	Ŷ		oad 12 V DC, 1mA or lower)	Wired Remote	e Controller ote Control		0	0	0	0	0	×
								0	0	0			×

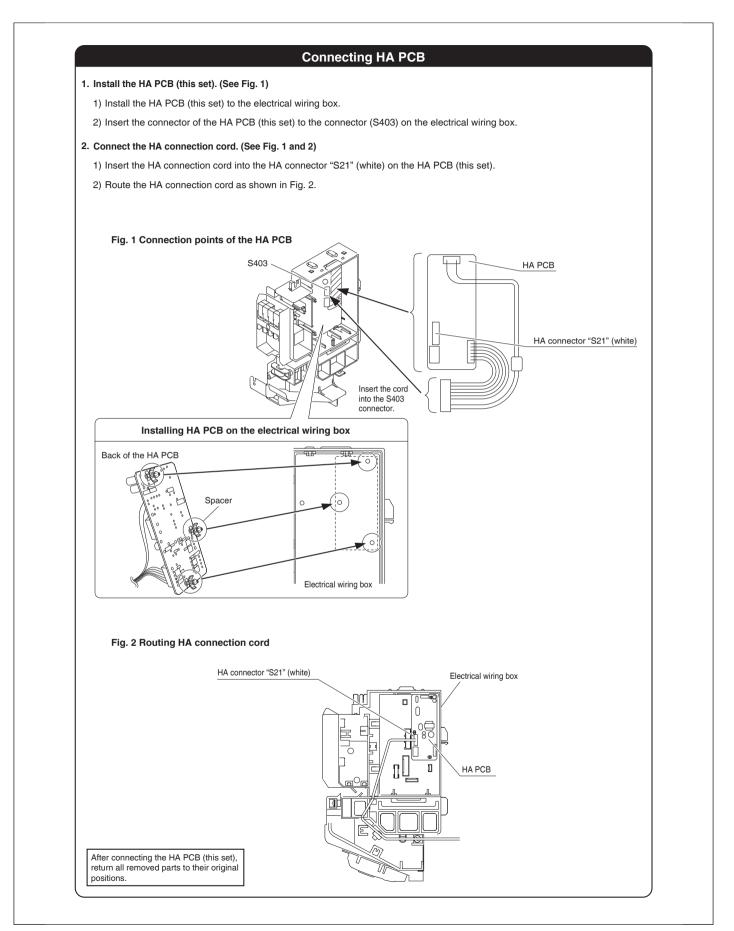


# 14.7 <KRP067A41> Interface Adaptor for Residential Air Conditioner

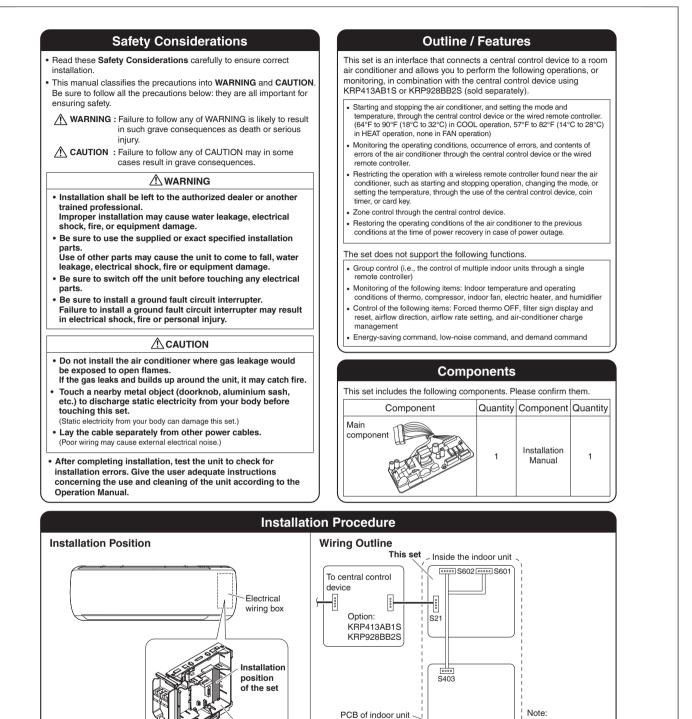








# 14.8 <KRP980B2> Interface Adaptor for Residential Air Conditioner

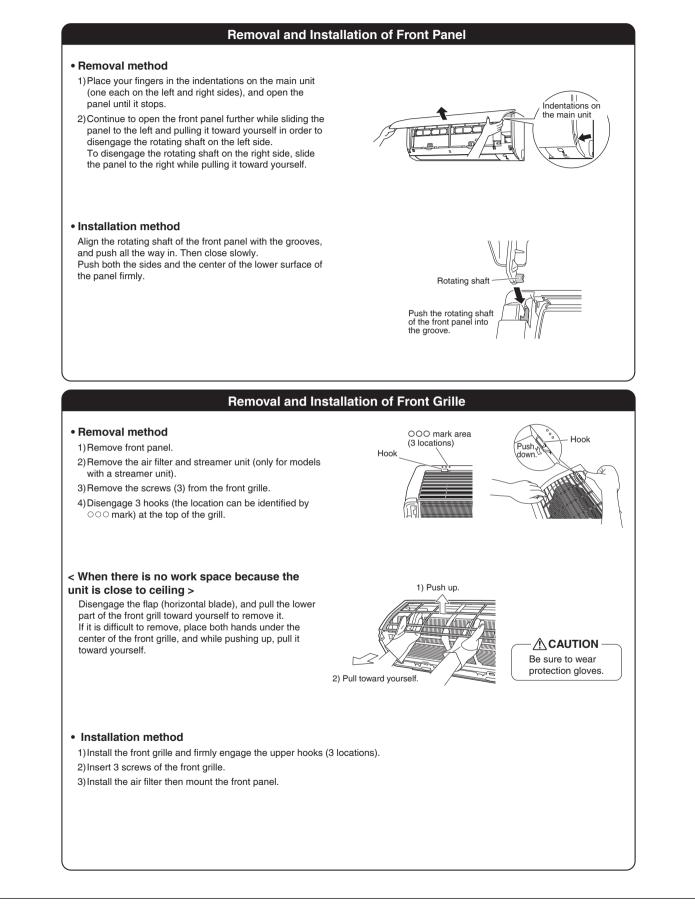


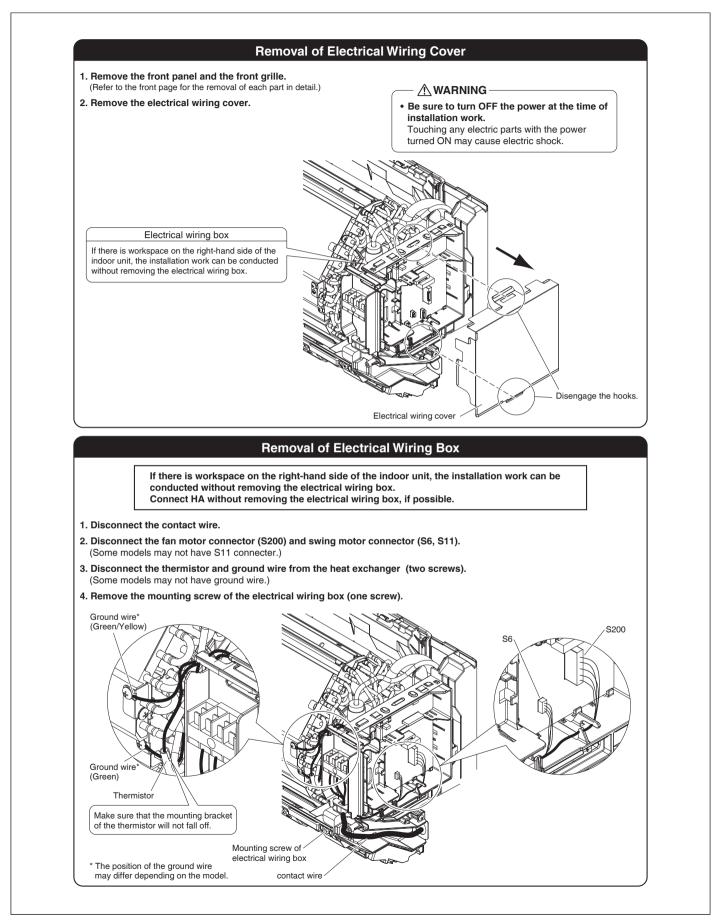
Wires indicated by thick lines ------

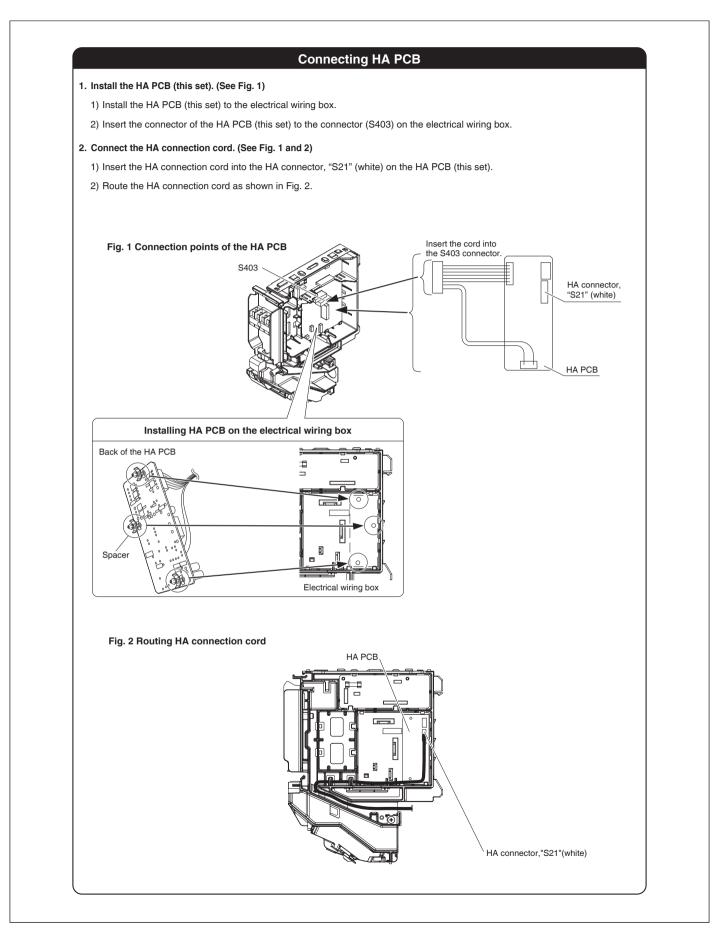
are not included with the set.

Electrical

wiring box

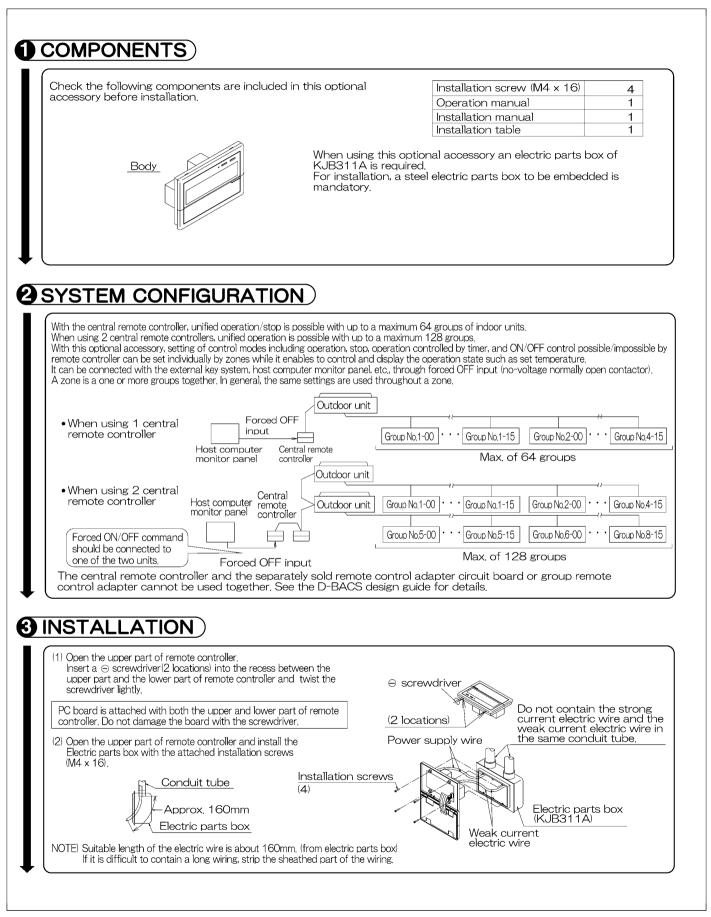






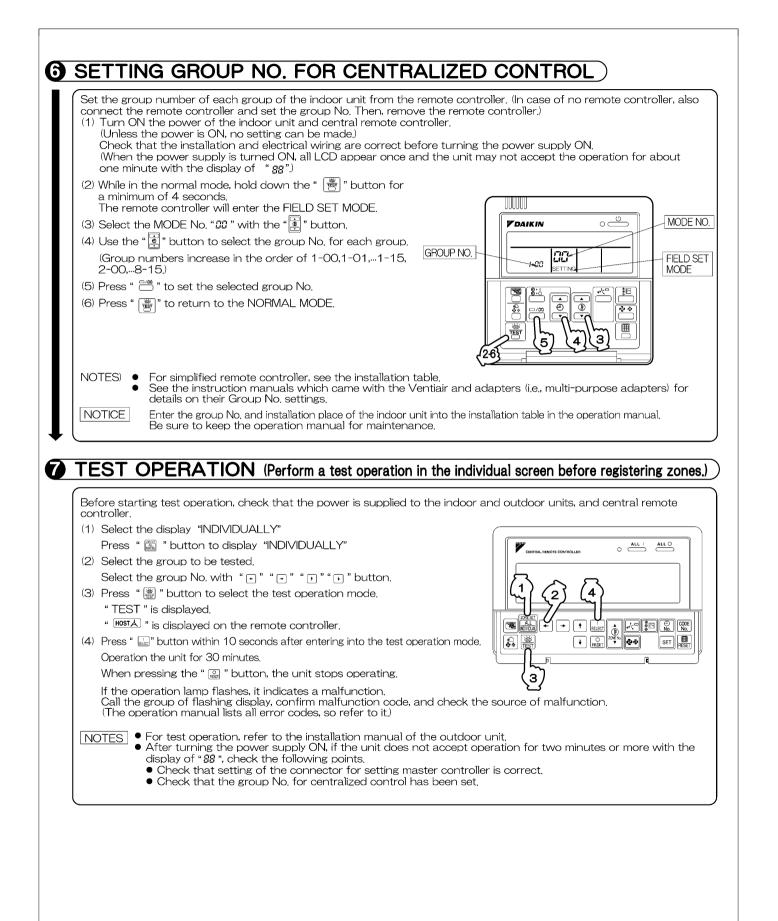
# 14.9 <DCS302C71> Central Remote Controller Installation Manual

Also, in	nstruct the customer on how to operate the unit and keep it maintained. form customers that they should store this installation manual along with the operation manual for future reference conditions comer under the term "applicance net concerning to the report of under".
This all	conditioner comes under the term "appliances not accessible to the general public",
Meaning	of warning, caution and note symbols.
<u>⊼</u> CA	RNING Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury, UTION Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, It may also be sued to alert against unsafe practices. TE Indication situation that may result in equipment or property-damage-only accidents.
Ack vo	ur dealer or gualified personnel to carry out installation work. Do not try to install the machine by yoursel
Improp	er installation may result in water leakage, electric shocks or fire.
Imprope	n installation work in accordance with this installation manual. er installation may result in water leakage, electric shocks or fire,
	e to use only the specified accessories and parts for installation work. to use the specified parts may result in water leakage, electric shocks, fire or the unit falling,
	but the specified installation work after taking into account strong winds, typhoons or earthquakes, er installation work may result in the equipment falling and causing accidents.
by qua	ure that a separate power supply circuit is provided for this unit and that all electrical work is carried out lified personnel according to local laws and regulations and this installation manual. Ifficient power supply capacity or improper electrical construction may lead to electric shocks or fire.
	re that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires. In connections or installation may result in fire.
wires s	wiring the power supply and connecting the remote controller wiring and transmission wiring, position the o that the electric parts box lid can be securely fastened. er positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
Before	touching electrical parts, turn off the unit.
Ground Incomp	the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. lete grounding may result in electric shocks.
When the sp	installing or relocating the system, be sure to keep the refrigerant circuit free from substances other than acified refrigerant (R410A), such as air.
If the p	reconstruct or change the settings of the protection devices, ressure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than thos d by Daikin are used, fire or explosion may result.
	touch the switch with wet fingers. ng a switch with wet fingers can cause electric shock.
	<b>an leak circuit breaker, as required.</b> ak circuit breaker is not installed, electric shock may result.
(a) w P (b) w (c) n (d) w V	install the air conditioner or the remote controller in the following locations: here a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen lastic parts may deteriorate and fall off or result in water leakage, here corrosive gas, such as sulfurous acid gas, is produced orroding copper pipes or soldered parts may result in refrigerant leakage, ear machinery emitting electromagnetic waves lectromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment here flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where olatile flammables such as thinner or gasoline are handled. Operating the unit in such conditions may result in fire.
Be ver	y careful about product transportation.
Packing Tear ap	dispose of the packing materials. ; materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Part and throw away plastic packaging bags so that children will not play with them. If children play with a plastic ich was not torn apart, they face the risk of suffocation.
	: <b>turn off the power immediately after stopping operation.</b> wait at least five minutes before turning off the power, Otherwise, water leakage and trouble may occur,
televisi	the indoor and outdoor units, power supply wiring and connecting wires at least 3.5ft, away from ons or radios in order to prevent image interference or noise. Inding on the radio waves, a distance of 3.5ft, may not be sufficient enough to eliminate the noise.)
fluores	e controller (wireless kit) transmitting distance can result shorter than expected in rooms with electronic cent lamps.(inverter or rapid start types) he indoor unit as far away from fluorescent lamps as possible.
	n <mark>it is a class A product.</mark> restic environment this product may cause radio interference in which case the user may be required to take adequate measure:
	ntling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance



			s, or using the centrakes settings as indi		r in conjunction with the table.
	of optional controllers for ce Unified ON/OFF controller			master controller (X1A) Se Unified ON/OFF controlle	
	Unified UN/OFF controller	Schedule limer		Unitied UN/UFF controlle	
1 to 4	1 to 16	1	Set one to "Used" and all the rest to "Not used"	Set all to "Not used"	"Not used" "Not used"
sing the unit toge nit, or the parallel 2) Address settin Two central remo	ether with the Ve-U interface station.) g ote controllers can be u door units. In this case	P controller, - used as shown group address	the master station I in <b>② SYSTEM CON</b> s must be set. This is do	I, the DMS interface	he schedule timer when e, the payment managemer ontrol anywhere up to a max, r setting each address (SS3),
SETTING EACH ADDRE 5-00 1400 ~ 8-15	SS To control indoor u	nits 00 5- ~	TING EACH ADDRESS To a	cor unit address control indoor units n group Nos, 5-00 jugh 8-15	
<ol> <li>Setting of the The central rer units on in 2-s</li> </ol>	sequential operation mote controller is eq	rollers (1) . (2 n function quipped with ing unified of	peration. (Sequentia	vhile the other is se ion function that s	entral remote ontroller (2) t to "SUB". equentially turns indoor ory set to "ON.") To switch
(	ential operation "ON" Factory set)	perform forc While holdir button, perf	ng down the unified	operation	quential operation "OFF"
not guarar	ntee that compress	ors will not be		ously. You cannot t	upply equipment, but does herefore count on a
for setting mas reset simply by s once and return without turning	the setting of the co ster controller, etc., yo setting it to the reset hing to the normal sid the power OFF. eration, set the swit	ou can side de, ch to N	kormal side Factory set)	MAI Reset side	tor for setting for setting Idress V/SUB Teoreed reset switch Fig

WIRING OUTLINE	Central remote Outdoor
Power supply AC100V-240' (50/60Hz)	
WIRING TO THE INDOOF	R UNIT AND OUTDOOR UNIT
	Outcor unit InOut DurOut F1.F2 F1.F2       Outcor unit InOut DurOut F1.F2 F1.F2       See the installation manual which came with the air conditioner for details on its transmission wiring specifications.         Image: specification of the specific
Batch remote control adapte	Central remote controller Power supply (AC100V-240V)
Separately sold batch remote Used for DCS302A72 conn	e control adapter.
Wiring specifications	
Power supply wiring Transmission wiring	2mm ² 0.75 – 1.25 mm ² sheathed vinyl cord or cable (balanced type) – maximum length
for control Manual switch	1000 m (total overall wiring length 2000 m) 1000 r 15A
instruction manual inclu CONTROL TERMINAL *1 For connecting Inde *2 Forced OFF input ( None of the indoor contact with minima	por unit (F1, F2)
T1 - ] T2 - 9   ] DC16∨	NOTE) Use instantanecous contactor of over 200m sec, energizing time, when necessary.
	lied to the schedule timer (DST301B61) separately sold. For nstallationmanual of the schedule timer.
damage or burn electrical p	supply wiring (100 to 240V) to the control terminal strip. If connected by mistake, it may parts of optional controllers for centralized control and indoor unit. It may result in serious virings before turning the power ON.



## 14.10 <DCS302C71> Central Remote Controller Operation Manual

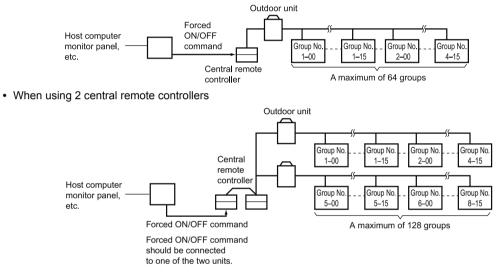
## **BEFORE USE**

#### ■ GENERAL DESCRIPTION OF SYSTEM

This central remote controller can monitor and control up to 64 indoor unit groups. Using two central remote controllers allows monitoring and controlling of up to 128 indoor unit groups.

Main Functions

- 1. Batch starting and stopping of indoor units connected to the central remote controller.
- 2. Handling of operation settings such as start/stop, timer operation, remote controller prohibition/permission, etc., and operation status settings such as temperature.
- 3. Operation status monitoring of operation mode, set temperature, etc.
- **4.** Can be connected to an external central monitor panel and key system using the forced stop input (non-voltage a connector).
- · When using 1 central remote controller

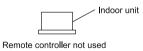


(The central remote controller and the separately sold remote control adapter circuit board or group remote control adapter cannot be used together.)

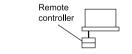
* GROUP OF INDOOR UNIT refers to the below.

**1.** A single indoor unit without remote controller

**1.** A single indoor unit without remote controller

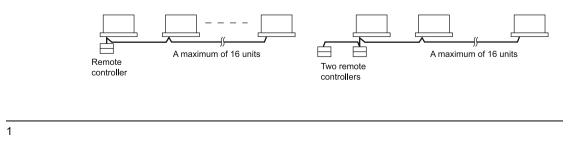


2. A single indoor unit controlled by one or two remote controllers

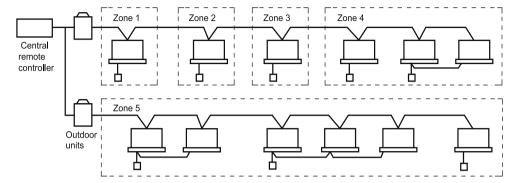




3. Maximum of 16 indoor units, group-controlled by one or two remote controllers



#### * Zone control from the central remote controller Zone control is available from the central remote controller. With it, it is possible to make unified settings for multiple groups, so setting operations are greatly simplified.



- Any setting you make within a given zone will apply to all groups in the said zone.
- A maximum of 64 zones can be set from a single central remote controller.
- (Each zone contains a maximum of 64 groups.)
- Zones can be set randomly from the central remote controller.

# SAFETY CONSIDERATIONS

Please read these "SAFETY CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly.

After completing the installation, make sure that the unit operates properly during the start-up operation. Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference. This air conditioner comes under the term "appliances not accessible to the general public".

Meaning of danger, warning, caution and note symbols.

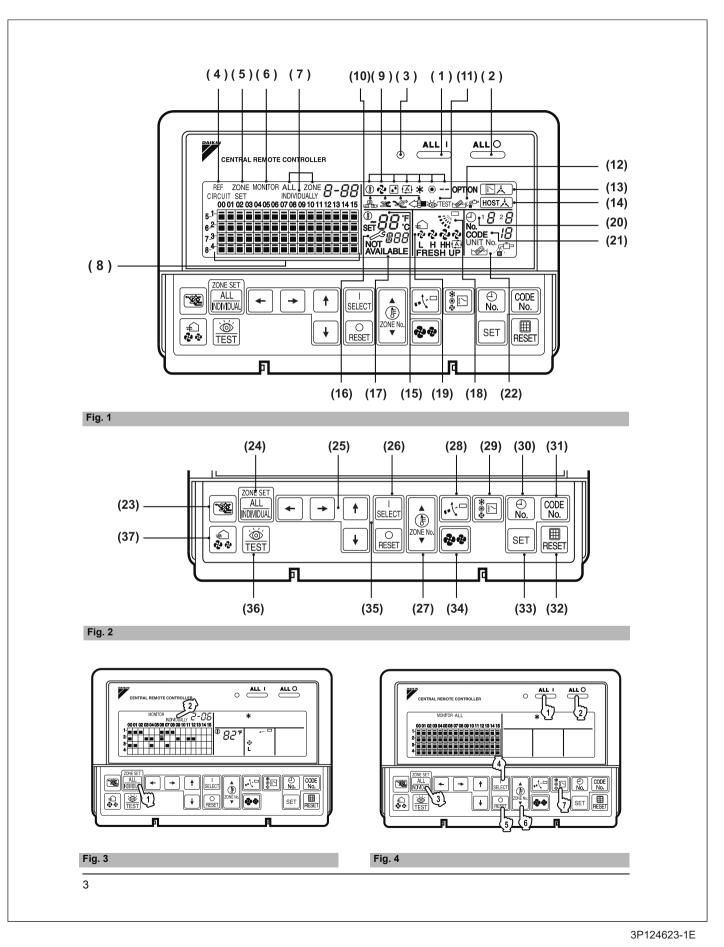
- DANGER ..... Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
- WARNING ....Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
- CAUTION .... Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
- NOTE..... Indicates situation that may result in equipment or property-damageonly accidents.

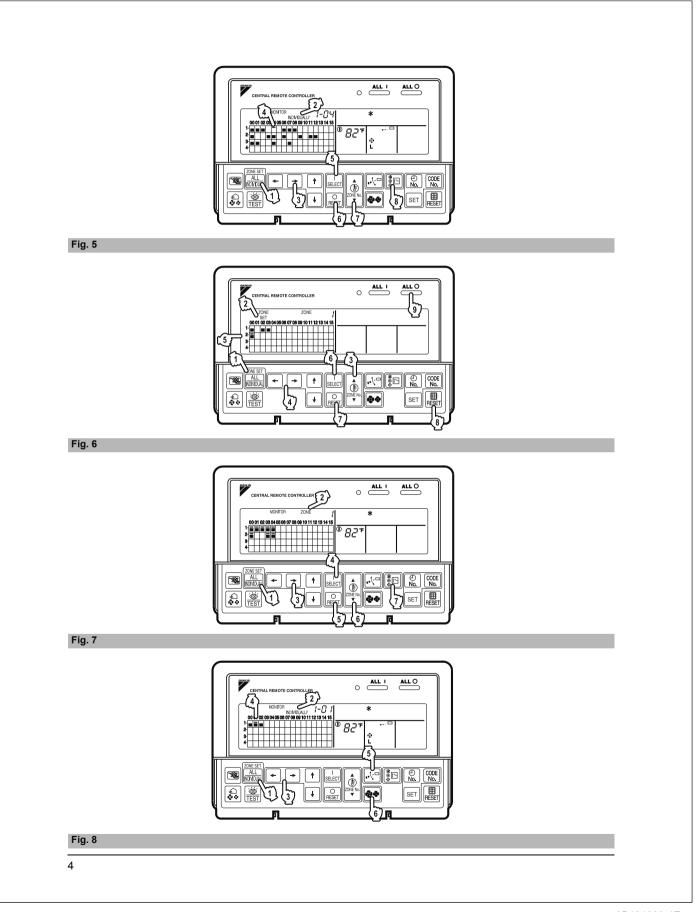
# Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

- Any abnormalities in the operation of the air conditioner such as smoke or fire could result in severe injury or death. Turn off the power and contact your dealer immediately for instructions.
- Do not install the unit in an area where flammable materials are present due to risk of explosion resulting in serious injury or death.
- Safely dispose of the packing materials. Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries. Tear apart and throw away plastic packaging bags so that children will not play with them. Children playing with plastic bags face the danger of death due to suffocation.

- Ask your dealer for installation of the air conditioner. Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire.
- Ask your dealer for improvement, repair, and maintenance. Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.
- Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.
- Ask your dealer to move and reinstall the air conditioner or the remote controller.
   Incomplete installation may result in a water leakage, electric shock, and fire.
- Never let the indoor unit or the remote controller get wet. It may cause an electric shock or a fire.





- Never use flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.
- Do not allow children to play on or around the unit as they could be injured.
- Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out. Use of wire or copper wire may cause the unit to break down or cause a fire.
- Never inspect or service the unit by yourself. Ask a qualified service person to perform this work.
   Cut off all electric waves before maintenance.
- Cut off all electric waves before maintenance.
   Do not wash the air conditioner or the remote controller with excessive water.
- Electric shock or fire may result. • Do not touch the switch with wet fingers.
- Touching a switch with wet fingers can cause electric shock.
   Never touch the internal parts of the controller. Do not remove the front panel because some parts inside are dangerous to touch. In addition, some parts may be damaged by touching. For checking and adjusting internal parts, contact your dealer.
- Check the unit stand for damage on a continuous basis, especially if it had been in use for a long time. If left in a damaged condition the unit may fall and cause injury.
- Placing a flower vase or other containers with water or other liquids on the unit could result in a shock hazard or fire if a spill occurs.

### - CAUTION -

 Avoid placing the controller in a spot splashed with water.

Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

- Do not operate the air conditioner when using a room fumigation - type insecticide.
   Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.
- Do not turn off the power immediately after stopping operation.
- Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.
- The appliance is not intended for use by young children or infirm persons without supervision.
- The remote controller should be installed in such a way that children cannot play with it.

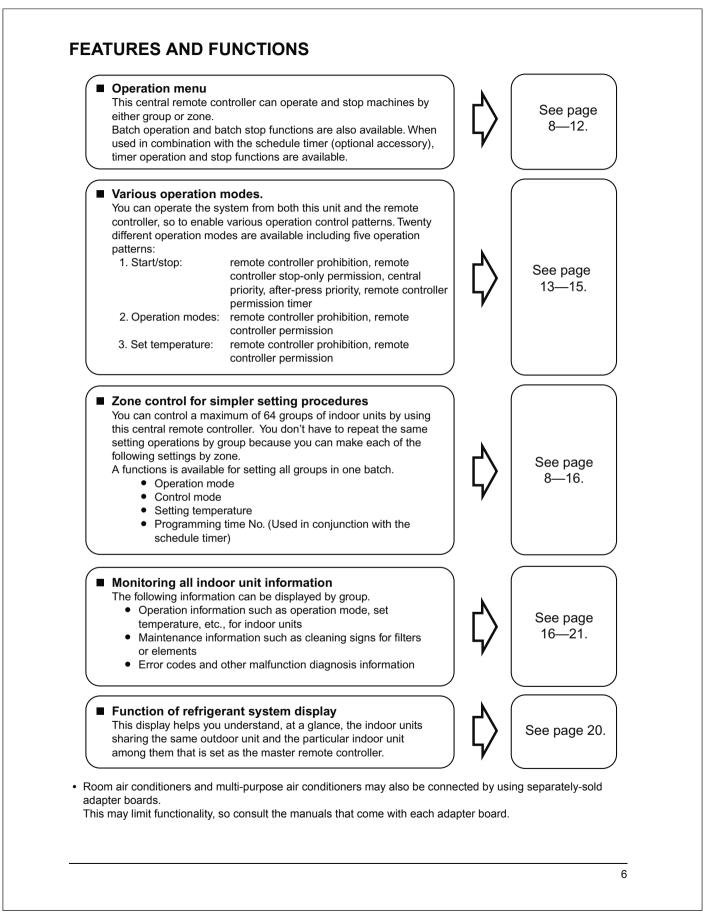
## 

- Never press the button of the remote controller with a hard, pointed object.
  - The remote controller may be damaged.
- Never pull or twist the electric wire of the remote controller.
- It may cause the unit to malfunction.
- Do not place the controller exposed to direct sunlight. The LCD display may get discolored, failing to display the data.
- Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.
   The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.
- Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

# CONTENTS

<b>BEFORE USE</b> 1
GENERAL DESCRIPTION OF SYSTEM 1
SAFETY CONSIDERATIONS 2
FEATURES AND FUNCTIONS
NAMES AND FUNCTIONS OF THE
OPERATING SECTION
OPERATION
Individual screen, all screen, zone screen
Batch operation and stop method9
Group operation and stop method9
Registering zones9
Zone operation and stop method 10
Changing the fan direction and fan strength 11
Changing the ventilation mode and
ventilation strength 11
Timer Number Setting 11
Setting the Operation Code 12

OPERATION MODE	13
Setting operation mode1	16
Group monitoring1	16
Error diagnosing function1	
Setting master remote controller2	20
Display of time to clean2	21
INSTALLATION TABLE	22
OPTIONAL ACCESSORIES	23
DOUBLE CENTRAL REMOTE	
CONTROLLERS	23
SPECIFICATIONS	24
Specifications	
Outline drawings2	
Fig. 1, 2, 3, 4	3
Fig. 5, 6, 7, 8	
Fig. 9, 10, 11, 12	
Fig. 13, 14, 15, 16	
· · · · · · · · · · · · · · · · · · ·	



	UNIFIED OPERATION BUTTON		" 『上" DISPLAY (COOLING/HEATING	
1	Press to operate all indoor units.		SELECTION PRIVILEGE NOT SHOWN)	
•	UNIFIED STOP BUTTON	13	For zones or individual units (groups) for which	
2	Press to stop all indoor units.		this is displayed, cooling and heating cannot be	
	OPERATION LAMP (RED)		selected.	
3	Lit white any of the indoor units under control is in operation.		"HOST " DISPLAY (UNDER HOST COMPUTER INTEGRATED CON-	
4	" CIRCUIT " DISPLAY (REFRIGERANT SYSTEM DISPLAY)	14	<b>TROL)</b> While this display is lit up, no settings can be made. It lights up when the upper central machines are present on the same air conditioning network.	
	This indication in the square is lit while the refrigerant system is being displayed.			
5	" ZONE SET " DISPLAY (ZONE SETTING)	15	" [®] 88 ^{° F} " DISPLAY (PRESET TEMPERATURE)	
	The lamp is lit while setting zones.		Displays the preset temperature.	
6	" MONITOR " DISPLAY (OPERATION MONITOR)		" 🖉 냅낙 " DISPLAY (MALFUNCTION CODE)	
	The lamp is lit while operation is being monitored.	16	,	
	" ALL " " ZONE " " INDIVIDUALLY " DISPLAY		when an error failure has occurred.	
7	The status displays indicates either batch		In maintenance mode, it displays the latest error	
-	functions or which zone or individual unit (or group) are being used.		content. "NOT AVAILABLE" DISPLAY	
	OPERATION MONITOR	17	(NO FUNCTION DISPLAY)	
8	Each square displays the state corresponding to each group.		If a function is not available in the indoor unit even if the button is pressed, "NOT AVAILABLE" is may be displayed for a few seconds.	
9	"⑧""�""€""爲""★""◎""" DISPLAY (OPERATION MODE)		"🐝"" DISPLAY	
	Displays operating state.	18	(FAN DIRECTION SWING DISPLAY)	
	"ఊ" "ஊ" "ஊ" "℃" "<■" DISPLAY (VENTILATION CLEANING DISPLAY)		This displays whether the fan direction is fixed or set to swing.	
10	This is displayed when a Ventiair total enthalpy heat exchanger unit or other such unit is connected.	19	"€" " ² " "FRESH UP" DISPLAY (VENTILATION STRENGTH/SET FAN STRENGTH	
	" 💩 TEST " DISPLAY (INSPECTION/TEST)		DISPLAY)	
11	Pressing the maintenance/test run button (for service) displays this. This button should not normally be used.		This displays the set fan strength. " ^① No. " <b>DISPLAY (TIME NO.)</b>	
	" ⊮ ∕ ∰ " DISPLAY (TIME TO CLEAN)	20	Displays the operation timer No. when used in conjunction with the schedule timer.	
12	It lights up when any individual unit (group) has reached the time for the filter or element to be cleaned.	Ĺ		

		33	SET BUTTON					
	CODE AND UNIT NUMBER DIS-	55	Sets control mode and time No.					
24	PLAY) The method of operation (remote controller	34	FAN STRENGTH ADJUSTMENT BUTTON					
21	prohibited, central operation priority after-press operation priority, etc.) is displayed by the	34	Pressing this button scrolls through "weak", "strong", and "fast".					
	corresponding code. This displays the numbers of any indoor units		ZONE SETTING BUTTON					
	which have stopped due to an error.	35	Zone registration mode can be turned on and off by pressing the start and stop buttons simulta- neously for at least four seconds.					
22	CLEAN AIR CLEANER ELEMENT/ TIME TO CLEAN AIR FILTER)		INSPECTION/TEST RUN BUTTON (FOR SERVICE)					
	Displayed to notify the user it is time to clean the air filter or air cleaner element of the group displayed.	36	Pressing this button scrolls through "inspection", "test run", and "system display". This button is not normally used.					
	VENTILATION MODE BUTTON		VENTILATION STRENGTH					
23	This is pressed to switch the ventilation mode of		ADJUSTMENT BUTTON					
	the total enthalpy heat exchanger.	37	This button is pressed to switch the ventilation					
<b>1</b> 4	ALL/INDIVIDUAL BUTTON		strength ("fresh up") of the total enthalpy heat exchanger.					
24	Pressing this button scrolls through the "all screen", "zone screen", and "individual screen".	(No	tes)					
	ARROW KEY BUTTON	<b>1</b> .	Please note that all the displays in the figure					
25			appear for explanation purposes or when the cover is open.					
	ON/OFF BUTTON		If the unit is used in conjunction with other optiona central controllers, the OPERATION LAMP of the					
26	Starts and stops ALL, ZONE, and INDIVIDUAL units.		unit that is not under operation control may light up and go out a few minutes behind schedule.					
	TEMPERATURE ADJUSTMENT BUTTON (ZONE NUMBER BUTTON)		This shows that the signal is being exchanged, and does not indicate any failure.					
27	This button is pressed when setting the temperature. Select the zone number if any zones have been registered.		PERATION ndividual screen, all screen,					
	FAN DIRECTION ADJUSTMENT		zone screen (Fig. 3)					
28	BUTTON	This	controller can perform operations in the individua					
-0	This button is pressed when setting the fan direction to "fixed" or "swing".		en, all screen, or zone screen. ndividual screen The individual screen is used when performing group opera-					
29	OPERATION MODE SELECTOR BUTTON	• A	tions. Il screen The all screen is used when pe					
20	This sets the operation mode. The dry setting cannot be done.	• Z	forming operations for all units a once. one screen The zone screen is used when					
	TIME NO. BUTTON		performing zone operations.					
••		4	Select the screen by pressing the					
30	Selects time No. (Use in conjunction with the schedule timer only).		"ALL/INDIVIDUAL" button.					
30 31	schedule timer only). CONTROL MODE BUTTON	I	Every time the "ALL/INDIVIDUAL" button is					
	schedule timer only).         CONTROL MODE BUTTON         Selects control mode.	ľ						
	schedule timer only). CONTROL MODE BUTTON	 	⁽²⁾ Every time the "ALL/INDIVIDUAL" button is pressed, the selection scrolls through INDIVIDUA					

If the zone number in the zone screen is displayed as "---," this indicates that no units are registered in a zone.
 Please perform zone registration before pro-

ceeding in the zone screen. (See page 9)

#### Batch operation and stop method (Fig. 4)

This is for operating or stopping all connected units at once.

# A. What to do when operating or stopping all connected units at once.

#### 1. Press either () " ALL |" or

- 27 "ALL O".
  - Operation can be performed from the individual screen, the all screen, or the zone screen.
  - The "TEMPERATURE ADJUSTMENT" and "OPERATION MODE SELECTOR" buttons cannot be used.

To set the temperature and operation mode, use B. batch operation.

#### **B. Batch Operation**

# 1. ⁽³⁾ Press the "ALL/INDIVIDUAL button" to enter the all screen.

The " 📃 " display lights up on all registered units.

#### **2.** ⁽⁴⁾ Press the "SELECT" button.

The " I display lights up on all connected units.

#### ⁽⁵⁾ Press the "RESET" button.

The " **I** " display goes off on all connected units. Operation and stop in the batch screen are done the same as with the batch operation and batch stop buttons.

Image: Second state of the second

The temperature rises  $1^\circ\mbox{ every time}$ 

the ( $\blacktriangle$ ) button is pressed.

The temperature drops 1° every time

the ( $\mathbf{\nabla}$ ) button is pressed.

Set to "--" when you do not wish to use batch setting for the temperature setting. Setting to 1° above or below the temperature setting range displays "--".

#### 4. ^(T) Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

Set to "--" when you do not wish to use batch setting for the operation setting.

# Group operation and stop method (Fig. 5)

This is for operating or stopping connected units in groups.

#### [Group operation]

1. Press the Transformation "ALL/INDIVIDUAL button"

to enter the 2 individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

2. I Using the arrow keys, I move the

" T is select the units to operate or stop. Keeping the button pressed down will move it rapidly.

The " 🔄 " in this screen has selected unit 1-04.

3. ⁽⁵⁾ Press the "SELECT" button.

The " I display lights up in the group.

⁽⁶⁾ Press the "RESET" button.

The " I display goes off in the group.

 In the "TEMPERATURE ADJUST-MENT" button.

The temperature rises 1° every time the

( ) button is pressed.

The temperature drops 1° every time the

(▼) button is pressed.

Temperature adjustment cannot be done if the selected group's air conditioners are in fan mode.

5. ^(a) Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

#### Registering zones (Fig. 6)

It is possible to set multiple groups as one zone and control each zone separately.

No zones are registered when the unit is shipped from the factory.

Zone registration can be done in the individual screen, all screen, or zone screen.

#### [Registration]

#### 1. TPressing the "ALL/INDIVIDUAL" button for four seconds. Displays ZONE SET.

Zone Number 1 will be displayed, and if there are any groups already registered in the displayed

zone, a " 🔳 " will light up on the operation monitor.

- 2. ⁽³⁾ Select the Zone Number to be registered using the "ZONE NUMBER" button. Keeping the button pressed down will move it rapidly.
- 3. ⑸¯ " ☐" to the group you wish to ④ register using the arrow keys.

Keeping the button pressed down will move it rapidly.

4. ^(C) Press the "SELECT" button to register that group to the zone.

The " I display lights up on all the selected units.

V Pressing the "RESET" button removes the group from that zone, and

#### " 🔳 " goes off.

Repeat steps 3 and 4 until all the units you wish to register to the zone have been added.

2	ZONE						ZONE ZONE									
	00		02	-	04	05	06	07	08	09	10	11	12	13	14	15
1-																
2-																
3-																
4-																

In this example, a screen is shown with units 1-00, 1-02, 1-03, and 2-00 registered to Zone Number 1.

- 5. Repeat steps 2 to 4 to register to the next zone.
- Once zone registration is complete,
   press the "ALL/INDIVIDUAL" button to turn off "ZONE SET" display and return to the individual screen.

The display returns to the normal screen if nothing is done for one minute when in zone registration mode.

(NOTE)

• It is impossible to register one group to several different zones.

If this is done, the last zone registered to will be valid.

#### [Batch deletion of zone registration]

1. ☞ Pressing the "ALL ○" for at least four seconds while ☞ pressing the "FIL-TER SIGN RESET" button when

27 "ZONE SET" is displayed will delete all zone registrations.

The zone registrations for all units will be lost.

#### Zone operation and stop method (Fig. 7)

This is for operating or stopping connected units in zones.

#### [Zone operation]

- 1. IP Press the "ALL/INDIVIDUAL button" to enter the zone screen.
- 2. It using the arrow keys, select the zone number to operate or stop.

Pressing - and + reduces the zone number

while  $\rightarrow$  and  $\uparrow$  raise the number.

Keeping the button pressed down will move it rapidly.

 If the zone number is displayed as "---," this indicates that no units are registered in a zone. Please perform zone registration before using a zone. (See page 9)

3. ^(J)Press the "SELECT" button.

The " I display lights up in the group.

⁽⁵⁾ Press the "RESET" button.

The " I display goes off in the group.

4. IP Press the "TEMPERATURE ADJUST-MENT" button.

The temperature rises 1° every time the (  $\blacktriangle$  ) button is pressed.

The temperature drops 1° every time the ( $\mathbf{\nabla}$ ) button is pressed.

Set to " -- " when you do not wish to use zone setting for the temperature setting.

Setting to 1° above or below the temperature setting range displays " -- ".

#### 5. (Tr Call up the desired mode by pressing the "OPERATION MODE SELECTOR" button.

Set to " -- " when you do not wish to use zone setting for the operation mode.

#### Changing the fan direction and fan strength (Fig. 8)

This changes the fan direction and strength settings in the air conditioner.

Changing the fan direction and strength is done in the individual screen.

#### [Registration]

1. (IP Press the "ALL/INDIVIDUAL button"

to enter the IP individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

- 2. I Using the arrow keys, I move the
  - " " to select the units to fan direction adjustment or fan strength adjustment. Keeping the button pressed down will move it rapidly.
- GPPress the "FAN DIRECTION ADJUST-MENT" button.

This sets "fixed" or "swing" for the fan direction.

#### ^(C) Press the "FAN STRENGTH ADJUST-MENT" button.

Pressing this button scrolls through " $\overset{\circ}{L}$ ", " $\overset{\circ}{H}$ ", and " $\overset{\circ}{L}$ ".

Depending on the indoor unit, only " ${}^{*}_{L}$ " and " ${}^{*}_{H}$ "

may be available.

The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

#### Changing the ventilation mode and ventilation strength (Fig. 9)

This changes the ventilation mode and strength settings in the total enthalpy heat exchanger. Changing the ventilation mode and strength is done in the individual screen.

#### [Registration]

1. IP Press the "ALL/INDIVIDUAL button" to

enter the (i) individual screen. The unit will enter the individual screen automatically if nothing is done for one minute.

2. In Using the arrow keys, I move the

# 3. IP Press the "VENTILATION MODE" button.

It will scroll through " $(\underline{\mathbb{A}})$ "  $\rightarrow$  " $\mathbf{X}$ "  $\rightarrow$  "  $\mathbf{X}$ "  $\rightarrow$  "

**G** Press the "VENTILATION STRENGTH ADJUSTMENT" button.

It will scroll through " $\stackrel{\bullet}{L}$ "  $\rightarrow$  " $\stackrel{\bullet}{H}$ "  $\rightarrow$  " $\stackrel{\bullet}{L}$   $\stackrel{\bullet}{L}$   $\stackrel{\bullet}{}$   $\stackrel{\bullet}{}$ 

 $\begin{array}{c} \overset{\bullet}{\mathsf{H}} & \overset{\bullet}{\mathsf{H}} \\ & \mathsf{FRESH UP} & & \mathsf{In protion} \end{array}$ 

The fresh up function may not be available depending on the connected unit model. The functions included in the indoor units may vary. Pressing a button for a function which is not available will cause "NOT AVAILABLE" to be displayed.

#### Ventilation Mode and Amount

If these are changed using the remote controller depending on the unit model, they cannot be displayed on the central remote controller. To monitor the ventilation mode and amount, check the values on the remote controller.

#### ■ Timer Number Setting (Fig. 10)

(Only when used with the schedule timer) Using this together with the schedule timer makes it possible to set on and off times four times a day.

#### [Registration]

1. IP Pressing the "TIMER NO." button causes the number set for timer number 1 to blink.

If no timer setting has been made "-" will be displayed. Select the desired timer number by pressing the TIMER NO." button.



2. ⁽²⁾ Once the desired timer number is displayed, press the "SET" button.

Press the  $(27)^{\circ}$  "SET" button within 10 seconds after the timer number is displayed. The display will return to how it was after 10 seconds.



The display for timer number 1

will stop blinking and then timer number 2 will start blinking.

[&]quot; " to select the units to ventilation mode or ventilation strength adjustment. Keeping the button pressed down will move it rapidly.

3. IT Select the desired timer number by pressing the "TIMER NO." button. Once the desired timer number is _____

displayed, (2) press the "SET" button. The display for timer number 2 will stop blinking.



The " $\stackrel{\bigcirc}{No.}$ " display will disappear after 3 seconds.

Select " – " in the timer number when you do not wish to set a timer number.

It is possible to set only one timer number. (The times for turning the unit(s) on and off twice a day can be set with a single timer number.)

- Timer Number Setting
  - Group control: select the unit in the individual screen and set the timer number.
  - Batch control: set the timer numbers for all connected units. Zone control: set the timer numbers for all
    - control. Set the time numbers for an zone-registered units. Call up the zones which you wish to set in the zone screen and set the timer numbers.
- Since the timer number will be set to afterpress priority, the timer number in the last screen set will be valid for the connected units.

#### Example 1

Setting timer number 1 for unit 1-00 to "1" and timer number 2 to "2" in the individual screen and then setting timer number 1 to "3" and timer number 2 to "4" in the batch screen causes the timer numbers for all units to be set, so timer number 1 for unit 1-00 will be "3" and timer number 2 will be "4".

#### Example 2

To prevent leaving units on, timer number 1 is set to "5" in the batch screen.

Setting timer number 1 in zone number 1 to " – " in the zone screen after that will change the timer number for zone number 1, so the setting to prevent leaving the units on will be lost for zone number 1 only.

If a timer number is set incorrectly by accident, redo the setting in the desired screen.

# • What happens when the timer number on time and off time are set to the same time

When the on time and off time are set to the same time for the same timer number, operation does not change.

When the on time and off time are set to the same time for different timer numbers, the off time is given priority.

When using timer operation, make sure the times do not overlap when setting the program of the schedule timer.

#### ■ Setting the Operation Code (Fig. 11)

#### [Registration]

1. TPressing the "CONTROL MODE" button causes the currently set operation code to blink. Call up the desired code number by pressing the

 I Donce the code number is displayed, press the "SET" button.
 The display will stop blinking.
 The operation code display will disappear after 3 seconds.

#### [The Operation Code Setting]

- Group control: select the unit in the individual screen and set the operation code.
- Batch control: set the operation code for all connected units.
- Zone control: set the operation code for all zone-registered units. Call up the zones which you wish to set in the zone screen and set the operation code.

Since the operation code will be set for after-press priority, setting the operation code in the zone and individual screens after setting the operation code in the batch screen, will cause the operation codes set afterwards to be valid.

## **OPERATION MODE**

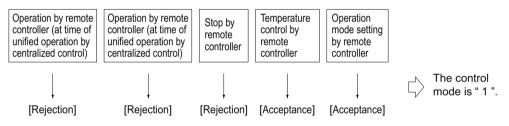
The following five operation control modes can be selected along with the temperature setting and operation mode by remote controller, for a total of twenty different modes. These twenty modes are set and displayed with control modes of 0 to 19. (For further details, see **EXAMPLE OF OPERATION SCHEDULE** on the next page.)

ON/OFF control impossible by remote controller	Use this mode when operating and stopping from the central remote controller only. (ON/OFF control by the remote controller is disabled.)
Only OFF control possible by remote controller	Use this mode when executing the operation only by the central remote controller, and executing only the stop by remote controller.
Centralized	Use this mode when executing the operation only by the central remote controller, and executing start/stop freely by remote controller during the preset hours.
Individual	Use this mode when executing start/stop both by central remote controller and remote controller.
Timer operation possible by remote controller	Use this mode when executing start/stop by remote con- troller during the preset hours, and not starting operation by the central remote controller at the programmed time of system start.

#### [HOW TO SELECT THE CONTROL MODE]

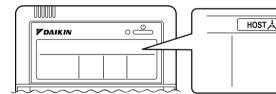
• Select whether to accept or to reject the operation from the remote controller regarding the operation, stop, temperature setting and operation mode setting, respectively, and determine the particular control mode from the rightmost column of the table below.

Example



		Control by remote	controller				
Oneration	Operat	ion				Cantral	
Operation mode	Unified operation, individ- ual operation by central remote controller, or opera- tion controlled by timerUnified stop, individual 		Stop	Tempera- ture control	Operation mode setting	Control mode	
				Rejection	Acceptance	0	
ON/OFF control			Rejection	Rejection	Rejection	10	
impossible by remote controller			(Example)	Acceptance	Acceptance (Example)	1 (Example)	
Only OFF control possible by remote controller	Rejection			(Example)	Rejection	11	
	(Example)			Dejection	Acceptance	2	
		Rejection (Example)		Rejection	Rejection	12	
		(Example)		Acceptance	Acceptance	3	
				Acceptance	Rejection	13	
				Dejection	Acceptance	4	
Centralized				Rejection	Rejection	14	
Centralized				Accentance	Acceptance	5	
	Assesses		Assesses	Acceptance	Rejection	15	
	Acceptance		Acceptance	Dejection	Acceptance	6	
المطنبة بأطريها		Assesses		Rejection	Rejection	16	
Individual		Acceptance		Accentorios	Acceptance	7	
				Acceptance	Rejection	17	
				Dejection	Acceptance	8	
Timer operation	Acceptance	Rejection		Rejection	Rejection	18	
possible by remote controller	(During timer at ON position only)	(During timer at OFF position)		A	Acceptance	9	
		P · · · · · /		Acceptance	Rejection	19	

Note) Do not select the timer operation possible without the remote controller. In this case, timer operation is disabled.

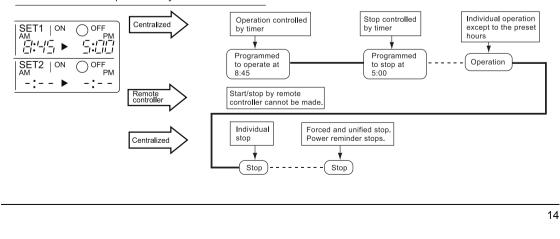


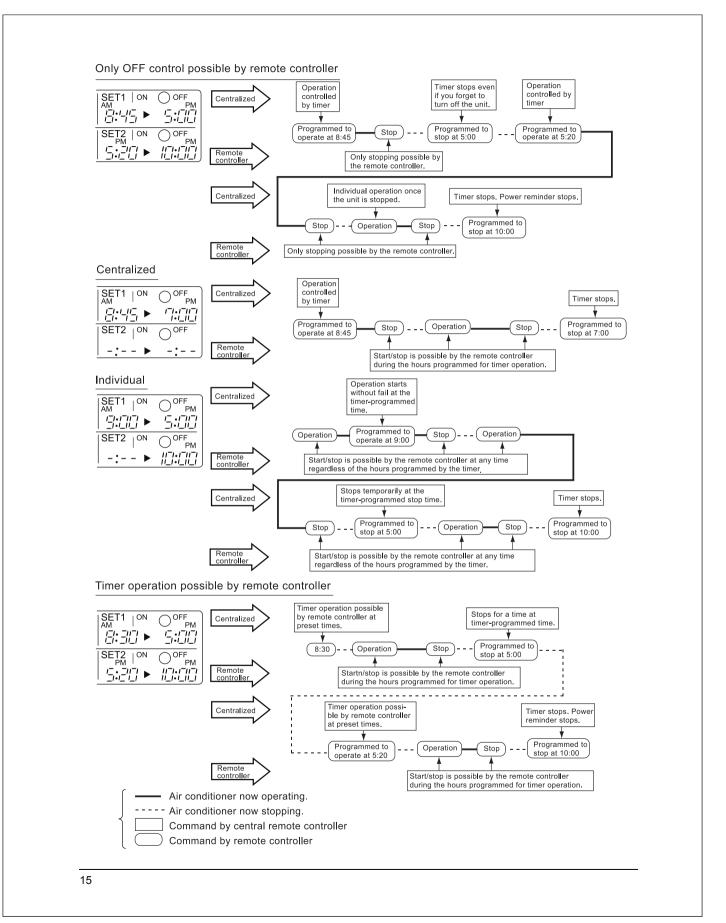
When the operation, stop, temperature setting and operation mode setting by remote controller are rejected, "HOSTAL" is displayed on the remote controller.

#### **EXAMPLE OF OPERATION SCHEDULE**

Operation schedule is possible only in conjunction with the schedule timer (optional accessory). Liquid crystal display of schedule timer

ON/OFF control impossible by remote controller





#### ■ Setting operation mode (Fig. 12)

#### [Registration]

- 1. TPress the OPERATION MODE SELEC-TOR BUTTON. Each time you press this button, the display rotates as shown on the below list.
- List of operations which can be set In the below list, " 
   " refers to the acceptable setting, while " × " refers to the not acceptable setting.

	A: Zones " ⊾	and groups with no " display.
Display	Setting	Contents of setting
	×	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0	Can be set in individual zones or groups
	0 * 1	Can be set in individual zones or groups
*	0	Can be set in individual zones or groups
*	0	Can be set in individual zones or groups
ur∰an (2) ⊈an or 2) €	0 * 1	Can be set in individual zones or groups * 3
	O * 1	Can be set in individual zones or groups
	0	Select this display if you don't wish to set by zone.

	B : Zone " []]人	es and groups with a " display.		
Display	Setting	Contents of setting		
	0	To be set by zone * 2		
* ??-	0	Can be set in individual zones or groups		
	×			
*	×	The displays are shown by group * 4		
*	×	The displays are shown by group * 4		
u∰e or 30€ or * 42°	0 * 1	Can be set in individual zones or groups * 3		
	0 * 1	Can be set in individual zones or groups		
	0	Select this display if you don't wish to set by zone.		

- *1: Setting may not be acceptable depending on the type of indoor unit with which this unit is connected.
- *2: In zone control, the units run in temperature adjustment mode (heating or cooling) for the outdoor system for the groups registered to those zones. Heating or cooling selection is not available.
- *3: (A) or 20 or 2
- *4: In group control, the units run in temperature adjustment mode (heating or cooling) for the group outdoor system. Heating or cooling selection is not available.
- The Zone consists of the following two cases.

A. Zone without display"

The group with master remote controller setting exists in this zone.

Setting the master remote controller enables cool/ heat selection.

Operations other than cool/heat operations can also be set for some operations. For further details, see the list on the left.

B. Zone with display" [] 人 "

No group with master remote controller setting exists in this zone.

The cool/heat selection is not available because the master remote controller has not been set. Some operations other than cool/heat operations can be set. For further details, see the list in the left.

See page 20 if the display" [], " is flashing.

- Fan operation can be performed for each zone using the central remote controller even if there is no cooling/heating selection right during cooling or heating. Also, if a Ventiair is connected in the zone, ventilation and ventilation cleaning operation is possible. See the included operating manuals for details.
- When the indoor unit is in heat operation, change the setting to FAN operation through the central remote controller; then, you can switch the fan speed to the extremely low fan speed. Warm air may blow if any other indoor unit belonging to the same system is in heat operation.
- The indoor fan stops during defrost/hot start.
- DRY cannot be set from the central remote controller.

Group monitoring (Fig. 13)

Utilize the group monitor function in each of the following cases:

- 1. Check the malfunction code.
- (See the next page.)
- 2. Check the group that requires cleaning of the air filter and air cleaner element. (See page 21.)
- 3. Change the setting of the master remote controller. (See page 20.)
- Check the group(s) sharing the same outdoor unit. Or, check the particular group(s) with the master remote controller setting. (See page 20.)
- 5. Check the conditions of other individual groups.

When in zone screen

The zone screen will revert to the individual screen automatically if nothing is done in it for one minute.

[Registration]

- 1. TPress the "ALL/INDIVIDUAL" button to switch to the T "INDIVIDUAL" screen.
- 2. In Using the arrow key, I move the

" To select the unit to be monitored. Keeping the button pressed down will move it rapidly.

The " \square " lights up and the status of that unit is displayed in the LCD. The cursor in the screen Fig. 13 has selected unit 2-06.

Error diagnosing function (Fig. 14)

This central remote controller is provided with a diagnosing function, for when an indoor unit stops due to malfunction. In case of actuation of a safety device, disconnection in transmission wiring for control or failure of some parts, the operation lamp, inspection display and unit No. start to flash; then, the malfunction code is displayed. Check the contents of the display, and contact your DAIKIN dealer because the above signs can give you the idea on the trouble area.

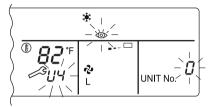


The display " — " flashes under the group No. where the indoor unit that has stopped due to malfunction.

[Registration]

1. IP Press the ARROW KEY BUTTON to call up the group that has stopped due to malfunction.

2 The unit No. 3 the malfunction code is flashing because of an error failure.



Operation lamp	Maintenance display	Unit No.	Malfunction code	Error content
÷.	•	÷ þ	64	Indoor air thermistor error
÷.	•	৵	65	Outdoor air thermistor error
\$	•	৵	68	HVU error (Ventiair dust-collecting unit)
\$	•	⇒	6A	Dumper system error
\$	÷\$	⇒	6A	Dumper system error + Thermistor error
\$	•	⇒	6F	Simple remote controller error
÷.	•	⇒	6H	Door switch (Ventiair dust-collecting unit), relay harness fault (Ventiair dust-collecting/humidifier unit)
÷Þ	÷Þ	÷ Þ	94	Ventiair internal transmission error (between total enthalpy – fan unit)
÷.	\$	⇒	A0	Indoor unit · external safety device error
÷Þ	⇒	÷\$	A1	Indoor unit · BEV unit (Sky-Air connection unit) PC board assembly fault
\$÷	•	÷	A1	Indoor unit · PC board assembly fault
÷	\$	⇒	A3	Indoor unit · Drain level error (33H)
÷	÷	৵	A6	Indoor unit · Fan motor (51F) lock, overload
\$	•	৵	A7	Indoor unit · Fan direction adjustment motor (MA) error
¢.	÷	৵	A9	Indoor unit · BEV unit, electric expansion valve motor (20E) error
¢	•	⇒	AF	Indoor unit · Malfunctioning drain
¢	•	⇒	AH	Indoor unit · Dust-collector error
¢.	÷	⇒	AJ	Indoor unit · Insufficient capacity setting, address setting fault

⇒	⇒	\$	C4	Indoor unit · Liquid piping thermistor (Th2) Error (faulty connection, cut wire, short circuit, fault)
৵	÷	.	C5	Indoor unit · BEV unit, gas piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
⇒	÷Þ	Þ	C9	Indoor unit Intake air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
⇒	÷Þ	Þ	CA	Indoor unit · Outlet air thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
÷.	•	¢	CJ	Indoor unit · remote controller sensor error
÷ þ	Þ	⇒	E0	Outdoor unit · Safety device operation
.⊅	⇒	⇒	E1	Outdoor unit · PC board assembly fault
÷	•	⇒	E1	Outdoor unit · PC board assembly fault
- Þ	÷	⇒	E3	Outdoor unit · High-pressure switch fault
- Þ	÷	⇒	E4	Outdoor unit · Low-pressure switch fault
- Þ	÷Þ	⇒	E9	Outdoor unit · Electric expansion valve motor (20E) error
¢	•	*	EC	Heat source unit · Intake water temperature inter-lock operation (fan operation)
⇒	÷.	\$	EF	Outdoor unit · Ice thermal storage unit error
⇒	÷)	⊅	F3	Outdoor unit · Discharge piping temperature error
÷¢-	•	⊅	H3	Outdoor unit · High-pressure switch operation
-⊅	⇒	⊅	H4	Outdoor unit · Low-pressure switch operation
⇒	÷Þ	\$	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
¢	•	\$	H9	Outdoor unit · Outdoor air thermistor (Th1) Error (faulty connection, cut wire, short circuit, fault)
÷¢-	•	\$	нс	Outdoor unit · Water temperature sensor system error
¢	•	Þ	HF	Ice thermal storage unit error, ice thermal storage controller erro error in outdoor unit during ice thermal storage operation
⇒	⇒	\$	HJ	Outdoor unit · water system fault
.≯	÷Þ	\$	J1	Outdoor unit · pressure sensor error
⇒	÷Þ	\$	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
¢	•	\$	J3	Outdoor unit · Discharge piping thermistor (Th3) Error (faulty connection, cut wire, short circuit, fault)
৵	÷Þ	\$	J5	Outdoor unit · Intake piping thermistor (Th4) Error (faulty connection, cut wire, short circuit, fault)
⇒	⇒	\$	J6	Outdoor unit · Heat exchange thermistor (Th2) error
¢	•	\$	J6	Outdoor unit · Heat exchange thermistor (Th2) error Error (faulty connection, cut wire, short circuit, fault)
÷Þ	÷Þ	Þ	J7	Outdoor unit · Header thermistor (Th6) error
- ' Þ	÷Þ	∻	JA	Outdoor unit · Discharge piping pressure sensor error
-≯	÷)	∻	JC	Outdoor unit · Intake piping pressure sensor error
	÷)	.⇔	JF	Outdoor unit · Oil temperature sensor (Th5) system error
\$÷	•	.⇔	JH	Outdoor unit · Oil temperature sensor (Th5) system error
.⊅	×)	-¢-	LO	Outdoor unit · Inverter system fault
.⊅	⇒	.≯	L4	Outdoor unit · Inverter cooler fault
÷		- Þ	L5	Outdoor unit · Ground circuit for compressor motor, short circuit

->	->	÷	L6	Outdoor unit · Ground circuit for compressor motor, short circuit
÷	-> þ		L8	Outdoor unit Compressor overload, compressor motor wire disconnection
->	-> b	÷)	L9	Outdoor unit · Compressor lock
->	->	->	LA	Outdoor unit · Power unit error
÷	-> þ	*	LC	Outdoor unit · Transmission error between inverter and outdoor control unit
⇔ or ●	-≯	÷	M1	Central controller: PC board fault
⇔ or ●	- Þ	÷	M8	Transmission error between central controllers
☆ or ●	- Þ	÷	MA	Central controller: Incorrect combination
⇔ or ●	-≯	¢.	MC	Central controller: Address setting fault
-≯	•	÷,	P0	Insufficient gas (thermal storage)
- Þ	- Þ	\$	P1	Outdoor unit · Power voltage imbalance, phase loss
-≯	-≯	\$	P4	Outdoor unit · Power unit temperature sensor error
÷	٠	⇒	U0	Pressure drop due to insufficient refrigerant, electric expansion valve fault, etc.
÷Þ	-⊅	÷\$	U1	Reversed or lost phase
÷Þ	.≯	÷\$	U2	Power voltage error, momentary electrical stoppage
÷ þ	⇒	÷	U4	Transmission error between indoor unit/BEV unit and outdoor/B3 unit, Transmission error between outdoor unit and BS unit
- Þ	- ` Þ	÷\$	U5	Transmission error between remote controller and indoor control unit
•	\	•	U5	Remote controller board fault or remote controller setting fault
÷Þ	.⊅	÷\$	U6	Transmission error between indoor units
⇒	- >	⋪	U7	Transmission error between outdoor units Transmission error between outdoor unit and ice thermal storage unit
¢	•	÷	U7	Transmission error between outdoor units (cooling/heating batch, low-noise operation)
-> b	⇒	•	U8	Transmission error between master remote controller and slave remote controller (slave remote controller error) Incorrect combination of indoor unit and remote controller within a single system (model)
*	⇒	*)	U9	Transmission error between indoor unit/BEV unit and outdoor unit within a single system Transmission error between BS unit and indoor unit/BEV unit and outdoor unit within a single system
⇒	⇒	⇒	UA	Incorrect combination of indoor, BS, and outdoor units within a single system (model, number of units, etc.) Incorrect combination of indoor unit and remote controller (remote controller in question) BS unit connection position fault
\	•	¢	UC	Central control group numbers overlap
÷Þ	- ` Þ	*	UE	Transmission error between indoor unit and central controller
Þ	⇒	*	UF	Unset system, incorrect settings between BEV unit and indoor unit
৵	⇒	\$	UH	System fault

- error codes (in outline font) do not display "maintenance" and the system will run, but please check the content of the display and contact your dealer.

Setting master remote controller (Fig. 15)

You must set the master remote controller of the operation mode for one of the indoor units, if two or more such indoor units with the remote controller are connected with the outdoor unit where the operation modes such as cool/heat operation and FAN operation can be set by remote controller and central remote controller.

1. Preparations

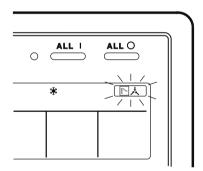
When you want to fix settings

- Check the particular group with the master remote controller setting for the refrigerant system you wish to reset. (See the below.)
- Call up the group without the display
 - " **下**, " (See page 16.)

Hold the OPERATION MODE SELECTOR BUTTON down for about four seconds while the above group is being called up.

When you turn on the power switch for the first

time, the display" [], " flashes.



2. Setting selection right

Pall up the desired group to set the master remote controller, and ip press the OPERA-TION MODE SELECTOR BUTTON. The master remote controller is set for this group, and the

display " [] , goes out. The display

" The second sec

When switching operation

In case of operation switch
 Call up the zone including the group with the setting of master remote controller.

(Zone without the display " []; ")

T Press the OPERATION MODE SELECTOR BUTTON several times, and switch to the desired operation mode.

Each time you press it, the display is switched

NOTE

 However, the displays " (A) " " (B) " and "VENTI-LATION MODE" may apper in some zones, depending on the type on indoor unit with which they are connected. (VENTILATION MODE)

📇 or 💥 or 🏏

[System Display]

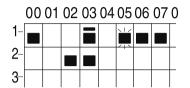
- 1. Test run mode is necessary to display the system display.
- 2. In order to turn on test run mode, select the appropriate air conditioner on the individual screen with the cursor and then set its operation mode to either cooling or heating. (It makes no difference if the air conditioner is running or not running while this operator is being performed.)
- 3. Press the "inspection/test run" button twice to put it into test run mode.
- 4. Pressing the "inspection/test run" button for four or more seconds in test run mode will display IT the "REF CIRCUIT."

RE	F ¢	— Т	۲Î	ጋ										-	0	3
C	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15
1-						Ĭ										
2-																
3-																
4-																

Call the unit whose system you wish to look up using the arrow keys.

The " **m**" on all groups in the same system as the displayed group will light up.

Of those, the " **I** " display in all groups which have cooling/heating selection privilege will blink.



In this example, individual units 1-00, 1-03, 1-05, 1-06, 1-07, 2-02, and 2-03 are in the same system, and 1-05 has the cooling/heating selection privilege.

To look up other systems, call up all the units you wish to look up using the arrow keys.

Pressing the inspection/test run button one more time gets rid of the system display and ends it.

The unit will enter the individual screen automatically if nothing is done for one minute in the system display screen.

This function may not be available for all connected outdoor units, in which case "REF CIRCUIT" will blink. It will also not be correctly displayed if DIII-NET extension ADP is used.

■ Display of time to clean (Fig. 16)

cleaner element of some group.

If a cleaning sign is displayed

A filter or element in some group is ready to be cleaned.

1. ⊕ Press the ARROW KEY BUTTON, and search the groups displaying " → " or

" ৣ∰" (The group may be plural.)

Clean or change the air filter or air cleaner element.

For further details, see the operation manual attached to each indoor unit. (Clean or change the air filter or air cleaner element of all the groups dis-

playing " 🖓 " or " 🖉 ".)

2. ② Press the FILTER SIGN RESET BUT-TON, and the display " → " disappears. (Including all the groups where the air filter has been cleaned.)

NOTE

Be sure to check the display (3) " (2) ") ") has disappeared at this point. The appearance of the above display is a sign that the air filter or air cleaner element of some group still needs cleaning.

INSTALLATION TABLE

When installing the equipment, mark the zone No. of each group and installation location in the below table.

Setting group No.

(Setting is not possible unless power is activated to both the central remote controller and indoor unit.)

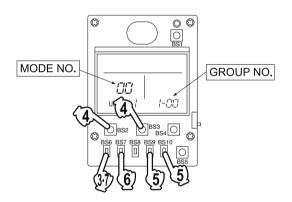
Operated by remote controller

- 1. Activate power to both the central remote controller and indoor unit.
- While in the normal mode, hold down the "
 ">">"
 ">"
 ">"
 ton for a minimum of 4 seconds. The unified ON/ OFF controller will enter the FIELD SET MODE.
- 3. Select the MODE No. "
- Use the " button to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 5. Press " $\overset{\square \land \bowtie}{\frown}$ " to set the selected group No.
- 6. Press "" to return to the NORMAL MODE.

GROUP NO.

Operated by simplified remote controller

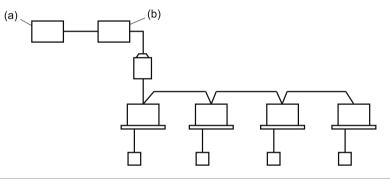
- 1. Activate power to both the central remote controller and indoor unit.
- 2. Remove the upper part of the remote controller.
- 3. Press the BS6 BUTTON (field set) on the PC board. The controller will enter the FIELD SET MODE.
- Select the MODE No. " ☐☐ " with the BS2 BUT-TON and BS3 BUTTON (temperature setting).
- 5. Use the BS9 BUTTON (set A) and BS10 BUTTON (set B) to select the group No. for each group. (Group No. increases in the order of 1-00, 1-01 ... 1-15, 2-00, ... 8-15.)
- 6. Press BS7 BUTTON (set/cancel) to set the selected group No.
- 7. Press BS6 BUTTON (field set) to return to the NORMAL MODE.



Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																
Zone No.																
Group No.	-00	-01	-02	-03	-04	-05	-06	-07	-08	-09	-10	-11	-12	-13	-14	-15
Indoor unit Quantity of units Controlled by																
Location																

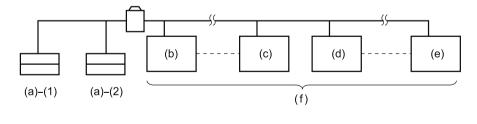
OPTIONAL ACCESSORIES



You can perform the normal operation, take off the malfunction contact point and unified start/stop by contact point, all by connecting this unit with the unification adaptor for computerized control. For further details, ask your DAIKIN dealer.

(a) Unification adaptor for computerized control (b) Central remote controller

DOUBLE CENTRAL REMOTE CONTROLLERS



With two central remote controllers, centralized control (indoor units) is possible from different locations.

(a) Central remote controller (b) Group No. 1 – 00 (c) Group No. 1 – 15 (d) Group No. 2 – 00 (e) Group No. 4 – 15 (f) A maximum of 64 groups

Note)

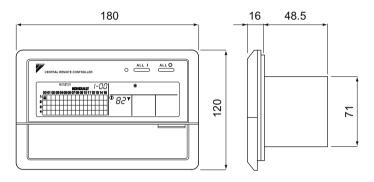
• For control alignment and settings for double central remote controllers, contact your dealer.

SPECIFICATIONS

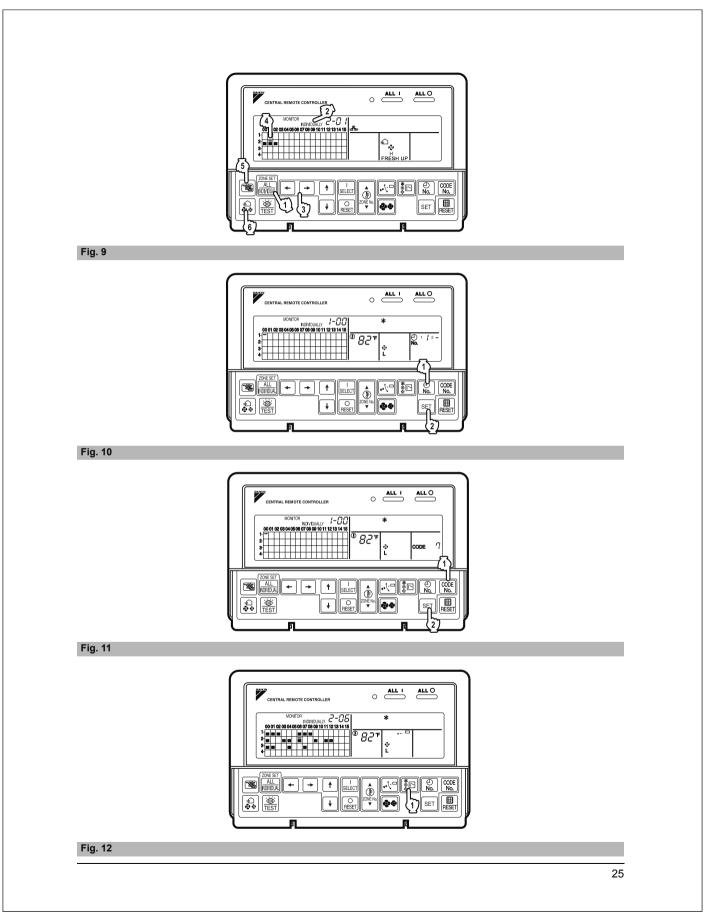
Specifications

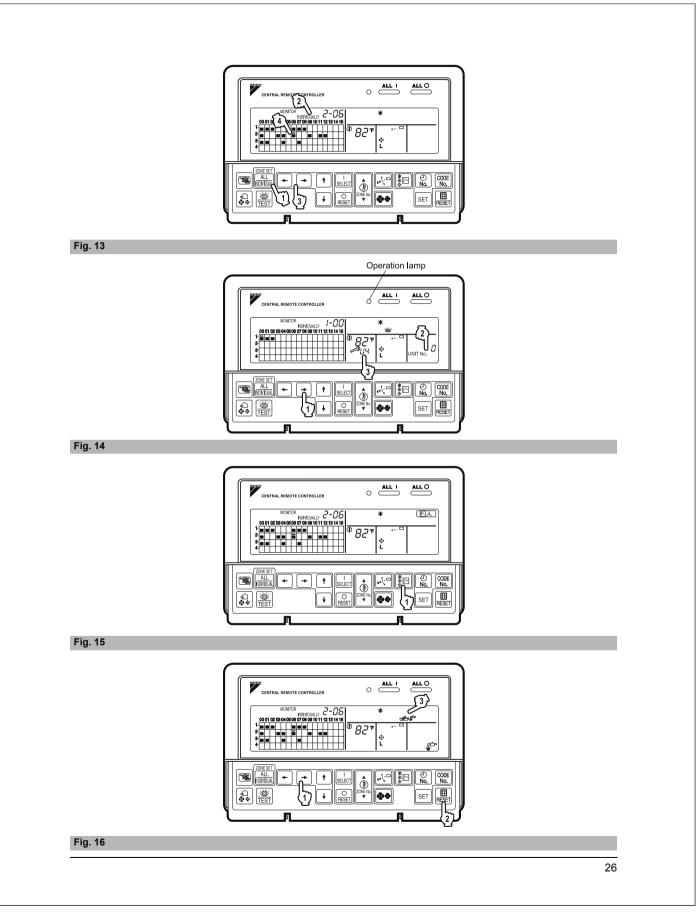
Power supply	1 ~ 50/60Hz, 100V – 240V
Power consumption	Max. 8W
Forced ON/OFF input	Continuous "a" contact Contact current: approximately 10mA
Size	180 (W) × 120 (H) × 64.5 (D)
Weight	420g

■ Outline drawings



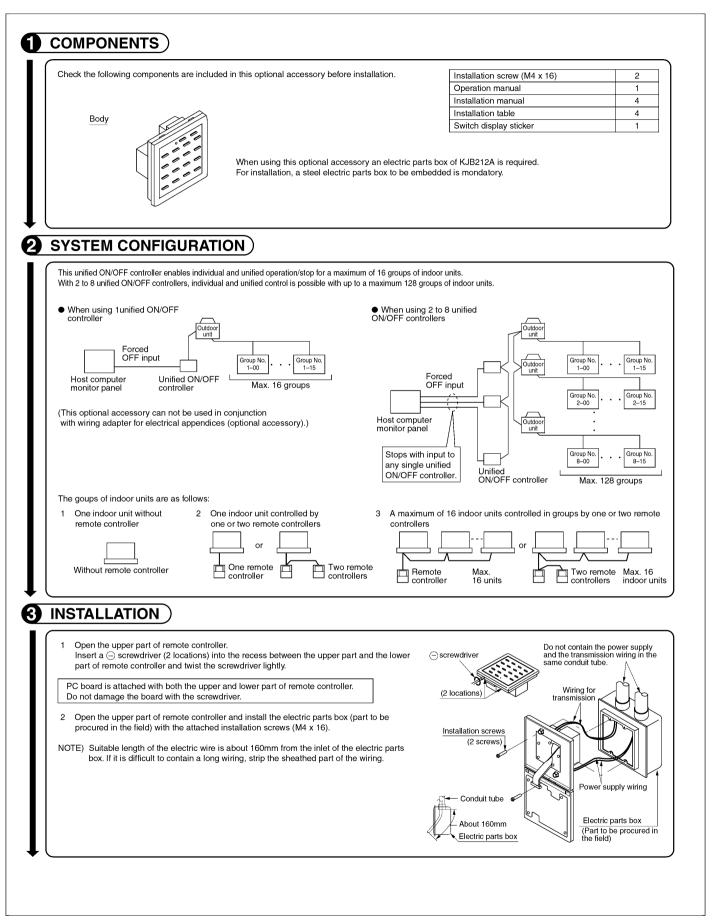
When using this unit an electric parts box of KJB311A is required. For installation, a steel electric parts box to be embedded is mandatory.



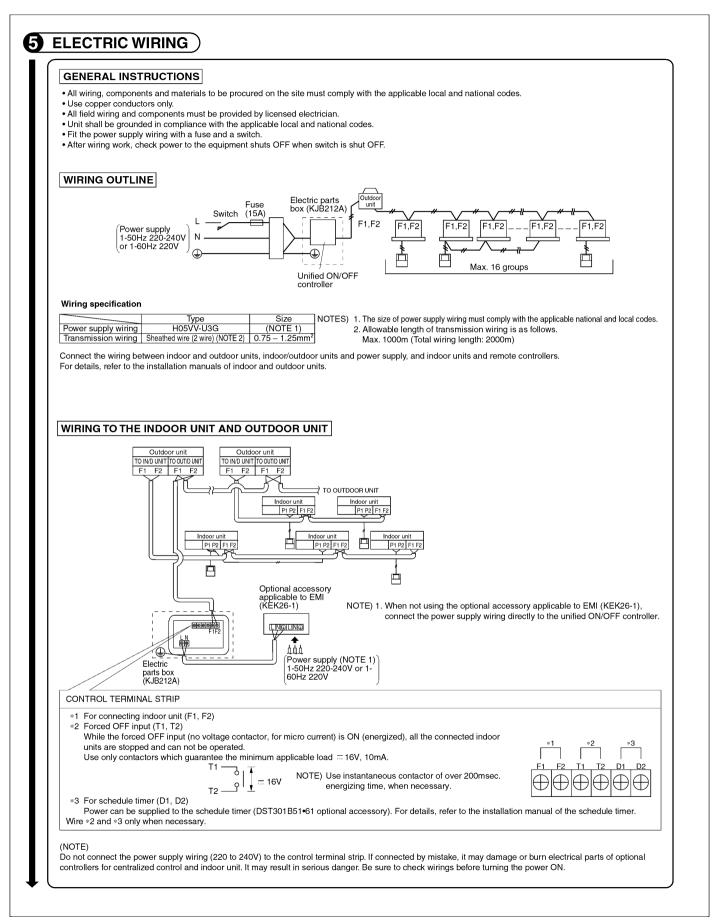


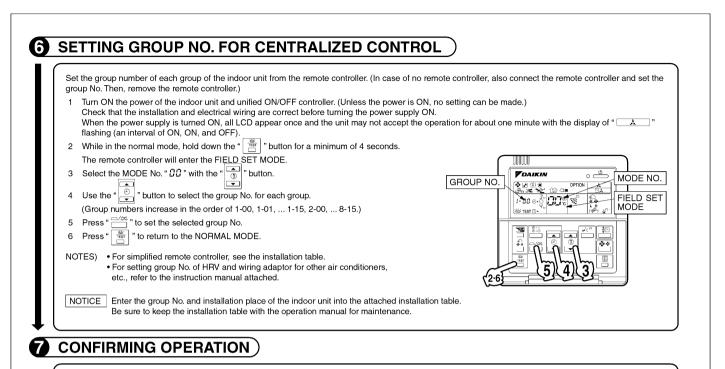
14.11 <DCS301C71> Unified ON/OFF Controller Installation Manual

installation, make sure that t	CONSIDERATIONS" carefully before installing air conditioning equipment and be sure to install it correctly. After completing the the unit operates properly during the start-up operation.
	r on how to operate the unit and keep it maintained. they should store this installation manual along with the operation manual for future reference.
	under the term "appliances not accessible to the general public".
Meaning of warning, caution	
AUTION Indica	tion a potentially hazardous situation which, if not avoided, could result in death or serious injury. tion a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against practices.
A NOTE Indica	tion situation that may result in equipment or property-damage-only accidents.
	▲ WARNING
	ed personnel to carry out installation work. Do not try to install the machine by yourself. sult in water leakage, electric shocks or fire.
	in accordance with this installation manual. sult in water leakage, electric shocks or fire.
Be sure to use only the sp	ecified accessories and parts for installation work.
	parts may result in water leakage, electric shocks, fire or the unit falling. stallation work after taking into account strong winds, typhoons or earthquakes.
Improper installation work m	ay result in the equipment falling and causing accidents.
local laws and regulations	power supply circuit is provided for this unit and that all electrical work is carried out by qualified personnel according to and this installation manual.
	capacity or improper electrical construction may lead to electric shocks or fire. s secured, the specified wires and used, and no external forces act on the terminal connections or wires.
Improper connections or ins	tallation may result in fire.
can be securely fastened.	pply and connecting the remote controller wiring and transmission wiring, position the wires so that the electric parts box lid
Improper positioning of the e	electric parts box lid may result in electric shocks, fire or the terminals overheating.
Ground the air conditione	r. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire.
Incomplete grounding may r When installing or relocat	esult in electric shocks.
such as air.	
	nge the settings of the protection devices. nal switch, or other protection device is shorted and operated forcibly, or parts other than those specified by Daikin are used, fire or
Do not touch the switch w Touching a switch with wet f	ith wet fingers. ingers can cause electric shock.
Install an leak circuit brea	ker, as required.
	iot installed, electric shock may result. itioner or the remote controller in the following locations:
	ist or an oil spray or vapor is produced, for example in a kitchen eriorate and fall off or result in water leakage.
	such as sulfurous acid gas, is produced es or soldered parts may result in refrigerant leakage.
(c) near machinery emitt	ing electromagnetic waves as may disturb the operation of the control system and result in a malfunction of the equipment.
(d) where flammable gas	es may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile flammables such as thinner or
gasoline are handled. Operating the unit in :	such conditions may result in fire.
Be very careful about proc	
Packing materials, such as i	hails and other metal or wooden parts, may cause stabs or other injuries. plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face
	immediately after stopping operation. utes before turning off the power. Otherwise, water leakage and trouble may occur.
	loor units, power supply wiring and connecting wires at least 3.5ft. away from televisions or radios in order to prevent image
interference or noise. (Depending on the radio wa	aves, a distance of 3.5ft. may not be sufficient enough to eliminate the noise.)
Remote controller (wireles (inverter or rapid start typ	es kit) transmitting distance can result shorter than expected in rooms with electronic fluorescent lamps.
	ees) away from fluorescent lamps as possible.
This unit is a class A prod In a domestic environment t	uct. his product may cause radio interference in which case the user may be required to take adequate measures.
	eatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national



which it • When u	was delivered.)	ontroller, do not discon /OFF controllers, or usi	nect the connector for s	set) etting master controller. (Use controller in conjunction with o		
Patter Unified ON/O	n of connection of optional			Connector for setting m Inified ON/OFF controller	aster controller (X1A) Setting Central remote controller	s Schedule timer
		1 to 4		"Used" and all the rest to "Not used" Set all to "Not used".		
1 to	16	1 to 4	1 Set one to	"Used" and all the rest to "Not used" Set all to "Not used".	(Note) (Note)	"Not used" "Not used"
centra 2 Switch fo	structions on how to set I remote controller. r setting each address (I ritches are used to set gr	DS1)	g master controller on th	e central remote controller, se	ee the installation manual p	provided with the
Each Address 1-0 DS1 setting	0 ~ 1-15 2-00 ~ 2-15 3-00 ~ 3			e unit is shipped from the facto 8-00 - 8-15 DS1 B B B B B B B B B B B B B		
	After setting, attach the n attached switch display s	ticker, as shown in the	diagràm below.	ige of the	Forced reset switc itch for setting each addres Control mode selecto MAIN/SUB change	ch sis
operation	ts on in 2-second interval (Sequential operation is t sequential operation ON (actory set to "ON.") or OFF, set as follows.	(Factory set)	While holding down the unified stop b While holding down the unified operation	h button, perform forced reset.	Sequential operatio "OFF"
NOTE: The s starte 5 Control n	equential operation func d simultaneously. You ca node selector (DS2)	nnot therefore count or		er supply equipment, but does fect by power supply equipme		essors will not be
NOTE: The s starte 5 Control n	equential operation func d simultaneously. You ca	nnot therefore count or			nt breaker selection.	essors will not be
NOTE: The s starte 5 Control n The follow	equential operation func d simultaneously. You ca node selector (DS2) ving four patterns of con Individual Operation/stop is controll unified ON/OFF controlle remote controller.	nnot therefore count or trol mode can be set. ed by both r and After opera controlled	a capacity reduction ef	fect by power supply equipme	e by ON/OFF cor by remote dule timer, Operation/stop is cr ON/OFF controller eration is (This unit can not b	ntrol impossible le controller ontrolled by unified
NOTE: The s starte 5 Control n The follow Control mode	equential operation func d simultaneously. You ca node selector (DS2) ving four patterns of con Individual Operation/stop is controll unified ON/OFF controlle remote controller.	nnot therefore count or trol mode can be set. ed by both r and controller, controlled stopped by	a capacity reduction of Centralized ted by unified ON/OFF operation/stop is freely by remote controller until	fect by power supply equipme Timer operation possibl remote controller When used in conjunction with sche operation/stop is controlled freely by controller during the set time but op	e by ON/OFF com by remot dule timer, remote eration is oN. remote controller of (This unit can not b remote controller.)	ntrol impossible ie controller ontrolled by unified only.



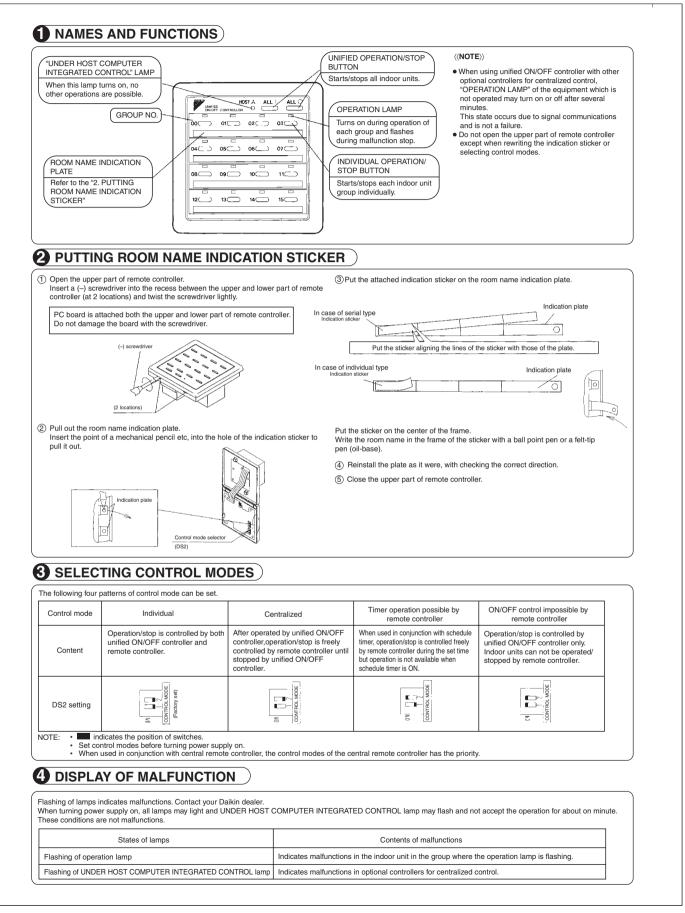


Before starting test operation, supply power to the indoor units, outdoor units, and unified ON/OFF controller and press the ON/OFF BUTTON. If the operation lamp flashes, it indicates a malfunction in the indoor unit of the applicable group.

- If the display of "_____" flashes, it indicates a malfunction in the optional controllers for centralized control. Check for such malfunctions.
 - After turning the power supply ON, if the unit does not accept operation for two minutes or more with the display of "______" flashing, check the following points.
 Check that setting of the connector for setting master controller is correct.
 - Check that the group No. for centralized control has been set.

14.12 <DCS301C71> Unified ON/OFF Controller Operation Manual

Also, inform customers that th	on how to operate the unit and keep it maintained. ey should store this installation manual along with the operation manual for future reference. der the term "appliances not accessible to the general public"
CAUTION Indic NOTEIndic Keep these warning sheets	nd note symbols. ation a potentially hazardous situation which, if not avoided, could result in death or serious injury. ation a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be sued to alert against unsafe practices. ation situation that may result in equipment or property-damage-only accidents. handy so that you can refer to them if needed. ferred to a new user, make sure to hand over this operation manual to the new user.
	bock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.
sk your dealer for improve	ion of the air conditioner. hed by yourself may result in a water leakage, electric shock, and fire. ment, repair, and maintenance. ir, and maintenance may result in a water leakage, electric shock, and fire.
	chment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. ries made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.
	d reinstall the air conditioner or the remote controller. sult in a water leakage, electric shock, and fire.
	the remote controller get wet.
lever use flammable spray	such as hair spray, lacquer or paint near the unit.
	at of wrong ampere ratings or other wires when a fuse blows out. ay cause the unit to break down or cause a fire.
lever inspect or service the losk a qualified service persor	unit by yourself.
Cut off all electric waves be	fore maintenance.
o not wash the air condition lectric shock or fire may result	oner or the remote controller with excessive water.
	oner or the remote controller at any place where flammable gas may leak out. around the air conditioner, a fire may break out.
	gers can cause electric shock.
ouching a switch with wet fin	gers can cause electric shock. CAUTION unit stand and fitting for damage.
ouching a switch with wet fin fter a long use, check the they are left in a damaged c o not allow a child to mou	gers can cause electric shock.
Suching a switch with wet fin sitter a long use, check the they are left in a damaged of to not allow a child to mou alling or tumbling may result to not let children play on a	gers can cause electric shock.
Touching a switch with wet fin the a long use, check the i they are left in a damaged o bo not allow a child to mou alling or tumbling may result bo not let children play on a they touch the unit careless bo not place a flower vase a	gers can cause electric shock.
After a long use, check the i f they are left in a damaged of bo not allow a child to mou alling or tumbling may result Do not let children play on a they touch the unit careless Do not place a flower vase a Vater may enter the unit, cau lever touch the internal pau bo not remove the front panel	gers can cause electric shock.
After a long use, check the they are left in a damaged of they too not let children play on a fit they touch the unit careless too not place a flower vase a Vater may enter the unit, cau Vater may enter the internal par to or checking and adjusting the Avoid placing the controller	gers can cause electric shock.
After a long use, check the of they are left in a damaged of bo not allow a child to mou alling or tumbling may result bo not let children play on a ti they touch the unit careless bo not place a flower vase of Vater may enter the unit, cau lever touch the internal pau bo not remove the front panel or checking and adjusting th Vater coming inside the mac bo not oremover the front pace of not operate the air cond	gers can cause electric shock.
After a long use, check the i they are left in a damaged of o not allow a child to mou alling or tumbling may result Do not let children play on a Vater may enter the unit, careless Do not place a flower vase a Vater may enter the unit, care lever touch the internal par lever touch the internal par to not remove the fint panel for checking and adjusting the Vater coming inside the mac Do not operate the air cond allure to observe could caus Safely dispose of the packing	gers can cause electric shock.
Suching a switch with wet fin after a long use, check the i they are left in a damaged of they are left in a damaged of they are left in a damaged of they touch the unit careless to not elace a flower vase a vater may enter the unit, cau lever touch the internal pai to not lect ouch the internal pai to not grave the front panel or checking and adjusting the vator lace and adjusting the vator lace are the air condor aliure to observe could causa afely dispose of the packing "acking materials, such as na ear apart and throw away pla	gers can cause electric shock.
Souching a switch with wet fin the second s	gers can cause electric shock.
After a long use, check the integration of the second seco	gers can cause electric shock.
After a long use, check the integration of the second seco	gers can cause electric shock.
Suching a switch with wet fin after a long use, check the i they are left in a damaged of they are left in a damaged of the not let children play on a they touch the unit careless to not place a flower vase a vater may enter the unit, cau lever touch the internal par to not greate the internal par to not greate the internal par to not operate the air cond ailure to observe could caus afely dispose of the packin acking materials, such as ne "ear apart and throw away pla Do not turn off the power in Ways wait at least five minu The appliance is not intend	gers can cause electric shock.
After a long use, check the it they are left in a damaged of they touch the unit careless too not place a flower vase a vater may enter the unit, cau lever touch the internal part or or checking and adjusting the vortroller vater coming inside the mach are coming inside the mach are apart and throw away pic are apart and throw away pic too not urn off the power in Waves wait at least five minu. The appliance is not intend The remote controller should be applied to the appliance is not intend.	gers can cause electric shock.
The remote controller may be the remote controller may be the remote controller may be the price the button of the the remote controller may be the price the the the the the the state the the the the the the state the the the the the state the state the the the the state the state the the the the state the the the the the the state the state the the the the the the state the the the the the the the state the	gers can cause electric shock. gers can cause electric shock. Image: Cause electric shock.
After a long use, check the interval of they are left in a damaged of they touch the unit careless too not place a flower vase e water may enter the unit, cau Never touch the internal part on a for the data and a state of the the internal part of they data may enter the unit, cau Never touch the internal part on the order of the the internal part of the data and the match of the data and the state of the packing and adjusting the Avoid placing the controller Nater coming inside the made of the packing materials, such as na fear apart and throw away plate and throw away plate and the state least five minu The appliance is not intend The remote controller should be place the unit to matful the match of the the the the the materials with the elect the appliance the unit the material be the unit to matful be not place the controller of the the controller of the the controller of the the the the the material be the unit to matful be not place the controller of the the controller	gers can cause electric shock:
After a long use, check the f they are left in a damaged 0 Do not allow a child to mou alling or tumbling may result Do not let children play on a f they touch the unit careless Do not let children play on a Water may enter the unit, cau Vever touch the internal pau To not remove the front panel for checking and adjusting th Avoid placing the controller Vater coming inside the mac Do not operate the air cond allure to observe could caus Safely dispose of the packin Packing materials, such as na Fear apart and throw away pi Do not turn off the power in Always wait at least five minu The appliance is not intend The remote controller may be Vever pull or twist the elect t may cause the unit to malfu Do not place the controller or the LCD display may get diso Do not wipe the controller or	gers can cause electric shock:



14.13 <DST301BA61> Schedule Timer Controller

Enables you to connect and control weekly schedule for up to 128 indoor units all together.



- Simultaneous control of up to 128 indoor units is managed by a week schedule.
- The start and stop time for twice a day can be set for the week in increments of 1 minute.
- By combining with a central remote controller and schedule timer, you can construct a system that matches the size and use of the building.
- If used together with a central remote controller, you can set up to 8 schedule patterns which can be distributed among zones as desired using the central remote controller.
- Is equipped with a compensation function for power failure up to 48 hours.
- Features thin design of a mere 16 mm in thickness. (Uses JIS recessed box for 2.)
- Wiring can be up to 1 km in length. Applicable wiring methods include bus and star in addition to crossover type.
- Can be used in combination with other D-BACS equipment.

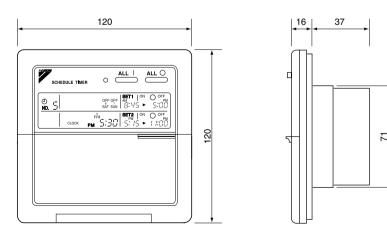
Specifications / Dimensions

SPECIFICATIONS

Specifications

Display of time	12-hour digital display
Clock cycle type	Quartz clock type
Clock accuracy	Within ± 30 sec./month (environmental temperature from $15^{\circ}C$ to $35^{\circ}C$)
Timer programming	Two pairs of programmed time for both system start and system off can be set in units of minute for each day of the week
Power failure compensation time	Approximately 48 hours for a single occurrence of power failure (clock with No. of programmed time)
Size	120 (W) \times 120 (H) \times 53 (D) mm (Width/Height/Depth)
Weight	Approximately 210g

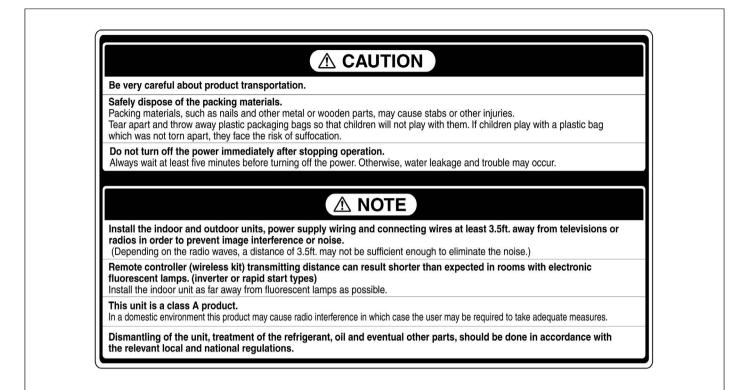
Outline drawings

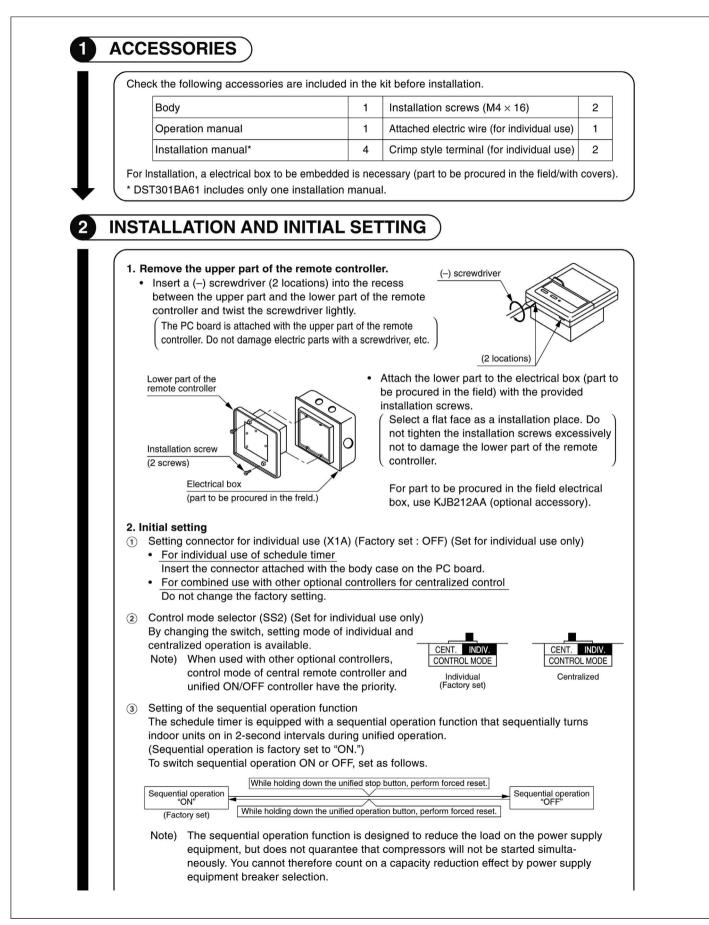


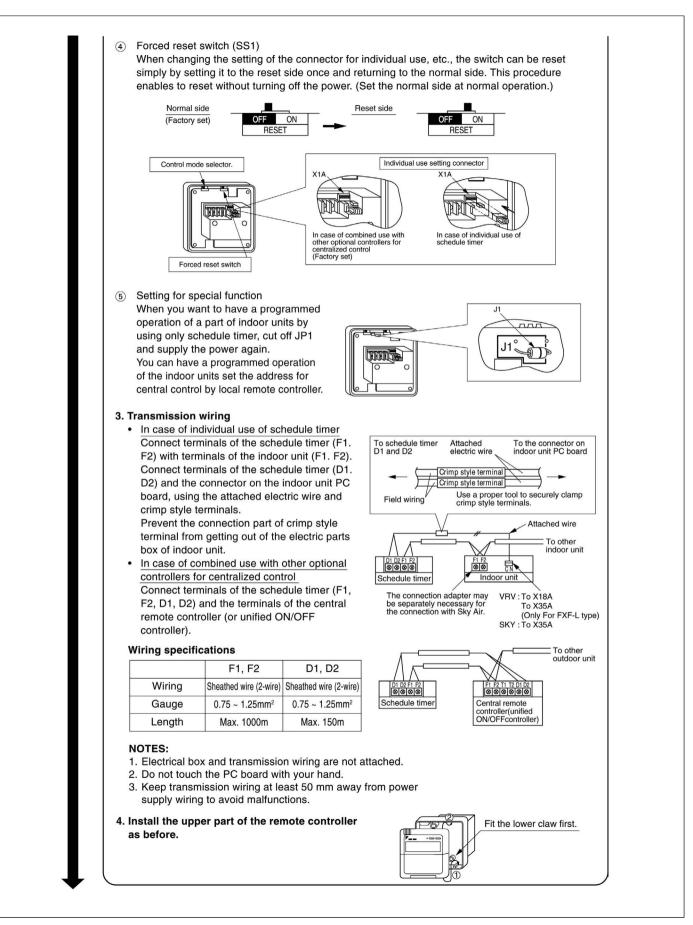
Specifications and appearance subject to change without notice.

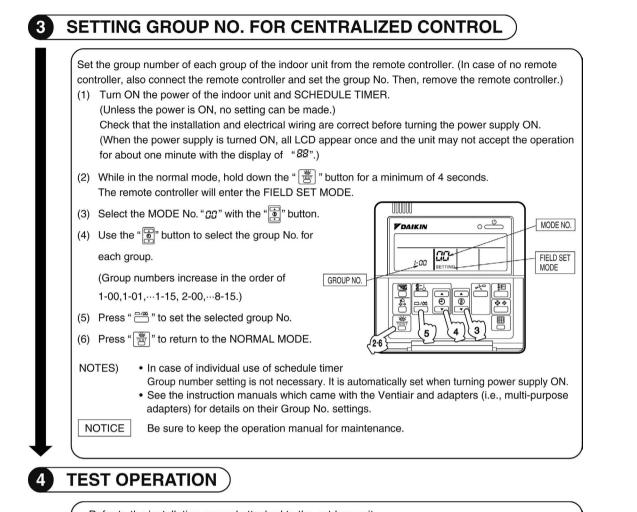
14.14 <DST301BA61> Schedule Timer Controller Installation Manual

Please i Also, inf	correctly. After completing the installation, make sure that the unit operates properly during the start-up operation. nstruct the customer on how to operate the unit and keep it maintained. orm customers that they should store this installation manual along with the operation manual for future reference. conditioner comes under the term "appliances not accessible to the general public".
Meaning	of warning, caution and note symbols.
🗥 CAU	 RNING Indication a potentially hazardous situation which, if not avoided, could result in death or serious injury. ITION Indication a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices. E Indication situation that may result in equipment or property-damage-only accidents.
	r dealer or qualified personnel to carry out installation work. Do not try to install the machine by yourself. r installation may result in water leakage, electric shocks or fire.
	installation work in accordance with this installation manual. r installation may result in water leakage, electric shocks or fire.
	to use only the specified accessories and parts for installation work.
	It the specified installation work after taking into account strong winds, typhoons or earthquakes. r installation work may result in the equipment falling and causing accidents.
qualified	re that a separate power supply circuit is provided for this unit and that all electrical work is carried out by a personnel according to local laws and regulations and this installation manual. icient power supply capacity or improper electrical construction may lead to electric shocks or fire.
	re that all wiring is secured, the specified wires and used, and no external forces act on the terminal connections or wires.
so that t	iring the power supply and connecting the remote controller wiring and transmission wiring, position the wires he electric parts box lid can be securely fastened. r positioning of the electric parts box lid may result in electric shocks, fire or the terminals overheating.
Before t	ouching electrical parts, turn off the unit.
	the air conditioner. Do not connect the ground wire to gas or water pipes, lightning rod or a telephone ground wire. ete grounding may result in electric shocks.
When in specifie	nstalling or relocating the system, be sure to keep the refrigerant circuit free from substances other than the d refrigerant (R410A), such as air.
If the pre	econstruct or change the settings of the protection devices. essure switch, thermal switch, or other protection device is shorted and operated forcibly, or parts other than those I by Daikin are used, fire or explosion may result.
	ouch the switch with wet fingers. a switch with wet fingers can cause electric shock.
	n earth leak circuit breaker, as required. th leak circuit breaker is not installed, electric shock may result.
Do not i (a) wh Pla (b) wh Co (c) ne Ela (d) wh fla	nstall the air conditioner or the remote controller in the following locations: ere a mineral oil mist or an oil spray or vapor is produced, for example in a kitchen astic parts may deteriorate and fall off or result in water leakage. here corrosive gas, such as sulfurous acid gas, is produced orroding copper pipes or soldered parts may result in refrigerant leakage. har machinery emitting electromagnetic waves ectromagnetic waves may disturb the operation of the control system and result in a malfunction of the equipment. here flammable gases may leak, where there are carbon fiber or ignitable dust suspensions in the air, or where volatile mmables such as thinner or gasoline are handled.
This is a	22 Class A Warning. class A product. In a domestic environment this product may cause radio interference in which case the user may be to take adequate measures.





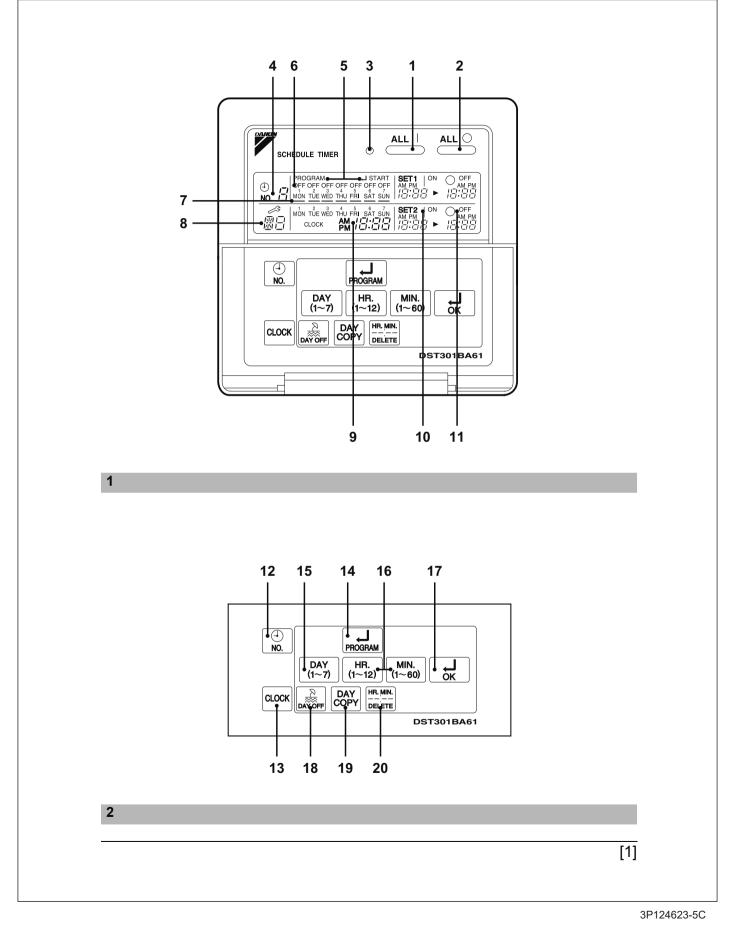


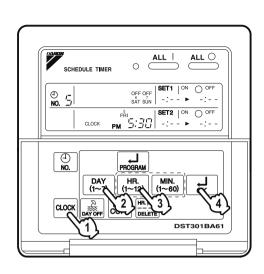


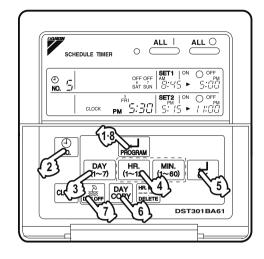
Refer to the installation manual attached to the outdoor unit.

In case the schedule timer is used individually and the wiring is changed after the system has been operated, reset the power after energizing for more than five minutes. It may not be possible to control the unit from the schedule timer.

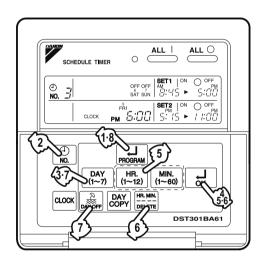


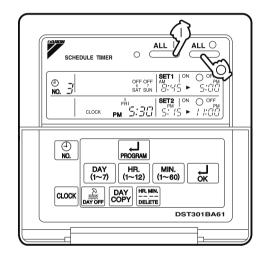






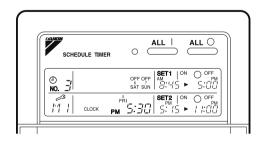
6





5

3



7

[2]

3P124623-5C

SAFETY CONSIDER-ATIONS

Please read these "SAFETY CONSIDER-ATIONS " carefully before installing air conditioning equipment and be sure to install it correctly. After completing the installation, make sure that the unit operates properly during the start-up operation.

Please instruct the customer on how to operate the unit and keep it maintained.

Also, inform customers that they should store this installation manual along with the operation manual for future reference.

This air conditioner comes under the term " appliances not accessible to the general public ".

Meaning of warning, caution and note symbols.

WARNING	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
	Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	Indicates situation

NOTE Indicates situation that may result in equipment or property-damage-only accidents.

Keep these warning sheets handy so that you can refer to them if needed.

Also, if this equipment is transferred to a new user, make sure to hand over this operation manual to the new user.

– <u>À</u> WARNING ·

In order to avoid electric shock, fire or injury, or if you detect any abnormality such as smell of fire, turn off power and call your dealer for instructions.

Ask your dealer for installation of the air conditioner.

Incomplete installation performed by yourself may result in a water leakage, electric shock, and fire. Ask your dealer for improvement, repair, and maintenance.

Incomplete improvement, repair, and maintenance may result in a water leakage, electric shock, and fire.

Improper installation or attachment of equipment or accessories could result in electric shock, short-circuit, leaks, fire or other damage to the equipment. Be sure only to use accessories made by Daikin which are specifically designed for use with the equipment and have them installed by a professional.

Ask your dealer to move and reinstall the air conditioner or the remote controller. Incomplete installation may result in a water leakage, electric shock, and fire.

Never let the indoor unit or the remote controller get wet.

It may cause an electric shock or a fire.

Never use flammable spray such as hair spray, lacquer or paint near the unit. It may cause a fire.

Never replace a fuse with that of wrong ampere ratings or other wires when a fuse blows out.

Use of wire or copper wire may cause the unit to break down or cause a fire.

Never inspect or service the unit by your-self.

Ask a qualified service person to perform this work.

Cut off all electric waves before maintenance.

Do not wash the air conditioner or the remote controller with excessive water. Electric shock or fire may result.

Do not install the air conditioner or the remote controller at any place where flammable gas may leak out.

If the gas leaks out and stays around the air conditioner, a fire may break out.

Do not touch the switch with wet fingers. Touching a switch with wet fingers can cause electric shock.

CISPR 22 Class A Warning:

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

After a long use, check the unit stand and fitting for damage.

If they are left in a damaged condition, the unit may fall and result in injury.

Do not allow a child to mount on the unit or avoid placing any object on it.

Falling or tumbling may result in injury.

Do not let children play on and around the unit.

If they touch the unit carelessly, it may result in injury.

Do not place a flower vase and anything containing water.

Water may enter the unit, causing an electric shock or fire.

Never touch the internal parts of the controller.

Do not remove the front panel. Some parts inside are dangerous to touch, and a machine trouble may happen. For checking and adjusting the internal

parts, contact your dealer.

Avoid placing the controller in a spot splashed with water.

Water coming inside the machine may cause an electric leak or may damage the internal electronic parts.

Do not operate the air conditioner when using a room fumigation - type insecticide. Failure to observe could cause the chemicals to become deposited in the unit, which could endanger the health of those who are hypersensitive to chemicals.

Safely dispose of the packing materials.

Packing materials, such as nails and other metal or wooden parts, may cause stabs or other injuries.

Tear apart and throw away plastic packaging bags so that children will not play with them. If children play with a plastic bag which was not torn apart, they face the risk of suffocation.

Do not turn off the power immediately after stopping operation.

Always wait at least five minutes before turning off the power. Otherwise, water leakage and trouble may occur.

The appliance is not intended for use by young children or infirm persons without supervision.

The remote controller should be installed in such away that children cannot play with it.

Never press the button of the remote controller with a hard, pointed object. The remote controller may be damaged.

Never pull or twist the electric wire of the remote controller.

It may cause the unit to malfunction.

Do not place the controller exposed to direct sunlight.

The LCD display may get discolored, failing to display the data.

Do not wipe the controller operation panel with benzine, thinner, chemical dustcloth, etc.

The panel may get discolored or the coating peeled off. If it is heavily dirty, soak a cloth in water-diluted neutral detergent, squeeze it well and wipe the panel clean. And wipe it with another dry cloth.

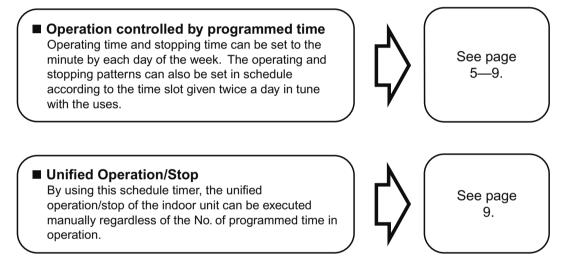
Dismantling of the unit, treatment of the refrigerant, oil and eventual other parts, should be done in accordance with the relevant local and national regulations.

CONTENTS

SAFETY CONSIDERATIONS	1
FEATURES AND FUNCTIONS.	3
NAMES AND FUNCTIONS OF	
OPERATING SECTION	4
OPERATION	5
Setting present time	
Setting no. of programmed time	6

Change and cancellation of no. of	-
programmed time	
Manual operation	
Operation control code	9
Error diagnosing function	
QUESTION AND ANSWER	10
SPECIFICATIONS	12
Specifications	12
Outline drawings	12

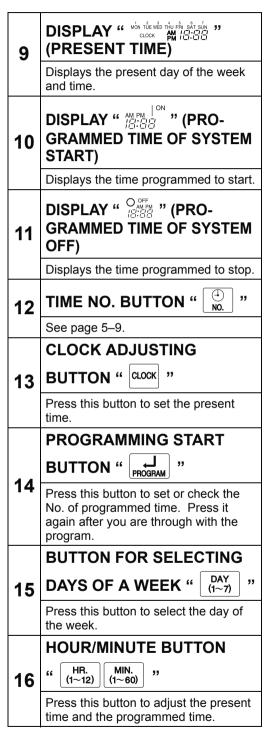
FEATURES AND FUNCTIONS

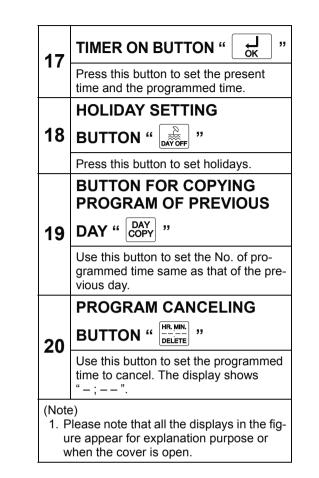


 When used in conjunction with central remote controller (Optional Accessory) The operation controlled by programmed time can be set for up to eight different patterns (timer No. 1 – 8). Each schedule pattern can be also selected.

NAMES AND FUNCTIONS OF OPERATING SECTION (Fig. 1, 2)

	UNIFIED OPERATION BUT-
1	TON " "
I	Press this button to perform the unified operation regardless of the No. of pro- grammed time.
	UNIFIED STOP BUTTON
2	" <u>ALL</u> "
2	Press this button to perform the unified stop regardless of the No. of pro- grammed time.
•	OPERATION LAMP (RED)
3	The light turns on during the operation of the indoor unit.
	Displays the time No. only when used
4	in conjunction with the central remote controller.
4	in conjunction with the central remote controller.
4	in conjunction with the central remote controller. DISPLAY "PROGRAM J START."
-	in conjunction with the central remote controller.
5	in conjunction with the central remote controller. DISPLAY "PROGRAM J START." (PROGRAMMING START) The light turns on when the timer is
-	in conjunction with the central remote controller. DISPLAY "PROGRAM J START." (PROGRAMMING START) The light turns on when the timer is programmed. DISPLAY " OFF " (HOLIDAY
5	in conjunction with the central remote controller. DISPLAY "PROGRAM J START." (PROGRAMMING START) The light turns on when the timer is programmed. DISPLAY " OFF " (HOLIDAY SETTING) Lights above the day of the week set as holiday. The operation controlled by
5	in conjunction with the central remote controller. DISPLAY "PROGRAM J START." (PROGRAMMING START) The light turns on when the timer is programmed. DISPLAY " OFF " (HOLIDAY SETTING) Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day. DISPLAY " — " (SETTING
5	in conjunction with the central remote controller. DISPLAY "PROGRAM J START." (PROGRAMMING START) The light turns on when the timer is programmed. DISPLAY " OFF " (HOLIDAY SETTING) Lights above the day of the week set as holiday. The operation controlled by timer is not available on that day. DISPLAY " — " (SETTING OF DAYS OF A WEEK) Flashes below the day of the week pro-





OPERATION

■ Setting present time (Fig. 3)

(Example) In case of setting Friday, 5:30 p.m.

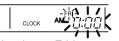
Image: Constant of the clock adjusting button. The present time display flashes.

(NOTE)

• The present time needs adjusting in case of turning power supply on for the first time or the occurrence of power failure over the period of 48 hours or more.



- 2. Press the BUTTON FOR SELECTING DAYS OF A WEEK. Each time the button is pressed, the day display shifts to the right. (NOTE)
 - The display " MON " follows the display " SUN. "

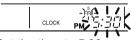


Set the day to Friday

3. ⁽³⁾ Set the time with the HOUR/ MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.

(NOTES)

- After becoming " AM 11:00 ", when the button is pressed, the display becomes " PM 0:00 ".
- After becoming "59" (minute), when the button is pressed, the display becomes "00" (minute).



Set the time to 5:30 p.m.

4. ⁽⁴⁾ Press the TIMER ON BUTTON the moment the time signal of TV, radio, telephone, etc. is heard. The mark ": " flashes, and the clock starts.

I PM - (N-1)-1

Press the TIMER ON BUTTON in tune with the time signal at 5:30 p.m.

(NOTES)

- The clock used is of 12-hour type.
- When you turn power supply on, the system may display " 🖓 " for about one minute and not start to operate after all the liquid crystal displays appear at a time.
- If the CLOCK ADJUSTING BUTTON is pressed by mistake, press it again to return to the original state. As the clock does not stop, the time indicated by the clock is kept correct. In case of power failure within 48 hours, the clock keeps operating by utilizing the built-in battery.

Setting no. of programmed time (Fig. 4)

(Example) Time No. 5 (to be programmed only when used in conjunction with the central remote controller)

Monday to Friday:

Operating from 8:45 a.m. till 5:00 p.m. Operating from 5:15 p.m. till

11:00 p.m.

Saturday and Sunday: Setting the whole day stop operation (application for holidays) controlled by programmed time.

PROGRAM L START MON TUE WED THU FRI SAT SUN

2. Press the TIME No. BUTTON, and select the desired number.

(NOTE)

• Unless used in conjunction with the central remote controller, The TIME No. is not displayed and can not be selected.

Select the TIME No. 5.



3. ⁽³⁾ Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the proper day of the week. Each time you press it, the flashing display of days of a week shifts to the right.



Set to Monday.

- (1) Setting programmed time
- 4. ⁽⁴⁾ Set the programmed time of system start 1 by using the HOUR/ MINUTE BUTTON. Each time the HOUR/MINUTE BUTTON is pressed, the display is put forward minute by minute and hour by hour. When the button is kept pressed, the display is put forward continuously.

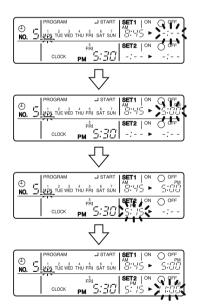


Set the "PROGRAMMED TIME OF SYSTEM START 1" at 8:45 a.m.

 5 Press the TIMER ON BUTTON, and set the programmed time of system start 1. Each time you press it, the next area to be set flashes.

(NOTE)

• Set the other programmed time in the same procedure.



- (2) Set the next day of the week. Set the day of the week to Tuesday, and copy the program of the previous day (Monday). In the same procedure, set the day of the week to Wednesday through Friday in sequence.
- 6. ^(E) Press the BUTTON FOR SELECTING DAYS OF A WEEK and set the following day. Press the BUTTON FOR COPYING PRO-GRAM OF PREVIOUS DAY. The same program as that of the immediately preceding day of the week is set.

(NOTE)

 Repeat each procedure 3 – 5 in the above when not copying the contents of the previous day.

- (3) Holiday setting
- 7. TPress the BUTTON FOR SELECTING DAYS OF A WEEK and set one or more days of the week as holiday. Press the HOLI-DAY SETTING BUTTON, and the display "OFF " is displayed at the top of the day of the week. If you press it again, the display returns to the original state.



Set Saturday and Sunday as holidays.

8. ^(*) Press the PROGRAMMING START BUTTON, and finish the program setting.

(NOTES)

- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents up to the point where the TIMER ON BUTTON (or HOL-IDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVI-OUS DAY) is pressed will only take effect.
- The display "PROGRAM J START " and the display of days of a week " — " disappears.

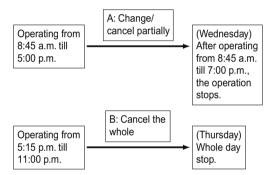
- The flashing display goes off, and the No. of programmed time of the present day is displayed. Then the operation controlled by timer starts.
- The operation controlled by timer is executed even while the program is being set.



This is the end of the setting example.

Change and cancellation of no. of programmed time (Fig. 5)

(Example) Time No. 3 (to be set only when used in conjunction with the central remote controller)



- Image: Press the PROGRAMMING START BUTTON. The program setting is ready. The display "PROGRAM JSTART " appears, and the display of days of a week flashes.
- 2. ⁽²⁾ Press the TIME No. BUTTON, and select the desired No.

() NO.		OFF OFF AM 4 5 6 7 THU FRI SAT SUN G
	CLOCK	

Select the time No. 3.

3. ⁽³⁾ Press the BUTTON FOR SELECTING DAYS OF A WEEK, and set the day of the week to be changed. The set No. of programmed time of the day of the week is displayed.



Set the day to Wednesday.

- A. Change/cancel partially
- 4. ⁽⁴⁾ Press the TIMER ON BUTTON and change, and the display of programmed time flashes. Each time you press it, the next area to be set flashes.

(-) NO.	OFF OFF	Q OFF 5:00

Shift to the display "PROGRAMMED TIME OF SYSTEM OFF 1".

5. ⁽⁵⁾ Press the HOUR/MINUTE BUTTON and change the programmed time. Press the TIMER ON BUTTON, and finalize the setting of change.



Change the "PROGRAMMED TIME OF SYSTEM OFF 1" to 7:00 p.m.

6. ⁽⁶⁾ Press the PROGRAM CAN-CELING BUTTON, and cancel the programmed time. If you press it again, display returns to the original state. Press the TIMER ON BUTTON to finalize the cancellation.



Shift to the "PROGRAMMED TIME OF SYSTEM START 2".



Set the "PROGRAMMED TIME OF SYSTEM START 2" to program cancellation.

In the same procedure, cancel the programmed time of system off 2.

- B. Cancel the whole
- 7. TPress the BUTTON FOR SELECTING DAYS OF A WEEK, and shift to the day of the week to be canceled. Then, press the HOL-IDAY SETTING BUTTON, the display " OFF " appears at the top of the particular day of the week. The programmed time is canceled. If you press the button again, the display returns to the original state.

() NO.	OFF OFF SET I ON OFF

Shift the day of the week to Thursday to set as a holiday.

8. ^(I) Press the PROGRAMMING START BUTTON. The program setting is now finished.

- (NOTES)
- Unless the button is pressed within 20 minutes, the display will automatically revert back to the original state. In this case, setting contents to the point where the TIMER ON BUTTON (or HOLIDAY SETTING BUTTON or BUTTON FOR COPYING PROGRAM OF PREVIOUS DAY) is pressed will only take effect.
- To continue the change/cancellation, do not press the PROGRAMMING START BUTTON until all change/cancellation are completed.
- The operation controlled by timer is executed even while the program is being set.

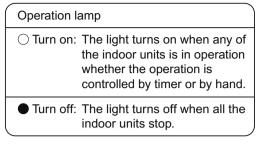
■ Manual operation (Fig. 6)

This schedule timer enables the operation/stop by pressing the UNIFIED OPERATION/STOP BUTTON in addition to the operation controlled by timer (operation/stop according to the programmed time) at any time.

- 1. UP Press the UNIFIED OPERA-TION BUTTON, and the OPERA-TION LAMP turns on.
- 2. ^{OP} Press the UNIFIED STOP BUT-TON, and the OPERATION LAMP is turned off.

(NOTES)

- The operation automatically stops according to the programmed time of system off even during the manual operation. In the meantime, the operation starts automatically according to the programmed time of system start even during the stop of operation.
- If the unit is used in conjunction with other optional controllers for centralized control, the OPERATION LAMP of the unit that is not under operation control may be turned on or off a few minutes behind schedule. This shows that the signal is being exchanged, and does not indicate any failure.



Operation control code

Two different types of operation control codes can be selected when this kit is used independently (when not used in conjunction with the central remote controller, unified ON/OFF controller, etc.).

Individual

In case where the operation/stop is controlled by both schedule timer and remote controller.

Centralized

The operation is controlled by the schedule timer alone, and the operation/stop is controlled freely with the remote controller during the programmed time.

(NOTES)

- For current settings, contact your DAIKIN dealer.
- To change settings, contact your DAIKIN dealer.

Do not change settings yourself.

Error diagnosing function (Fig. 7)

This schedule timer is provided with the malfunction diagnosing function. The malfunction code flashes if there occurs any malfunction in communication, etc. between and among the optional controllers for centralized control. In addition, the operation lamp also flashes if there occurs any malfunction in communication with the indoor unit. Check the contents of the display and contact your DAIKIN dealer because the signals give you the idea of the trouble area.

Opera- tion lamp	Malfunc- tion code	Contents of mal- function					ress failure of edule timer.
Turn off	M1	Failure of PC board of schedule timer. Fixes The following causes are possi- ble. Check each one. 1. PC board prob- lems	timer. ng possi- each	Turn on or off	мс	caus Che 1. D ra ir fe 2. D	following ses are possible. ck each one. to the control ange addresses the central emote control- er overlap? to the control
Turn on		Malfunction of transmission between each optional controllers for centralized con- trol.				ir tr 3. A m ti	ange addresses in the on/off con- oller overlap? are there 2 or hore schedule mers con- ected?
or off M8 F	Fixes Check all central devices which are connected (e.g., power supply, transmission wiring, etc.).	Flash	UE	tran betv unit cont	function of smission veen indoor and optional trollers for cen- zed control.		
	Improper combina- tion of optional controllers for cen- tralized control. Fixes				Insp units play (e.g tran	ect all indoor s which are dis- ing an error ., power supply, smission ng, etc.).	
Turn on or off	MA	 The following causes are possible. Check each one. 1. Are all central devices combined correctly? 2. Is the master central connector attached to 		Flash		indo to th code rem whil " CA SEF attac	function in for unit (Refer the malfunction es of the indoor ote controller, e also read the AUTION FOR AVICING " ched to the for unit.)
		two or more cen- tral devices? 3. Are there 128 or		QUEST	ION	AND	ANSWER
		more indoor		Questi	on		Anowor

Question	Answer
It is possible to make settings twice a day, but is it possible to make only the " off " setting? (To avoid forget- ting to turn the unit off.)	Yes. Press the PRO- GRAM CANCELING BUTTON in the " Mere 10 " section in order to set it to " OFF ".

units connected?

Is it possible to set times which straddle days?	Yes, it is possible. Example: Start operation at 5:00 a.m. on Sunday Stop operation at 6:00 p.m. on Monday $\frac{ mooww}{ whith relief of the first of the fi$	The TIME NO. is not displayed.	 The following causes are possible. 1. The TIME NO. is not displayed when using the schedule timer alone. (It can be set if using the central remote controller at the same time.) 	
The unit does not turn on even though the set " on " time has come. (When using the schedule timer alone)	The following causes are possible. 1. Are the " on " time and the " off" time set to the same time?	The display remains " [] [] [] [] [] [] [] [] [] [] [] [] []	The following causes are possible. 1. Is the day set to a holiday?	
The unit does not turn on even though the set " on " time has come. (When using the unit with a central remote controller)	 The following causes are possible. Check each one. 1. Was the timer number set with the central remote controller? Was an incorrect timer number set? 2. Is another timer no. set with the central remote controller set for " off " at the same time? 3. Is the operation code set to " remote control permission timer " using the central remote controller or the on/off controller? 	I cannot set " central manage- ment priority " or " after-push prior- ity " with the schedule timer.	 are possible. 1. Is a central remote controller or on/off controller also installed? * The priority order of the operation codes depends on the central devices which are installed. The below operation codes are set. Schedule timer Central remote controller is used as well Operation code of the central remote controller Schedule timer Schedule timer Operation code of the central remote controller Schedule timer 	
The unit oper- ates even though that day is set as a holiday. (When using the unit with a central remote controller)	The following causes are possible. 1. Is another timer num- ber set with the cen- tral remote controller set for " on " at the same time? (If two timer numbers are set, make sure that the settings for holidays and working days do not overlap between the different timer numbers.)		On/off controller is	

14.16 <KRCS01-4B> Remote Sensor

Notes

- Please check applicable kit model name by catalog etc.
- When installed on SkyAir Round-flow type models, the dehumidification by detection of humidity does not operate.

Accessories

Check the following accessories.

Name	Remote sensor (sensor box)	Extension cable (2-core, 12m)	Clamp	Installation manual (this drawing)	Mounting screw (M4x16)
Shape			3		5 I
Quantity	x 1	x 1	x 2	x 1	x 2

Mounting

1) Selection of mounting location.

The thermistor for temperature detection is incorporated into the remote sensor. Select the mounting location taking the following cautions into account.

① Where the average temperature of an air conditioned room can be detected.

- 2 Where it is not exposed to the direct sunlight.
- 3 Where it is not influenced by other heat sources.
- (4) Where it is not exposed to the direct discharge air from the air conditioner.
- (5) Where it is not exposed to the outdoor air infiltrated into the room by opening the door.

2) Mounting

• Remove the cover of the sensor box.

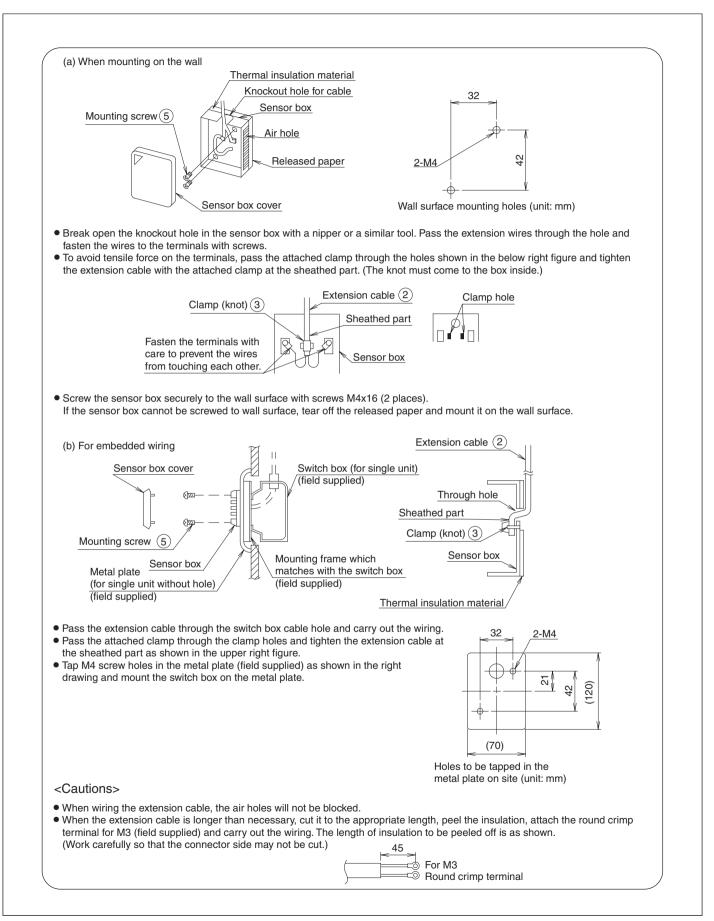
A

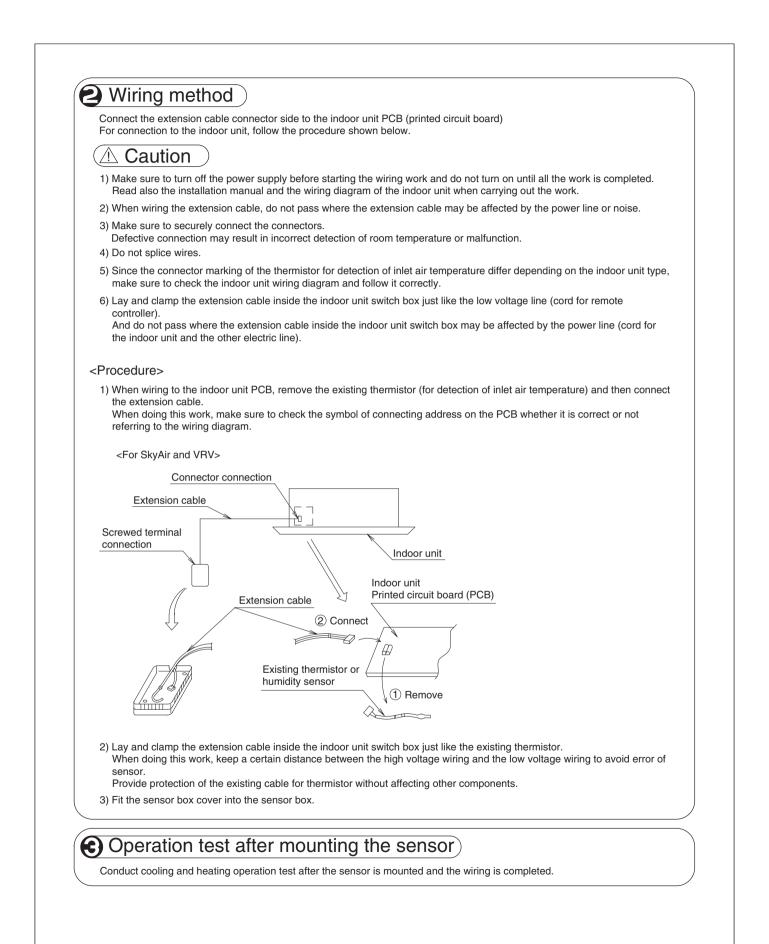
about 6mm width flat blade screw driver

(1) Insert a flat blade screw driver into the sensor box concave part (2 locations). (2) Remove the cover pushing up the nail to the cover of the sensor box.

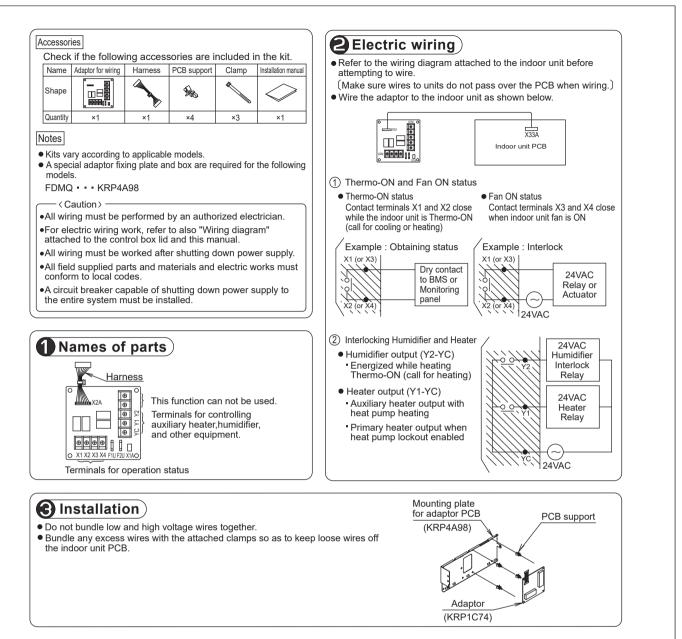
<Cautions>

Do not push the nail powerfully with a narrow flat blade screw driver, because you may break off the nail.

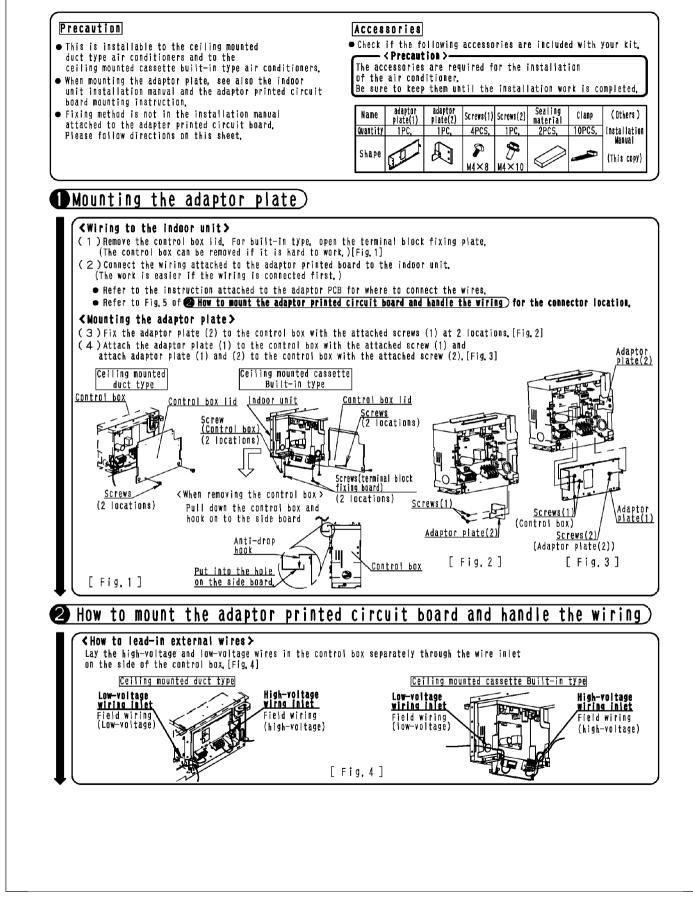


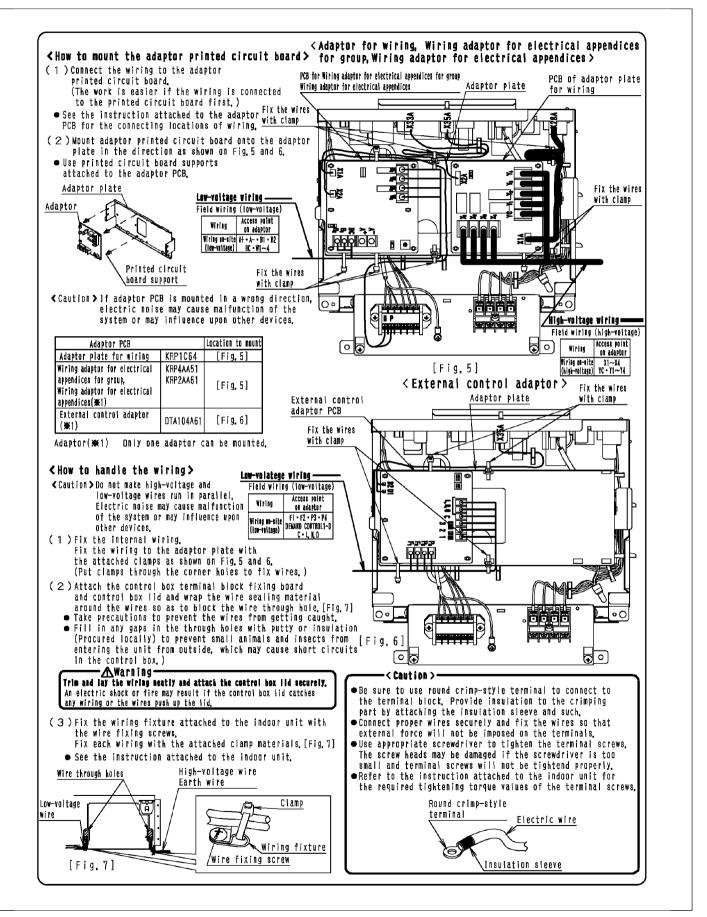


14.17 <KRP1C74> Wiring Adaptor



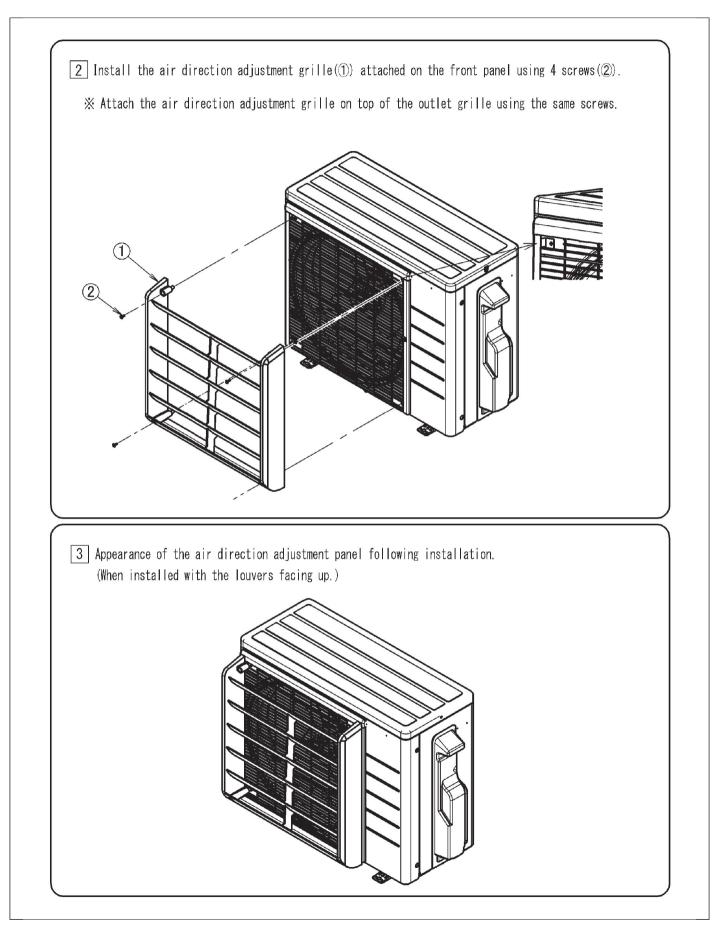
14.18 <KRP4A98> Installation Box for Adaptor PCB



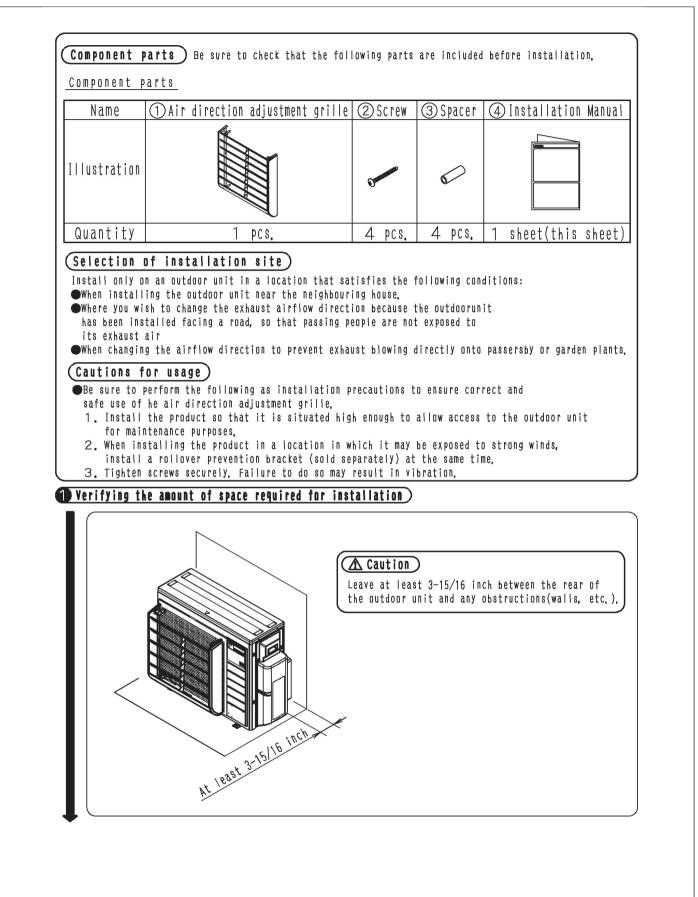


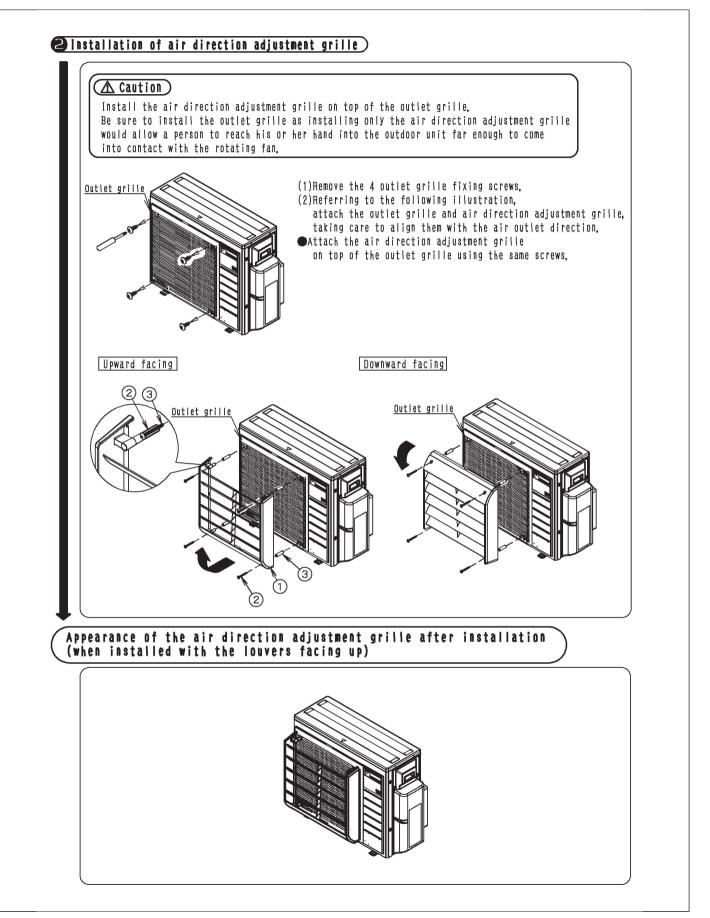
14.19 <KPW937F4> Air Direction Adjustment Grille

Name	①Air direction adjustment grille	②M4×30 Screw	③Installation manual	@Seal	(5)Spacer
Shape		3			Ø
Qty.	1 pc.	4 pcs.	3 sheets.	L=385:1pc, L=355:2pc	s. 4 pcs.
fol 1. Wi 2. Wi 2. Wi 3. Caution: • Be dire 1. Be 2. A 3. Wi 0 4. Be in 5. De Install • Pit and • Ins • Tem ang	lowing conditions. hen installing the o hen changing the air arden plants. sure to perform the ection adjustment gr e sure to stop the o void short-circuits hen using the unit i o not install the gr f the outdoor unit a e careful of foreign nstalling the grille o not use screws oth lation of air direct ch of the installati horizontal directio tallation can be per porarily secure the le, and then tighten	utdoor unit near the flow direction to pr following as install ille. peration before inst during installation. n areas with snow, in ille to create an up s this may damage th substances such as to create an upward er than those provid ion adjustment gril on screws for the ai ns. formed in 4 direction air direction adjust	event exhaust blowing d ation precautions to er allation. stall the grille to cre ward airflow to prevent e unit. dead leaves, which may a airflow. ed. Tighten the screws	lirectly onto passersby nsure correct and safe of eate a left-right or down snow accumulating in the accumulate on the air of securely without any low grille(①) is 434mm in the right.	use of the air wnward airflow the air outlet utlet after poseness. the vertical
●Seal	I wire outlet s(④) and spacers(⑤ move the 4 outlet gr) are not necessary. ille fixing screws.	Front panel Outlet grille Outlet grille fixing screw		

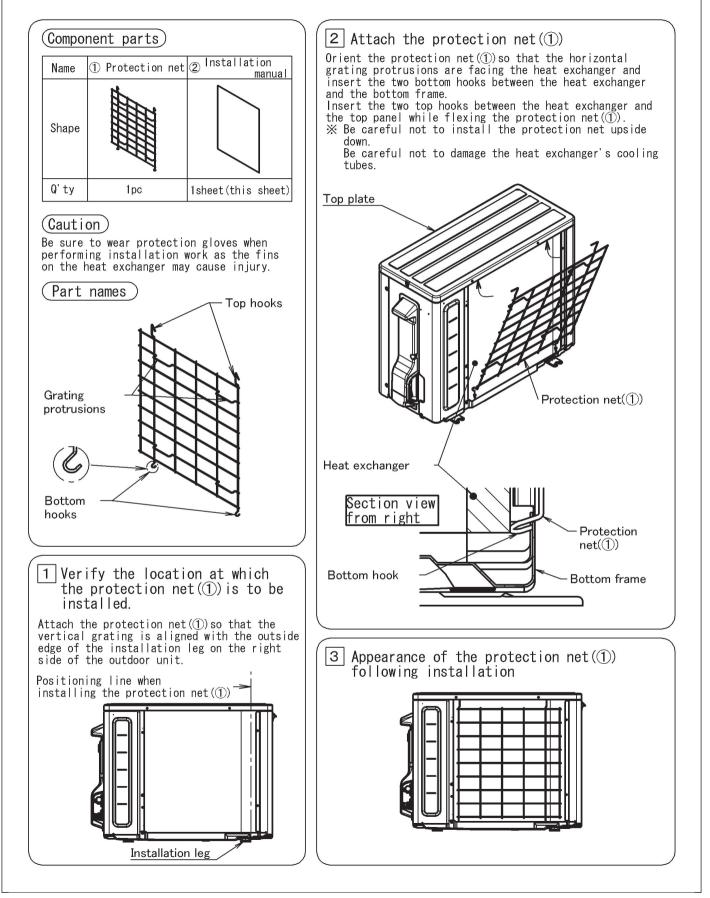


14.20 <KPW063B4> Air Direction Adjustment Grille

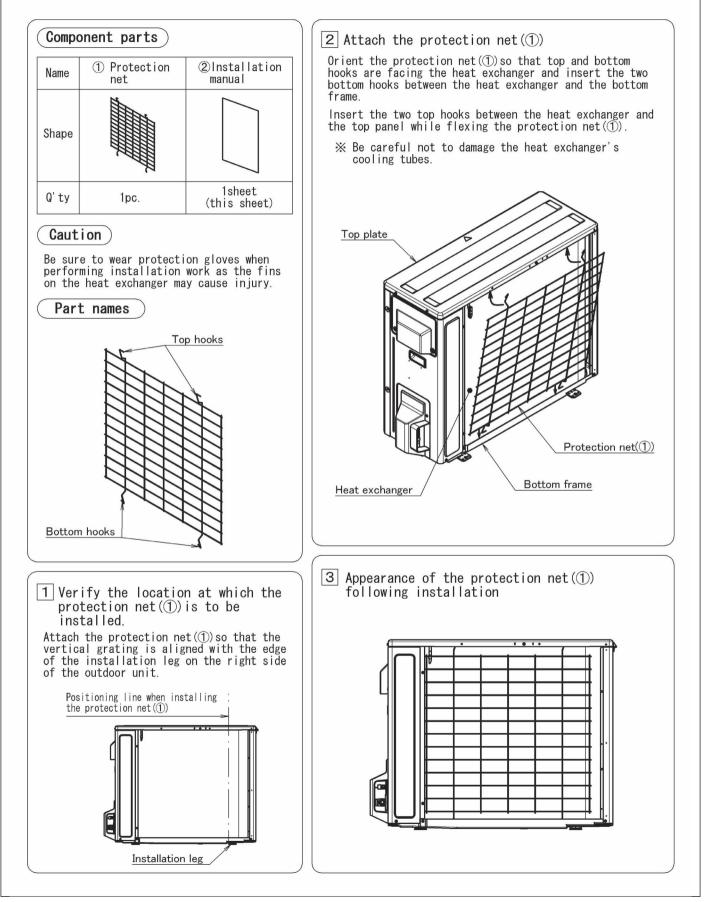




14.21 <KKG067A41> Back Protection Wire Net

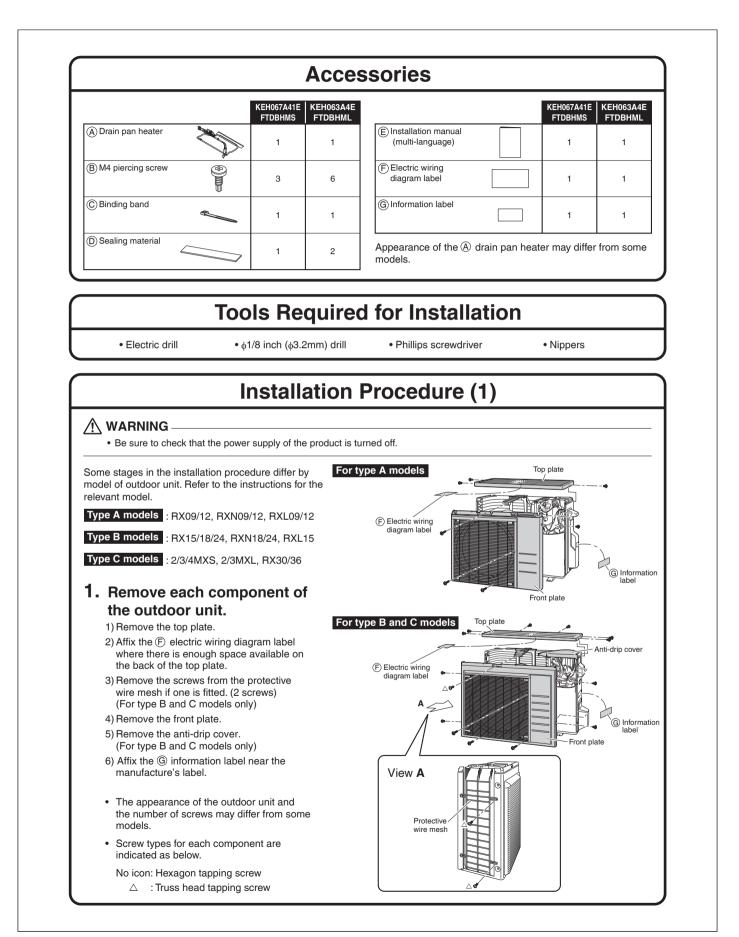


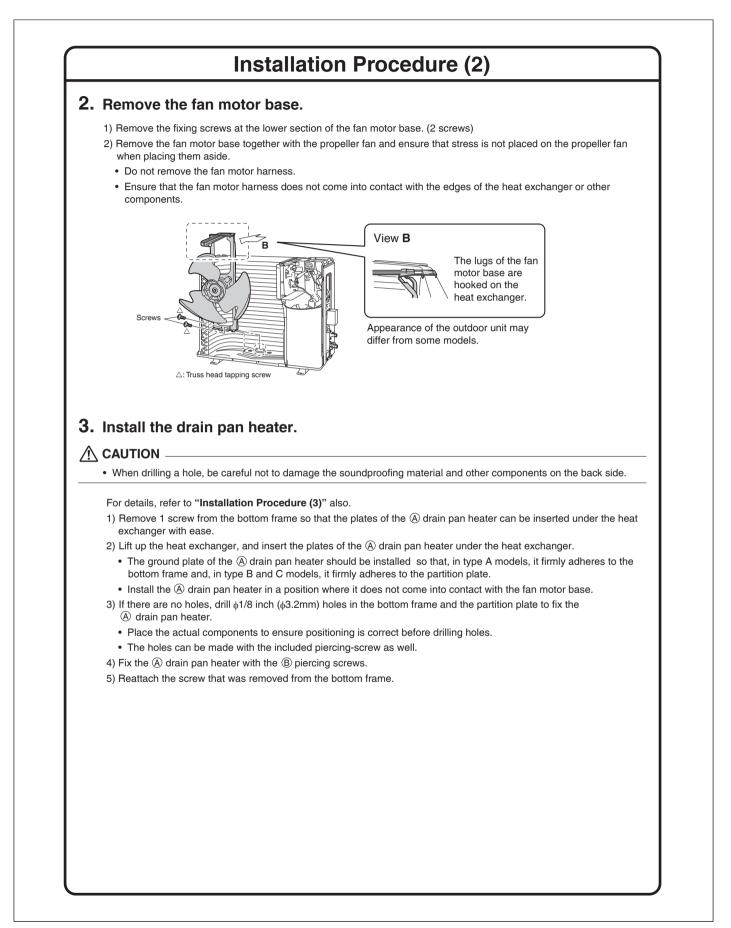
14.22 <KKG063A42> Back Protection Wire Net

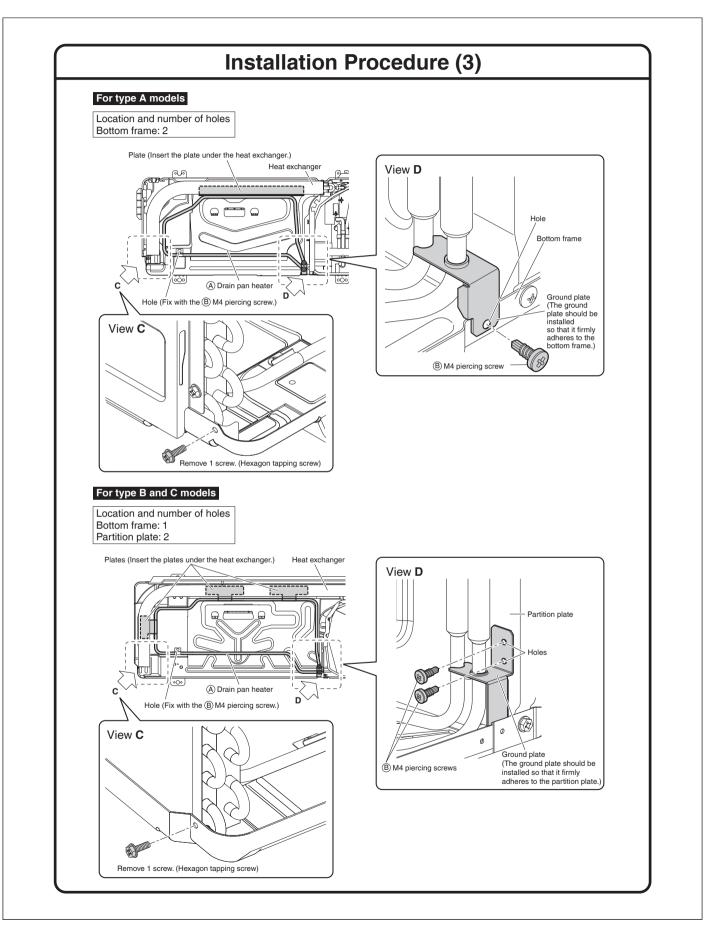


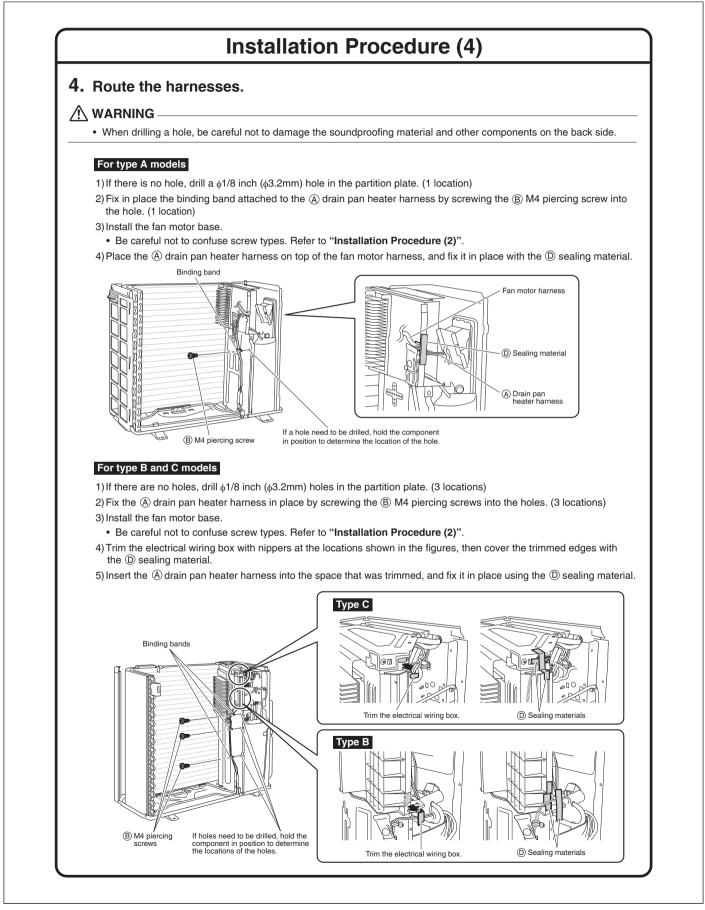
14.23 <KEH067A41E, KEH063A4E, FTDBHMS, FTDBHML> Drain Pan Heater

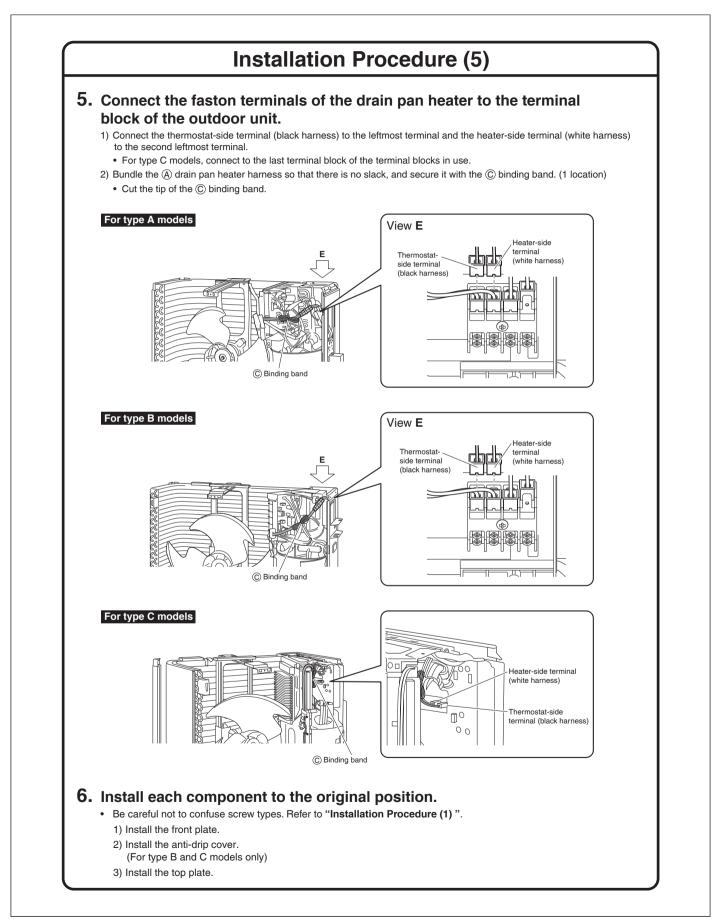
	onsiderations carefully before installing the drain pan he	ater. After completin	g the installation, check if the unit
,	ing the start-up operation. , WARNING and CAUTION symbols.		
			Leader to a sector the U. I. a sector of
	Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.		Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.
	Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.		
After completing the All phases of the fie manufacturer's instr This product is a he unit from freezing.	ey should store this installation manual for future reference installation, make sure that the unit operates properly d id-installation, including, but not limited to, electrical, pipi ructions and must comply with national, state, provincial, eater designed to melt snow that is blown into the product with a snow-break hood on a high stand if this product is o	uring the startup open ng, and safety, must and local codes. from the outside to	be done in accordance with prevent the drain pan of the outdoo
		, ,	
	e heater unit without wearing gloves.		
	he heater unit will become high when the heater is turned on. unit with bare hands will result in burns or injury.		
	NING		
Bequest the dep	aler or an authorized technician to install the pr	oduct	
•	of the product could result in water leakage, an electric shock, of		
	ist be installed according to the instructions give		I
•	allation of the product could result in water leakage, an electric s		
•	d or specified installation parts.		
••	ould result in the unit becoming loose and falling, water leakage,	electric shock, or fire.	
•	ver supply at the time of installation.	,	
•	cal parts may with the power supply turned on could result in ele	ctric shock.	
	res. Connect and fix the wires so that the wires wil		force on the terminal junctions
•	ixed improperly could result in terminal overheating, an electric		·····,
 When wiring an 	d connecting the indoor and outdoor units, care	efully arrange the	wiring so that they will not
	rce on the structures.		
Install covers over the	e wires. Incomplete cover installation could result in terminal over	erheating, an electric sh	nock, or fire.
🕂 CAUT	ION		
 Wear protective 	e gloves at the time of installation.		
Touching the suction	mouth or aluminum fin of the outdoor unit may result in injury.		
 Do not install the 	ne product in places where there is danger of ex	posure to inflam	mable gas leakage.
If the gas leaks and b	builds up around the unit, it may catch fire.		
 Do not grab the 	top plate of the outdoor unit carelessly when re	emoving the top	plate.
1 0	ne top plate may cause injury.		
	ne outdoor unit in places where small animals n		
If small animals intru Advise the user to ke	de and touch the internal parts of the outdoor unit, the outdoor upon the place clean	init may malfunction, g	enerate smoke, or ignite.
	he heater unit with bare hands.		
Do not touch th			
	he heater unit will become high when the heater is turned on.		



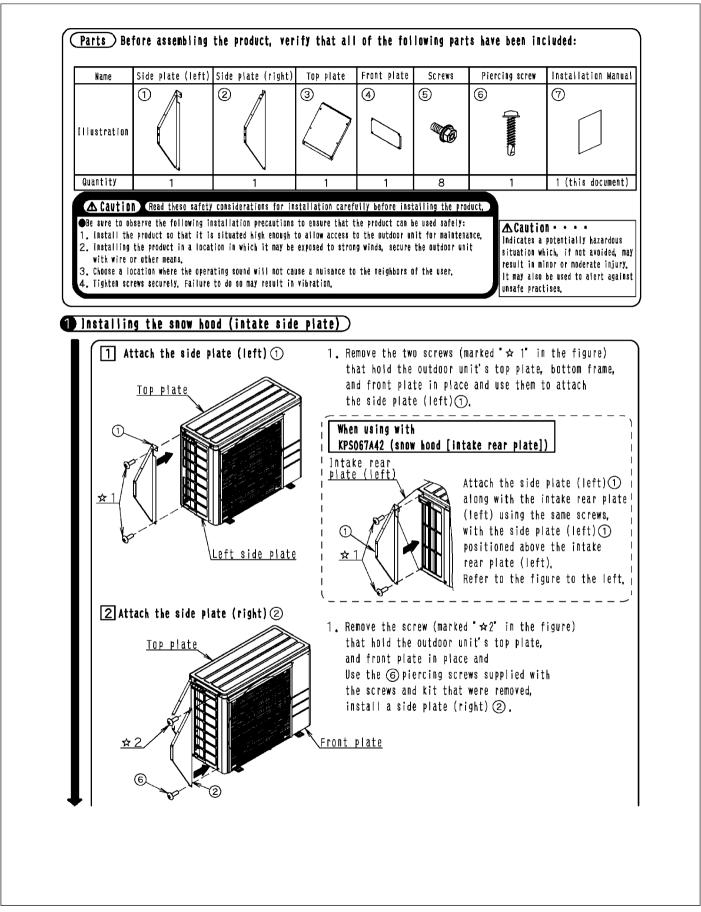


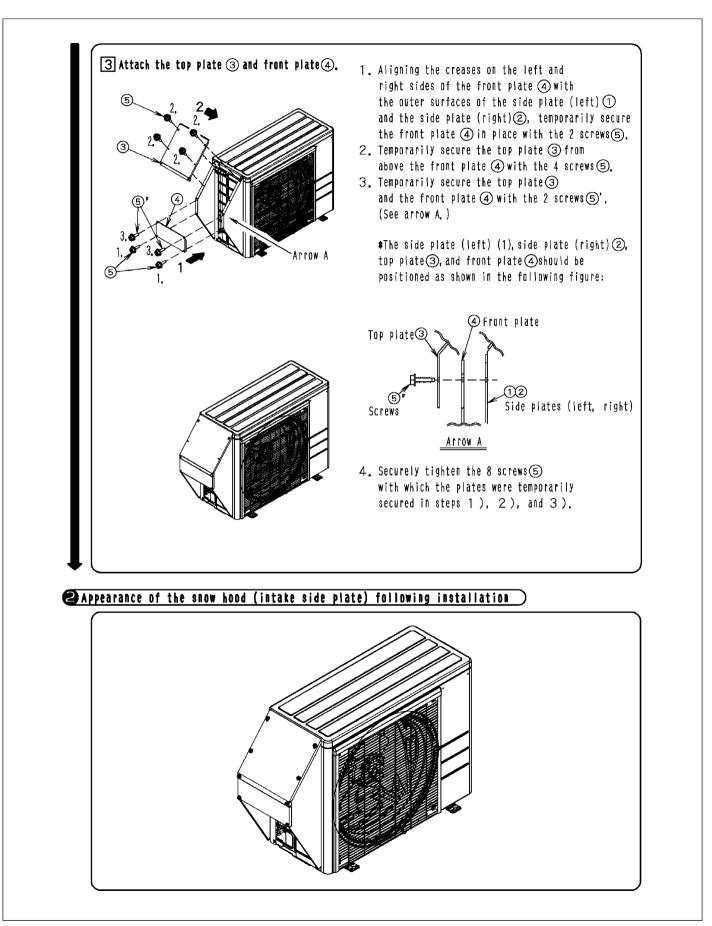




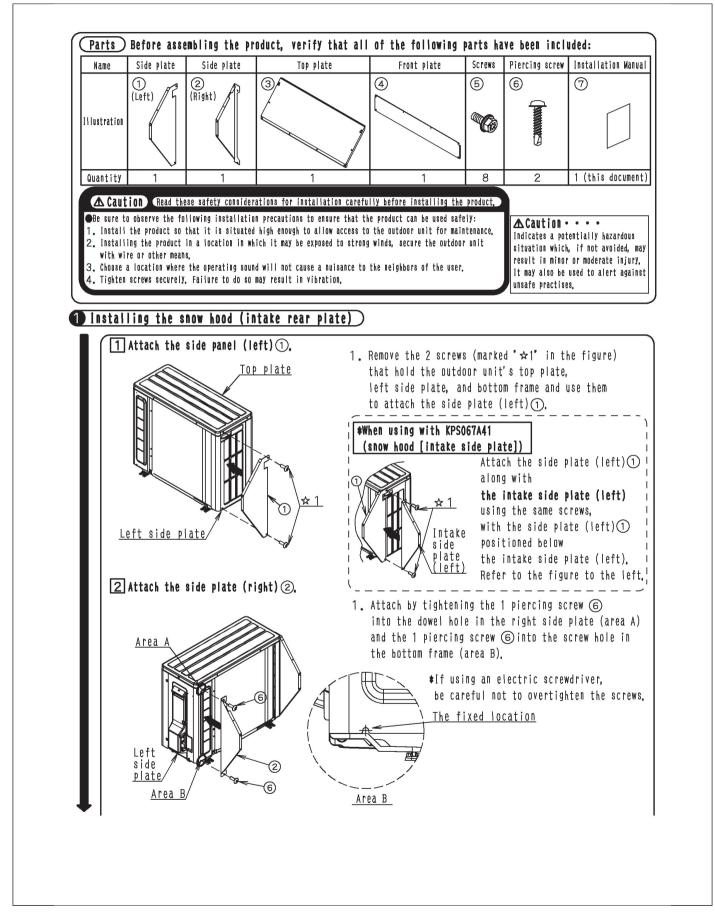


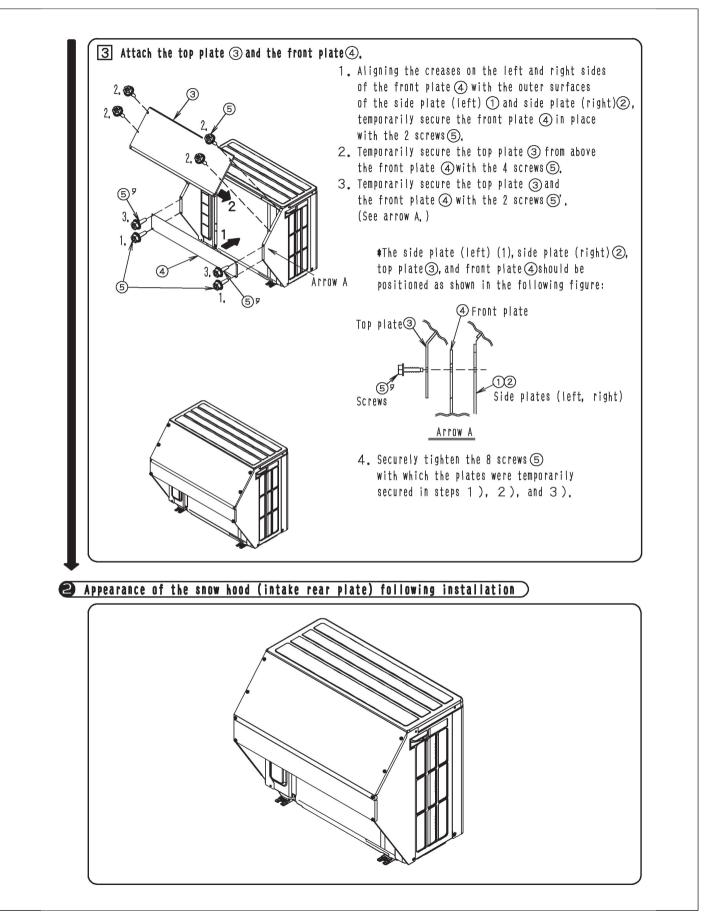
14.24 <KPS067A41> Snow Hood (Intake Side Plate)



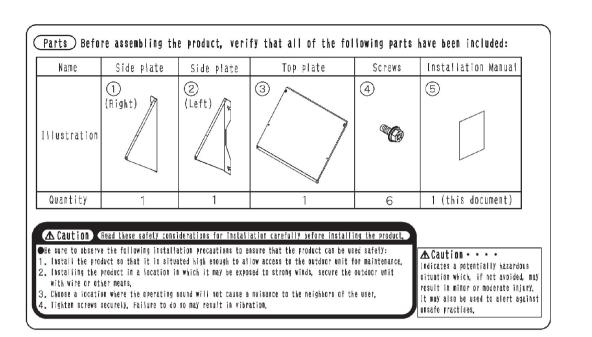


14.25 <KPS067A42> Snow Hood (Intake Rear Plate)

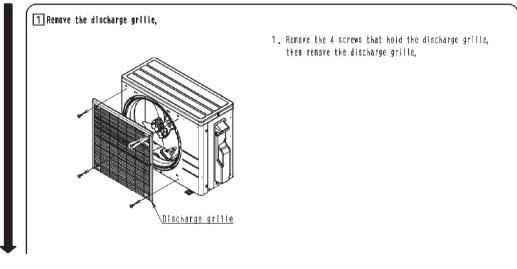


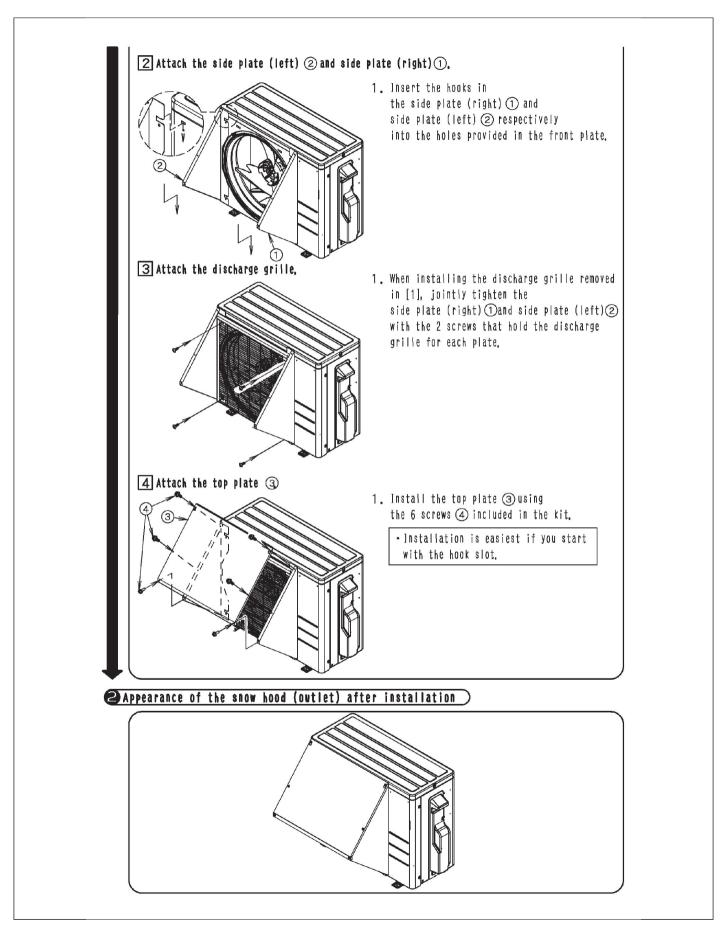


14.26 <KPS067A44> Snow Hood (Outlet)

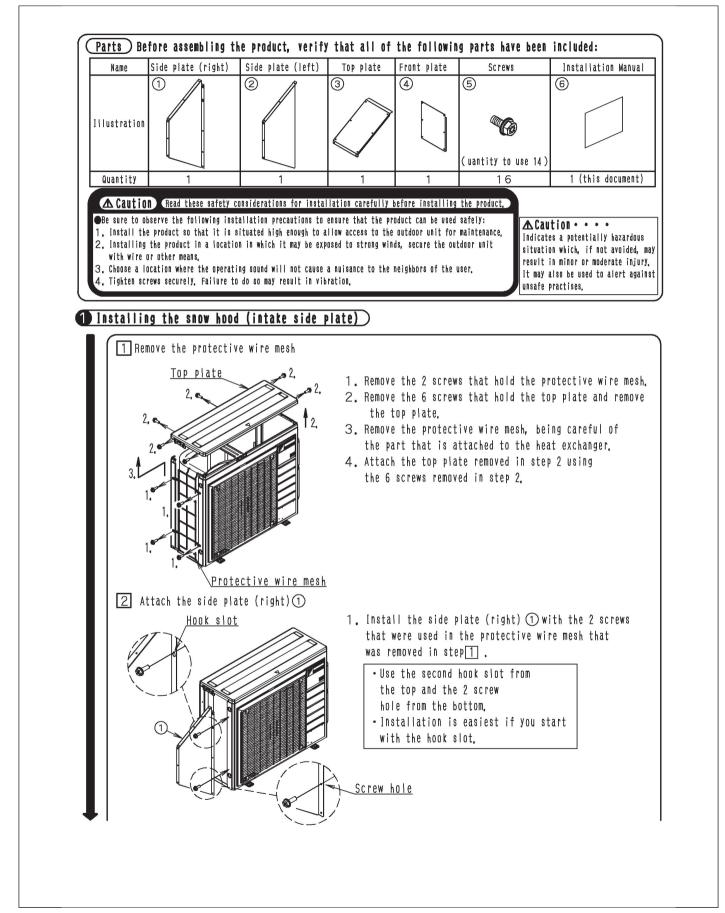


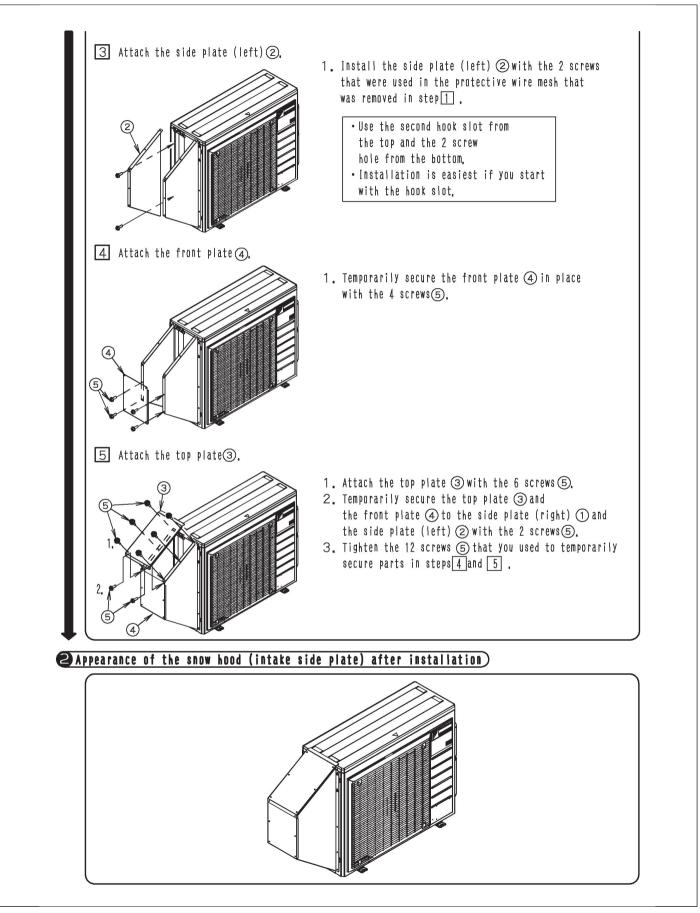
Installing the snow hood (outlet)



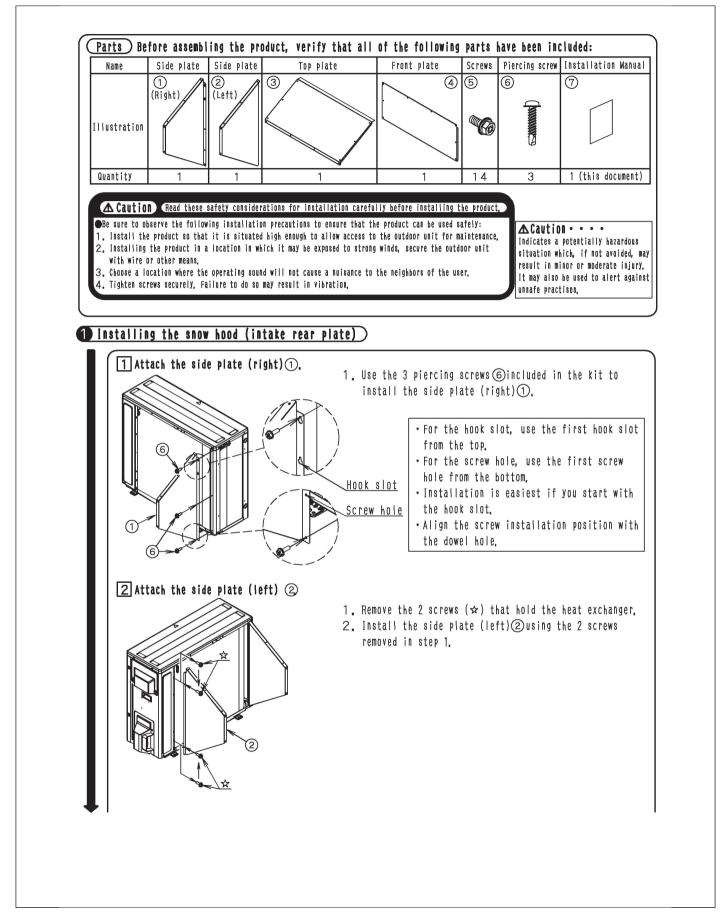


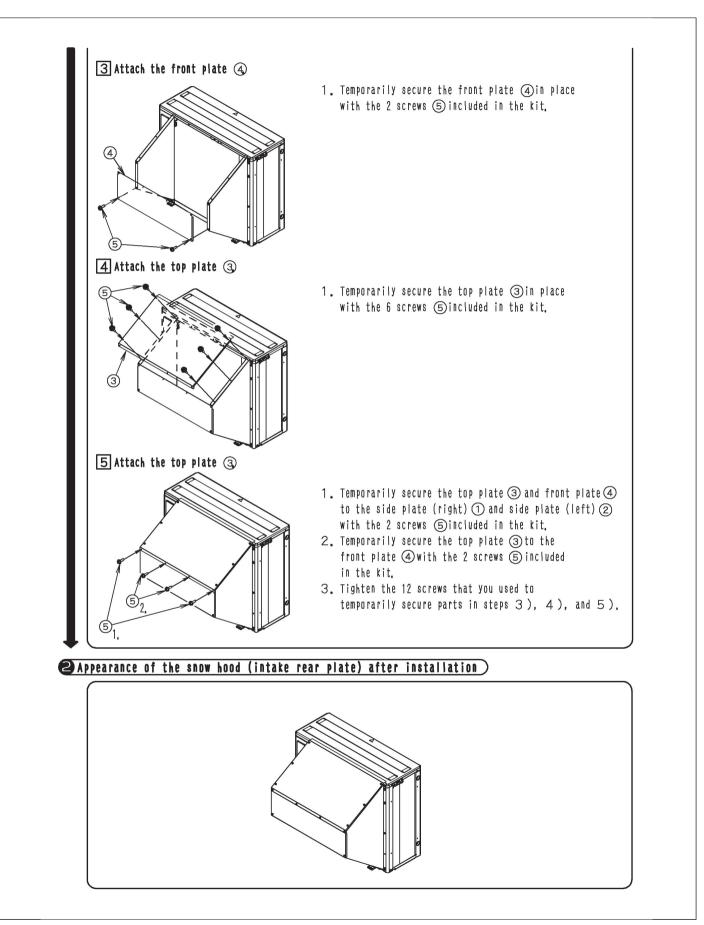
14.27 <KPS063A41> Snow Hood (Intake Side Plate)



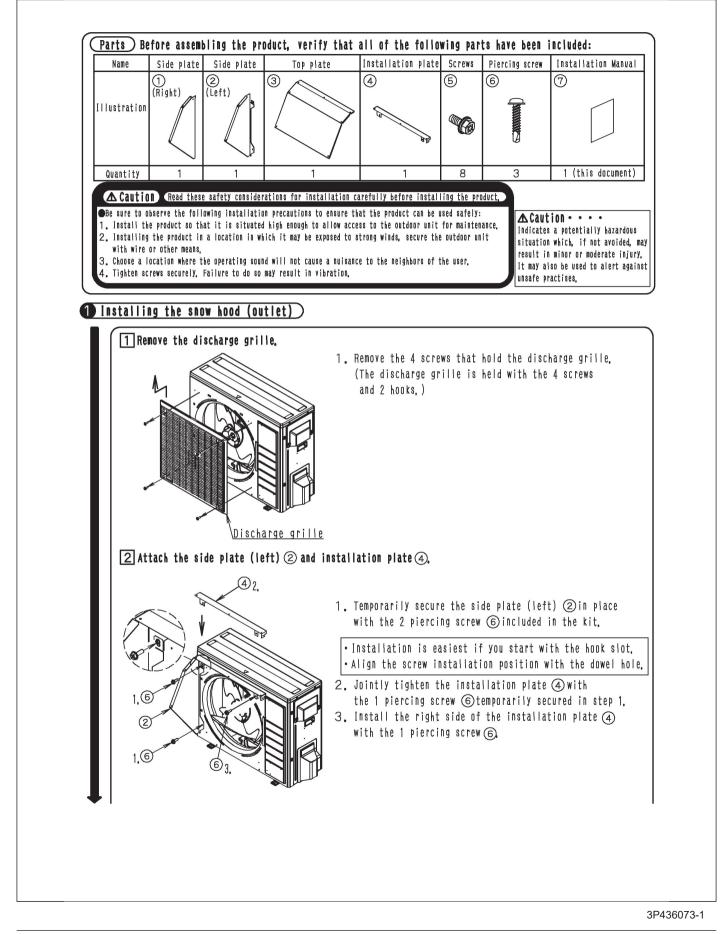


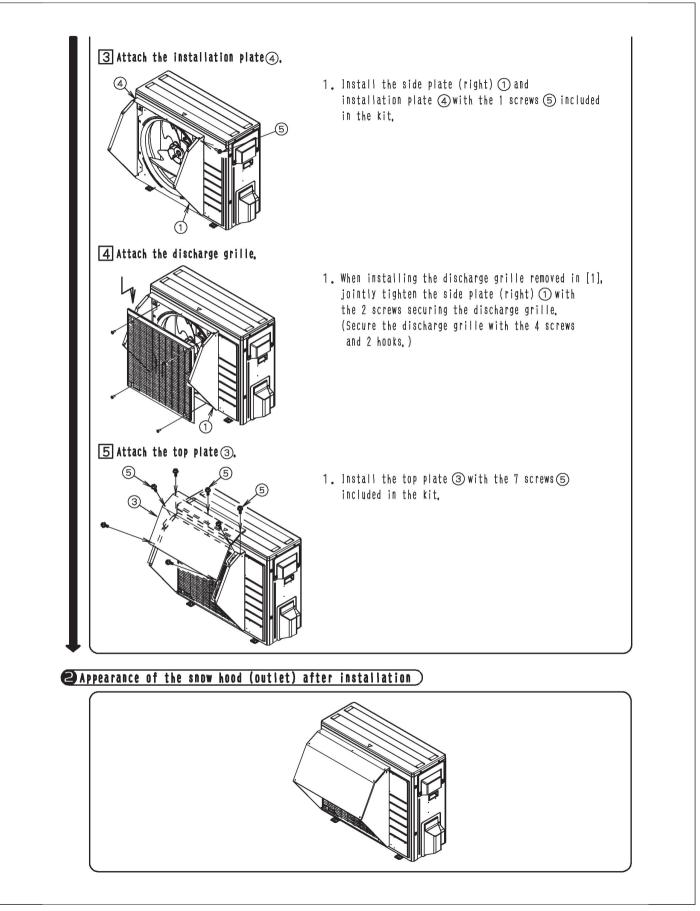
14.28 <KPS063A44> Snow Hood (Intake Rear Plate)





14.29 <KPS063A47> Snow Hood (Outlet)







- Ask a gualified installer or contractor to install this product. Do not try to install the product yourself. Improper installation can result in water or refrigerant leakage, electrical shock, fire or explosion.
 - Use only those parts and accessories supplied or specified by Daikin. Ask a qualified installer or contractor to install those parts and accessories. Use of unauthorized parts and accessories or improper installation of parts and accessories can result in water or refrigerant leakage, electrical shock, fire or explosion.
 - Read the user's manual carefully before using this product. The user's manual provides important safety instructions and warnings. Be sure to follow these instructions and warnings.

If you have any inquiries, please contact your local importer, distributor and/or retailer.

Cautions on product corrosion

1. Air conditioners should not be installed in areas where corrosive gases, such as acid gas or alkaline gas, are produced. 2. If the outdoor unit is to be installed close to the sea shore, direct exposure to the sea breeze should be avoided. If you need to install the outdoor unit close to the sea shore, contact your local distributor.