



ENGINEERING DATA

**Inverter Split Unit Air Conditioner
Wall Mounted
Cooling Only & Heatpump [60Hz]**

FTK-A & FTX-A Series



R410A

ED5WM9S-NA20V1

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Introduction

Model Name and Power Supply

Mode	Indoor Unit	Outdoor Unit	Power Supply
Cooling Only	FTK09AXVJU	RK09AXVJU	1Phase, 208/230V, 60Hz
	FTK12AXVJU	RK12AXVJU	
	FTK18AXVJU	RK18AXVJU	
	FTK24AXVJU	RK24AXVJU	
Heatpump	FTX09AXVJU	RX09AXVJU	
	FTX12AXVJU	RX12AXVJU	
	FTX18AXVJU	RX18AXVJU	
	FTX24AXVJU	RX24AXVJU	

Nomenclature

Indoor Unit

Definition	Description
Unit Category	F : Air-Cooled Split Indoor Unit
Product Type	T : Wall Mounted
System	K : Inverter, Cooling Only X : Inverter, Heatpump
Capacity Indication*	09 : 9,000 Btu/h
Major Design Category	A : A Series
Factory Origin	X : Malaysia
Power Supply	VJ : 208/230V/1Ph/60Hz
Country	U : United States

Outdoor Unit

Definition	Description
Unit Category	R : Air-Cooled Split Outdoor Unit
System	K : Inverter, Cooling Only X : Inverter, Heatpump
Capacity Indication*	09 : 9,000 Btu/h
Major Design Category	A : A Series
Factory Origin	X : Malaysia
Power Supply	VJ : 208/230V/1Ph/60Hz
Country	U : United States

Remark:

*Capacity value under Nomenclature is an indication.
Please refer to Engineering and Physical Data for exact capacity value.

Functions

Category	Functions	FTK09/12A RK09/12A	FTK18/24A RK18/24A	FTX09/12A RX09/12A	FTX18/24A RX18/24A
Basic Function	Inverter	●	●	●	●
	Operation Limit for Cooling (°CDB)(O/D)	10 - 46	10 - 46	10 - 46	10 - 46
	Operation Limit for Cooling (°FDB)(O/D)	50 - 114.8	50 - 114.8	50 - 114.8	50 - 114.8
	Operation Limit for Heating (°CWB)(O/D)	-15 - 18	-15 - 18	-15 - 18	-15 - 18
	Operation Limit for Heating (°FWB)(O/D)	5 - 64.4	5 - 64.4	5 - 64.4	5 - 64.4
Compressor	Scroll Compressor	-	-	-	-
	Swing Compressor	●	●	●	●
	Rotary Compressor	-	-	-	-
Comfortable Airflow	Power-airflow Flap	●	-	●	-
	Power-airflow Dual Flaps	-	●	-	●
	Power-airflow Diffuser	-	-	-	-
	Wide Angle Louvers	●	●	●	●
	Vertical Auto-Swing (Up and Down)	●	●	●	●
	Horizontal Auto-Swing (Right and Left)	-	-	-	-
	3D Airflow	-	-	-	-
	Breeze Airflow	-	-	-	-
Comfort Control	Auto Fan Speed	●	●	●	●
	Indoor Unit Quiet Operation	●	●	●	●
	Intelligent Eye Operation	-	-	-	-
	Automatic Defrosting	-	-	●	●
Operation	Automatic Operation	-	-	●	●
	Programme Dry Function	●	●	●	●
	Fan Only	●	●	●	●
Lifestyle Convenience	Powerful Operation (Non Inverter)	-	-	-	-
	Inverter Powerful Operation	●	●	●	●
	Energy Saving Function	●	●	●	●
	Sleep Mode	●	●	●	●
	Indoor Unit ON/OFF Button	●	●	●	●
	R/C with Backlight	●	●	●	●
	Signal Receiving Sign (R/C)	●	●	●	●
Set Temperature Display (R/C)	●	●	●	●	
Health & Clean	Saranet Filter	-	-	-	-
	Catechin Filter / Green Tea Filter	●	●	●	●
	Titanium Apatite Air-Purifying Filter	●	●	●	●
	PM 2.5 Filter	-	-	-	-
	Streamer	-	-	-	-
	Plasma	-	-	-	-
	Wipe Clean Flat Panel	●	●	●	●
Timer	Weekly Timer Operation (Wired R/C)	-	-	-	-
	24-hour ON/OFF Timer (R/C)	●	●	●	●
	Countdown ON/OFF Timer (R/C)	-	-	-	-
Worry Free (Reliability & Durability)	Auto Restart (after Power Failure)	●	●	●	●
	Self-diagnosis	●	●	●	●
	Anti-corrosion Treatment of Outdoor Heat Exchanger	●	●	●	●
Flexibility	Pre-charged Piping Length	10m	10m	10m	10m
	Either Side Drain (Right or Left)	●	●	●	●
Remote Control	BAG Connectivity	●	●	●	●
	WIFI Connectivity	●	●	●	●
	DIII-NET Connectivity	-	-	-	-
Remote Controller	Wireless (BRC52B63)	-	-	●	●
	Wireless (BRC52B64)	●	●	-	-
	Wired (BRC51D61)	●*	●*	●*	●*

Note: ● : Available

- : Not Available

●* : Optional (Refer to DAMA Spare Part team for more details on optional items.)

Specifications

Cooling Only

MODEL	INDOOR UNIT		FTK09A		FTK12A	
	OUTDOOR UNIT		RK09A		RK12A	
Rated Capacity (Min. ~ Max.)	kW		2.61 (1.30 - 3.00)		3.20 (1.30 - 3.90)	
	Btu/h		8900 (4400 - 10200)		10900 (4400 - 13300)	
Moisture Removal	gal/h		0.08		0.19	
Rated Running Current	A		3.36		3.99	
Rated Power Consumption	W		712		872	
EER	Btu/h/W				12.5	
SEER					19.0	
Power Factor (Rated)					N/A	
Piping Connections	Liquid	inch (mm)			1/4" (6.35)	
	Gas	inch (mm)			3/8" (9.52)	
Refrigerant	Type				R410A	
	Charge	lbs (kg)	1.54 (0.7)		2.09 (0.95)	
Max. Interunit Piping Length	ft (m)				65-5/8 (20)	
Max. Interunit Height Difference	ft (m)				49-1/4 (15)	
Chargeless	ft (m)				32-13/16 (10)	
Amount of Additional Charge of Refrigerant	oz/ft (g/m)				0.21 (20)	
INDOOR UNIT			FTK09A		FTK12A	
Front Panel Colour					WHITE	
Airflow Rate	Turbo	CFM	466		473	
	High	CFM	431		436	
	Medium	CFM	322		316	
	Low	CFM	249		247	
	Quiet	CFM	142		132	
Sound Pressure Level (H/M/L/Q)	dBA		43/36/30/19		45/37/31/19	
Fan	Type				CROSS FLOW	
	Drive				DIRECT	
	Speed				3 STEPS, QUIET, AUTO, TURBO	
Fan Motor	Type				DIRECT CURRENT	
	Motor Output	W	38		38	
	Running Current (Rated)	A	0.17		0.17	
	Power Consumption (Rated)	W	53		53	
Air Direction Control					UP, DOWN, LEFT, RIGHT	
Air Filter					CATECHIN	
Dimensions (H X W X D)	inch (mm)		11-1/3 X 30-29/32 X 9-27/32 (288 X 785 X 250)			
Packaged Dimensions (H X W X D)	inch (mm)		13-7/8 X 32-3/4 X 12-3/8 (350 X 830 X 314)			
Weight	lbs (kg)		20 (9)		22 (10)	
Gross Weight	lbs (kg)		25 (11)		27 (12)	
Condensate Drain Size	mm				19.00	
OUTDOOR UNIT			RK09A		RK12A	
Casing Colour					IVORY WHITE	
Airflow Rate	High	CFM	1083		1051	
Sound Pressure Level	dBA		46		49	
Fan	Type				PROPELLER	
	Drive				DIRECT	
Fan Motor	Type				DIRECT CURRENT	
	Index of protection (IP)				24	
	Insulation Grade				E	
	Running Current (Rated)	A	0.33		0.47	
	Power Consumption (Rated)	W	32		43	
	Motor Output	W	41		41	
Compressor	Poles				8	
	Type				HERMETIC SWING	
	Model				M5SLY10/15FR-1	
	Oil type				DAPHNE FVC50K	
	Oil amount	oz (cm ³)			12.4 (375)	
	Running Current (Rated)	A	2.86		3.35	
	Power Consumption (Rated)	W	627		776	
Heat Exchanger Type					FIN TUBE	
Starting Current	A		5.29		6.06	
Dimensions (H x W x D)	inch (mm)		21-11/16 X 26-1/2 X 11-3/16 (550 X 675 X 284)			
Packaged Dimensions (H x W x D)	inch (mm)		24-1/64 X 31-3/8 X 15-1/8 (610 X 801 X 384)			
Weight	lbs (kg)		55 (25)		62 (28)	
Gross Weight	lbs (kg)		62 (28)		68 (31)	
Drawing No.			3D128372		3D128372	
Document No. (Set)			3D128372		3D128372	

1) ALL UNITS ARE BEING TESTED ACCORDING TO AHRI 210/240 STANDARD.
 2) ALL SPECIFICATIONS ARE SUBJECT TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	
INDOOR:	80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)
OUTDOOR:	95°FDB (35°CDB)

MODEL	INDOOR UNIT		FTK18A		FTK24A	
	OUTDOOR UNIT		RK18A		RK24A	
Rated Capacity (Min. ~ Max.)	kW		5.28 (1.60 - 5.86)		6.21 (1.60 - 7.03)	
	Btu/h		18000 (5500 - 20000)		21200 (5500 - 24000)	
Moisture Removal	gal/h		0.41		0.67	
Rated Running Current	A		6.39		7.70	
Rated Power Consumption	W		1440		1738	
EER	Btu/h/W		12.5		12.2	
SEER			18.5		19.0	
Power Factor (Rated)					N/A	
Piping Connections	Liquid	inch (mm)	1/4" (6.35)			
	Gas	inch (mm)	1/2" (12.70)		5/8" (15.88)	
Refrigerant	Type		R410A			
	Charge	lbs (kg)	3.20 (1.45)		3.86 (1.75)	
Max. Interunit Piping Length	ft (m)		98-1/2 (30)			
Max. Interunit Height Difference	ft (m)		65-5/8 (20)			
Chargeless	ft (m)		32-13/16 (10)			
Amount of Additional Charge of Refrigerant	oz/ft (g/m)		0.21 (20)			
INDOOR UNIT			FTK18A		FTK24A	
Front Panel Colour					WHITE	
Airflow Rate	Turbo	CFM	754			
	High	CFM	716			
	Medium	CFM	605			
	Low	CFM	467			
	Quiet	CFM	395			
Sound Pressure Level (H/M/L/Q)	dBA		49/44/38/33		53/45/39/34	
Fan	Type		CROSS FLOW			
	Drive		DIRECT			
	Speed		3 STEPS, QUIET, AUTO, TURBO			
Fan Motor	Type		DIRECT CURRENT			
	Motor Output	W	35			
	Running Current (Rated)	A	0.145			
	Power Consumption (Rated)	W	47			
Air Direction Control			UP, DOWN, LEFT, RIGHT			
Air Filter			CATECHIN			
Dimensions (H X W X D)	inch (mm)		11-11/16 X 39-1/2 X 11-1/3 (297 X 1005 X 288)			
Packaged Dimensions (H X W X D)	inch (mm)		14-1/4 X 42-1/4 X 14-1/8 (362 X 1073 X 358)			
Weight	lbs (kg)		31 (14)			
Gross Weight	lbs (kg)		38 (17)			
Condensate Drain Size	mm		19.00			
OUTDOOR UNIT			RK18A		RK24A	
Casing Colour					IVORY WHITE	
Airflow Rate	High	CFM	2005		1908	
Sound Pressure Level	dBA		54		55	
Fan	Type		PROPELLER			
	Drive		DIRECT			
Fan Motor	Type		DIRECT CURRENT			
	Index of protection (IP)		23			
	Insulation Grade		E			
	Running Current (Rated)	A	0.99		1.00	
	Power Consumption (Rated)	W	81		86	
	Motor Output	W	128			
Compressor	Poles		8			
	Type		HERMETIC SWING			
	Model		D1C128S8P20-PN			
	Oil type		DAPHNE FVC50K			
	Oil amount	oz (cm ³)	21.5 (650)			
	Running Current (Rated)	A	5.255		6.555	
Power Consumption (Rated)	W	1312		1605		
Heat Exchanger Type			FIN TUBE			
Starting Current	A		7.33		11.00	
Dimensions (H x W x D)	inch (mm)		27-13/32 x 36-5/8 x 13-13/16 (696 X 930 X 351)			
Packaged Dimensions (H x W x D)	inch (mm)		29-7/8 x 42-3/8 x 18-7/8 (760 X 1075 X 480)			
Weight	lbs (kg)		99 (45)		106 (48)	
Gross Weight	lbs (kg)		108 (49)		115 (52)	
Drawing No.			3D128372		3D128372	
Document No. (Set)			3D128372		3D128372	

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COOLING	
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)	
OUTDOOR: 95°FDB (35°CDB)	

Heatpump

MODEL	INDOOR UNIT		FTX09A	
	OUTDOOR UNIT		RX09A	
		Cooling		Heating
Rated Capacity (Min. ~ Max.)	kW	2.61 (1.30 - 3.00)		2.93 (1.30 - 3.80)
	Btu/h	8900 (4400 - 10200)		10000 (4400 - 13000)
Moisture Removal	gal/h	0.08		
Rated Running Current	A	3.36		3.33
Rated Power Consumption	W	712		719
EER	Btu/h/W	12.5		N/A
SEER		19.0		N/A
COP	W/W	N/A		4.06
HSPF		N/A		10.0
Power Factor (Rated)		N/A		
Piping Connections	Liquid	inch (mm)	1/4" (6.35)	
	Gas	inch (mm)	3/8" (9.52)	
Refrigerant	Type		R410A	
	Charge	lbs (kg)	1.54 (0.7)	
Max. Interunit Piping Length	ft (m)	65-5/8 (20)		
Max. Interunit Height Difference	ft (m)	49-1/4 (15)		
Chargeless	ft (m)	32-13/16 (10)		
Amount of Additional Charge of Refrigerant	oz/ft (g/m)	0.21 (20)		
		INDOOR UNIT		FTX09A
Front Panel Colour		WHITE		
Airflow Rate	Turbo	CFM	466	
	High	CFM	431	402
	Medium	CFM	322	
	Low	CFM	249	
	Quiet	CFM	219	
Sound Pressure Level (H/M/L/Q)		dBA	43/36/30/25	43/36/29/25
Fan	Type		CROSS FLOW	
	Drive		DIRECT	
	Speed		3 STEPS, QUIET, AUTO, TURBO	
Fan Motor	Type		DIRECT CURRENT	
	Motor Output	W	38	
	Running Current (Rated)	A	0.17	
	Power Consumption (Rated)	W	53	
Air Direction Control		UP, DOWN, LEFT, RIGHT		
Air Filter		CATECHIN		
Dimensions (H X W X D)	inch (mm)	11-1/3 X 30-29/32 X 9-27/32 (288 X 785 X 250)		
Packaged Dimensions (H X W X D)	inch (mm)	13-7/8 X 32-3/4 X 12-3/8 (350 X 830 X 314)		
Weight	lbs (kg)	20 (9)		
Gross Weight	lbs (kg)	25 (11)		
Condensate Drain Size	mm	19.00		
		OUTDOOR UNIT		RX09A
Casing Colour		IVORY WHITE		
Airflow Rate	High	CFM	1083	1103
Sound Pressure Level		dBA	46	48
Fan	Type		PROPELLER	
	Drive		DIRECT	
Fan Motor	Type		DIRECT CURRENT	
	Index of protection (IP)		24	
	Insulation Grade		E	
	Running Current (Rated)	A	0.33	
	Power Consumption (Rated)	W	32	33
	Motor Output	W	41	
Compressor	Poles		8	
	Type		HERMETIC SWING	
	Model		M5SLY10/15FR-1	
	Oil type		DAPHNE FVC50K	
	Oil amount	oz (cm ³)	12.4 (375)	
Running Current (Rated)	A	2.86	2.83	
Power Consumption (Rated)	W	627	633	
Heat Exchanger Type		FIN TUBE		
Starting Current	A	5.29		
Dimensions (H x W x D)	inch (mm)	21-11/16 X 26-1/2 X 11-3/16 (550 X 675 X 284)		
Packaged Dimensions (H x W x D)	inch (mm)	24-1/64 X 31-3/8 X 15-1/8 (610 X 801 X 384)		
Weight	lbs (kg)	57 (26)		
Gross Weight	lbs (kg)	64 (29)		
Drawing No.		3D128372	3D128372	
Document No. (Set)		3D128372	3D128372	

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COOLING		HEATING	
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)		INDOOR: 70°FDB (21.1°CDB)	
OUTDOOR: 95°FDB (35°CDB)		OUTDOOR: 47°FDB (8.3°CDB) / 43°FWB(6.1°CWB)	

MODEL	INDOOR UNIT		FTX12A	
	OUTDOOR UNIT		RX12A	
			Cooling	Heating
Rated Capacity (Min. ~ Max.)	kW		3.20 (1.30 - 3.90)	3.96 (1.30 - 4.80)
	Btu/h		10900 (4400 - 13300)	13500 (4400 - 16400)
Moisture Removal	gal/h		0.19	
Rated Running Current	A		3.99	4.70
Rated Power Consumption	W		872	1038
EER	Btu/h/W		12.5	N/A
SEER			19.0	N/A
COP	W/W		N/A	3.80
HSPF			N/A	10.0
Power Factor (Rated)			N/A	
Piping Connections	Liquid	inch (mm)	1/4" (6.35)	
	Gas	inch (mm)	3/8" (9.52)	
Refrigerant	Type		R410A	
	Charge	lbs (kg)	2.09 (0.95)	
Max. Interunit Piping Length	ft (m)		65-5/8 (20)	
Max. Interunit Height Difference	ft (m)		49-1/4 (15)	
Chargeless	ft (m)		32-13/16 (10)	
Amount of Additional Charge of Refrigerant	oz/ft (g/m)		0.21 (20)	
INDOOR UNIT		FTX12A		
Front Panel Colour			WHITE	
Airflow Rate	Turbo	CFM	473	
	High	CFM	436	412
	Medium	CFM	316	
	Low	CFM	247	
	Quiet	CFM	210	
Sound Pressure Level (H/M/L/Q)	dBA		45/37/31/26	45/37/30/26
Fan	Type		CROSS FLOW	
	Drive		DIRECT	
	Speed		3 STEPS, QUIET, AUTO, TURBO	
Fan Motor	Type		DIRECT CURRENT	
	Motor Output	W	38	
	Running Current (Rated)	A	0.17	
	Power Consumption (Rated)	W	53	
Air Direction Control			UP, DOWN, LEFT, RIGHT	
Air Filter			CATECHIN	
Dimensions (H X W X D)	inch (mm)		11-1/3 X 30-29/32 X 9-27/32 (288 X 785 X 250)	
Packaged Dimensions (H X W X D)	inch (mm)		13-7/8 X 32-3/4 X 12-3/8 (350 X 830 X 314)	
Weight	lbs (kg)		22 (10)	
Gross Weight	lbs (kg)		27 (12)	
Condensate Drain Size	mm		19.00	
OUTDOOR UNIT		RX12A		
Casing Colour			IVORY WHITE	
Airflow Rate	High	CFM	1051	966
Sound Pressure Level		dBA	49	
Fan	Type		PROPELLER	
	Drive		DIRECT	
Fan Motor	Type		DIRECT CURRENT	
	Index of protection (IP)		24	
	Insulation Grade		E	
	Running Current (Rated)	A	0.47	
	Power Consumption (Rated)	W	43	36
	Motor Output	W	41	
Compressor	Poles		8	
	Type		HERMETIC SWING	
	Model		M5SLY10/15FR-1	
	Oil type		DAPHNE FVC50K	
	Oil amount	oz (cm ³)	12.4 (375)	
	Running Current (Rated)	A	3.35	4.06
Power Consumption (Rated)	W	776	949	
Heat Exchanger Type			FIN TUBE	
Starting Current	A		6.06	
Dimensions (H x W x D)	inch (mm)		21-11/16 X 26-1/2 X 11-3/16 (550 X 675 X 284)	
Packaged Dimensions (H x W x D)	inch (mm)		24-1/64 X 31-3/8 X 15-1/8 (610 X 801 X 384)	
Weight	lbs (kg)		64 (29)	
Gross Weight	lbs (kg)		71 (32)	
Drawing No.			3D128372	3D128372
Document No. (Set)			3D128372	3D128372

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COOLING	HEATING
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)	INDOOR: 70°FDB (21.1°CDB)
OUTDOOR: 95°FDB (35°CDB)	OUTDOOR: 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB)

Specifications

MODEL	INDOOR UNIT		FTX18A	
	OUTDOOR UNIT		RX18A	
			Cooling	Heating
Rated Capacity (Min. ~ Max.)		kW	5.28 (1.60 - 5.86)	6.33 (1.60 - 7.03)
		Btu/h	18000 (5500 - 20000)	21600 (5500 - 24000)
Moisture Removal		gal/h	0.41	
Rated Running Current		A	6.39	7.79
Rated Power Consumption		W	1440	1756
EER		Btu/h/W	12.5	N/A
SEER			18.5	N/A
COP		W/W	N/A	3.60
HSPF			N/A	9.0
Power Factor (Rated)			N/A	
Piping Connections	Liquid	inch (mm)	1/4" (6.35)	
	Gas	inch (mm)	1/2" (12.70)	
Refrigerant	Type		R410A	
	Charge	lbs (kg)	3.20 (1.45)	
Max. Interunit Piping Length		ft (m)	98-1/2 (30)	
Max. Interunit Height Difference		ft (m)	65-5/8 (20)	
Chargeless		ft (m)	32-13/16 (10)	
Amount of Additional Charge of Refrigerant		oz/ft (g/m)	0.21 (20)	
			FTX18A	
Front Panel Colour			WHITE	
Airflow Rate	Turbo	CFM	754	
	High	CFM	716	
	Medium	CFM	605	
	Low	CFM	467	
	Quiet	CFM	395	
Sound Pressure Level (H/M/L/Q)		dBA	49/44/38/33	49/42/37/33
Fan	Type		CROSS FLOW	
	Drive		DIRECT	
	Speed		3 STEPS, QUIET, AUTO, TURBO	
Fan Motor	Type		DIRECT CURRENT	
	Motor Output	W	35	
	Running Current (Rated)	A	0.145	
	Power Consumption (Rated)	W	47	
Air Direction Control			UP, DOWN, LEFT, RIGHT	
Air Filter			CATECHIN	
Dimensions (H X W X D)		inch (mm)	11-11/16 X 39-1/2 X 11-1/3 (297 X 1005 X 288)	
Packaged Dimensions (H X W X D)		inch (mm)	14-1/4 X 42-1/4 X 14-1/8 (362 X 1073 X 358)	
Weight		lbs (kg)	31 (14)	
Gross Weight		lbs (kg)	38 (17)	
Condensate Drain Size		mm	19.00	
			RX18A	
Casing Colour			IVORY WHITE	
Airflow Rate	High	CFM	2005	1905
Sound Pressure Level		dBA	54	
Fan	Type		PROPELLER	
	Drive		DIRECT	
Fan Motor	Type		DIRECT CURRENT	
	Index of protection (IP)		23	
	Insulation Grade		E	
	Running Current (Rated)	A	0.99	
	Power Consumption (Rated)	W	81	71
	Motor Output	W	128	
Compressor	Poles		8	
	Type		HERMETIC SWING	
	Model		D1C128S8P20-PN	
	Oil type		DAPHNE FVC50K	
	Oil amount	oz (cm ³)	21.5 (650)	
	Running Current (Rated)	A	5.255	6.655
Power Consumption (Rated)	W	1312	1638	
Heat Exchanger Type			FIN TUBE	
Starting Current		A	7.33	
Dimensions (H x W x D)		inch (mm)	27-13/32 X 36-5/8 X 13-13/16 (696 X 930 X 351)	
Packaged Dimensions (H x W x D)		inch (mm)	29-7/8 X 42-3/8 X 18-7/8 (760 X 1075 X 480)	
Weight		lbs (kg)	101 (46)	
Gross Weight		lbs (kg)	110 (50)	
Drawing No.			3D128372	3D128372
Document No. (Set)			3D128372	3D128372

1) ALL UNITS ARE BEING TESTED ACCORDING TO AHRI 210/240 STANDARD.
 2) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	HEATING
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)	INDOOR: 70°FDB (21.1°CDB)
OUTDOOR: 95°FDB (35°CDB)	OUTDOOR: 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB)

MODEL	INDOOR UNIT		FTX24A	
	OUTDOOR UNIT		RX24A	
		Cooling		Heating
Rated Capacity (Min. ~ Max.)	kW	6.21 (1.60 - 7.03)		6.92 (1.70 - 8.10)
	Btu/h	21200 (5500 - 24000)		23600 (5800 - 27600)
Moisture Removal	gal/h	0.67		
Rated Running Current	A	7.70		8.90
Rated Power Consumption	W	1738		2005
EER	Btu/h/W	12.2		N/A
SEER		19.0		N/A
COP	W/W	N/A		3.45
HSPF		N/A		9.0
Power Factor (Rated)		N/A		
Piping Connections	Liquid	inch (mm)	1/4" (6.35)	
	Gas	inch (mm)	5/8" (15.88)	
Refrigerant	Type	R410A		
	Charge	lbs (kg)	3.86 (1.75)	
Max. Interunit Piping Length	ft (m)	98-1/2 (30)		
Max. Interunit Height Difference	ft (m)	65-5/8 (20)		
Chargeless	ft (m)	32-13/16 (10)		
Amount of Additional Charge of Refrigerant	oz/ft (g/m)	0.21 (20)		
INDOOR UNIT		FTX24A		
Front Panel Colour		WHITE		
Airflow Rate	Turbo	CFM	754	
	High	CFM	716	
	Medium	CFM	605	
	Low	CFM	467	
	Quiet	CFM	395	
Sound Pressure Level (H/M/L/Q)	dBA	53/45/39/34		53/43/37/34
Fan	Type	CROSS FLOW		
	Drive	DIRECT		
	Speed	3 STEPS, QUIET, AUTO, TURBO		
Fan Motor	Type	DIRECT CURRENT		
	Motor Output	W	35	
	Running Current (Rated)	A	0.145	
	Power Consumption (Rated)	W	47	
Air Direction Control		UP, DOWN, LEFT, RIGHT		
Air Filter		CATECHIN		
Dimensions (H X W X D)	inch (mm)	11-11/16 X 39-1/2 X 11-1/3 (297 X 1005 X 288)		
Packaged Dimensions (H X W X D)	inch (mm)	14-1/4 X 42-1/4 X 14-1/8 (362 X 1073 X 358)		
Weight	lbs (kg)	31 (14)		
Gross Weight	lbs (kg)	38 (17)		
Condensate Drain Size	mm	19.00		
OUTDOOR UNIT		RX24A		
Casing Colour		IVORY WHITE		
Airflow Rate	High	CFM	1908	1908
Sound Pressure Level		dBA	55	
Fan	Type	PROPELLER		
	Drive	DIRECT		
Fan Motor	Type	DIRECT CURRENT		
	Index of protection (IP)	23		
	Insulation Grade	E		
	Running Current (Rated)	A	1.00	
	Power Consumption (Rated)	W	86	86
	Motor Output	W	128	
Compressor	Poles	8		
	Type	HERMETIC SWING		
	Model	D1C128S8P20-PN		
	Oil type	DAPHNE FVC50K		
	Oil amount	oz (cm ³)	21.5 (650)	
	Running Current (Rated)	A	6.555	7.755
Power Consumption (Rated)	W	1605	1872	
Heat Exchanger Type		FIN TUBE		
Starting Current	A	11.00		
Dimensions (H x W x D)	inch (mm)	27-13/32 X 36-5/8 X 13-13/16 (696 X 930 X 351)		
Packaged Dimensions (H x W x D)	inch (mm)	29-7/8 X 42-3/8 X 18-7/8 (760 X 1075 X 480)		
Weight	lbs (kg)	106 (48)		
Gross Weight	lbs (kg)	115 (52)		
Drawing No.		3D128372		3D128372
Document No. (Set)		3D128372		3D128372

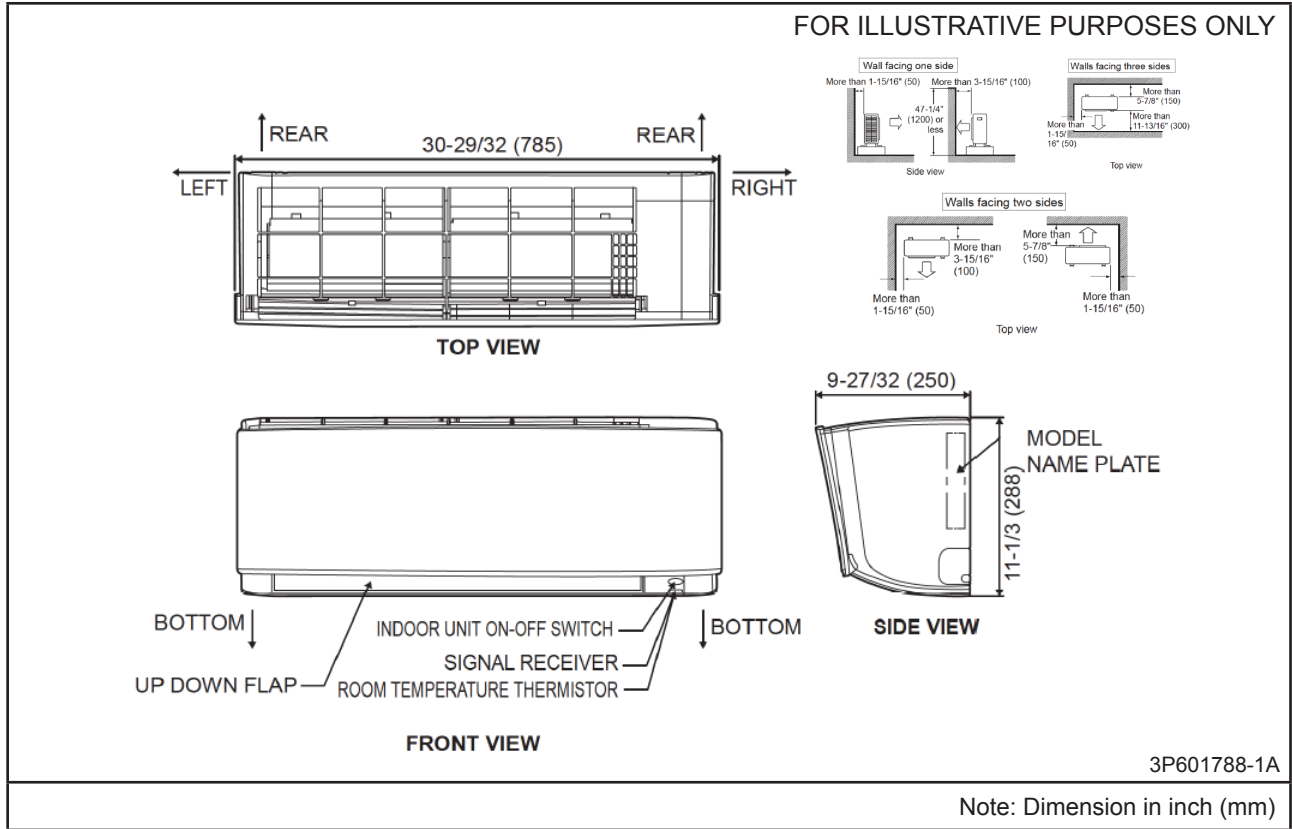
1) ALL UNITS ARE BEING TESTED ACCORDING TO AHRI 210/240 STANDARD.
 2) ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

COOLING	HEATING
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)	INDOOR: 70°FDB (21.1°CDB)
OUTDOOR: 95°FDB (35°CDB)	OUTDOOR: 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB)

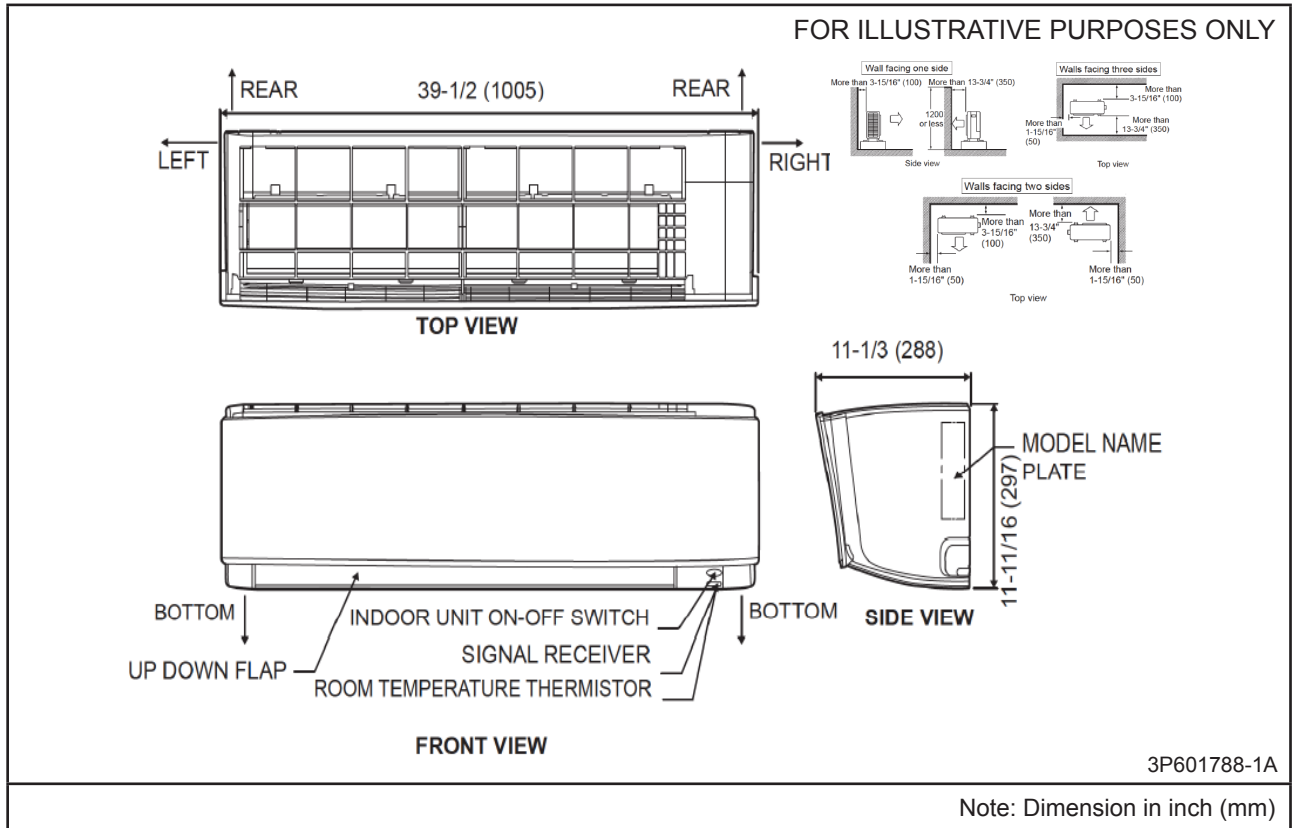
Dimensions

Indoor Unit

Model : FTK09/12A , FTX09/12A



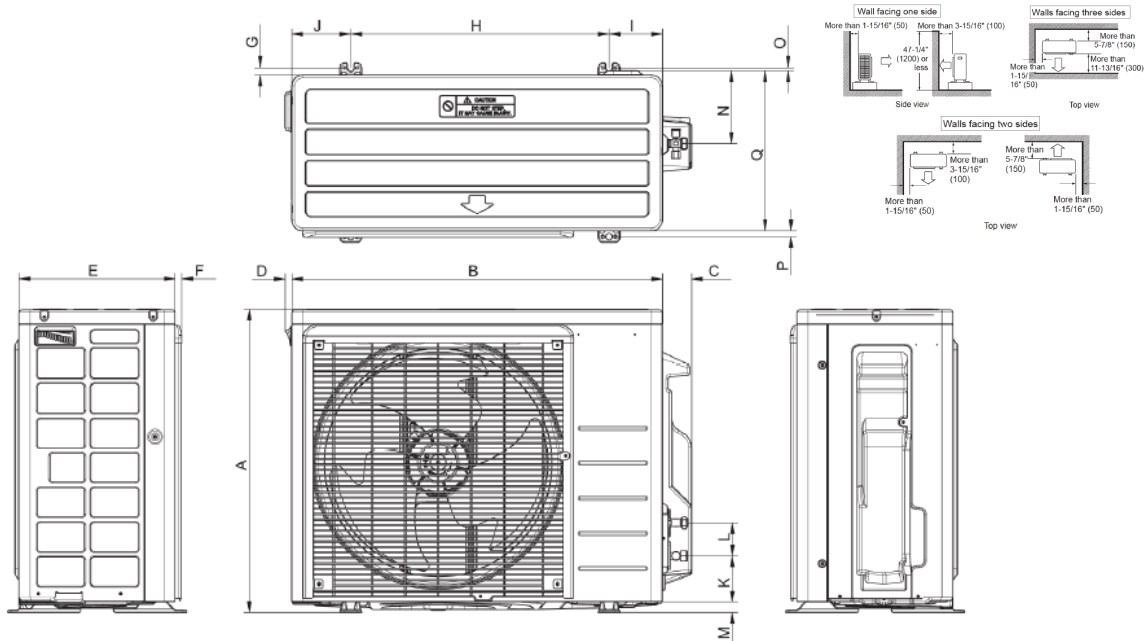
Model : FTK18/24A , FTX18/24A



Outdoor Unit

Model : RK09/12A, RX09/12A

FOR ILLUSTRATIVE PURPOSES ONLY



Model / Dimension	A	B	C	D	E	F	G	H	I
09/12	21-11/16 (550)	26-1/2 (675)	2-1/16 (53)	15/32 (12)	11-3/16 (284)	15/32 (12)	1/2 (13)	18-1/2 (470)	3-13/16 (97)

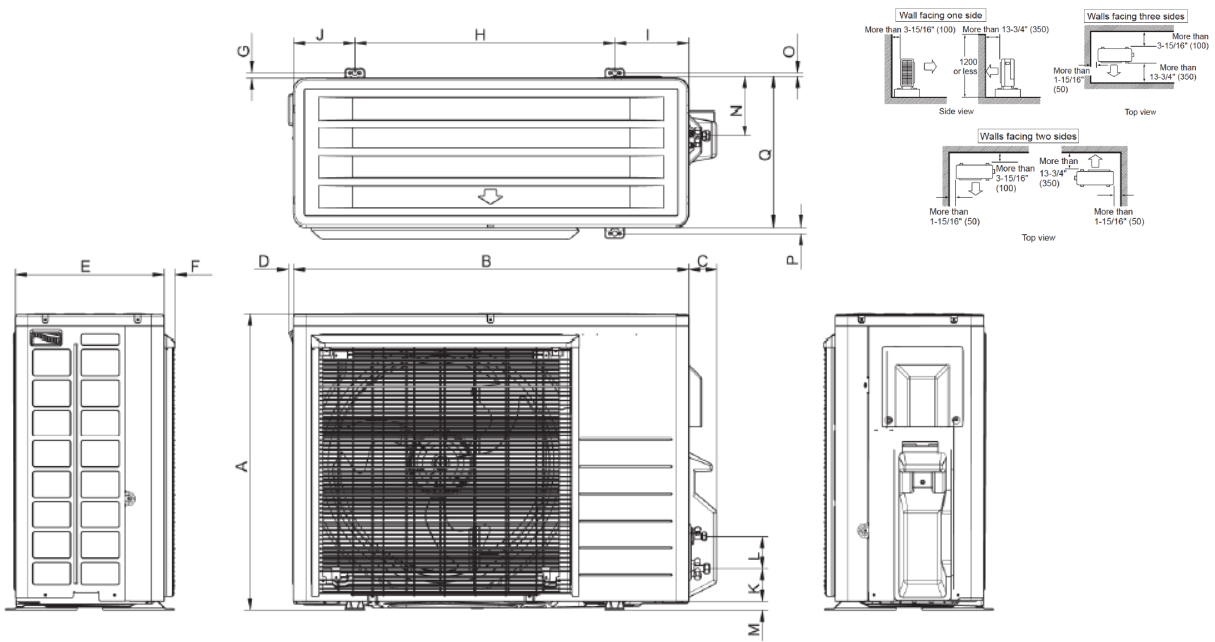
Model / Dimension	J	K	L	M	N	O	p	Q
09/12	4-1/4 (108)	3-3/8 (86)	2-3/8 (60)	25/32 (20)	5-1/4 (133)	3/16 (5)	7/16 (11)	11-1/2 (292)

3P601788-1A

Note: Dimension in inch (mm)

Model : RK18/24A, RX18/24A

FOR ILLUSTRATIVE PURPOSES ONLY



Model / Dimension	A	B	C	D	E	F	G	H	I
18/24	27-13/32 (696)	36-5/8 (930)	2-19/32 (66)	15/32 (12)	13-13/16 (351)	1-1/16 (27)	15/32 (12)	24 (610)	6-7/8 (175)

Model / Dimension	J	K	L	M	N	O	p	Q
18/24	5-23/32 (145)	3-1/32 (77)	2-31/32 (75)	13/16 (21)	5-19/32 (142)	5/16 (8)	17/32 (13)	13-31/32 (355)

3P601788-1A

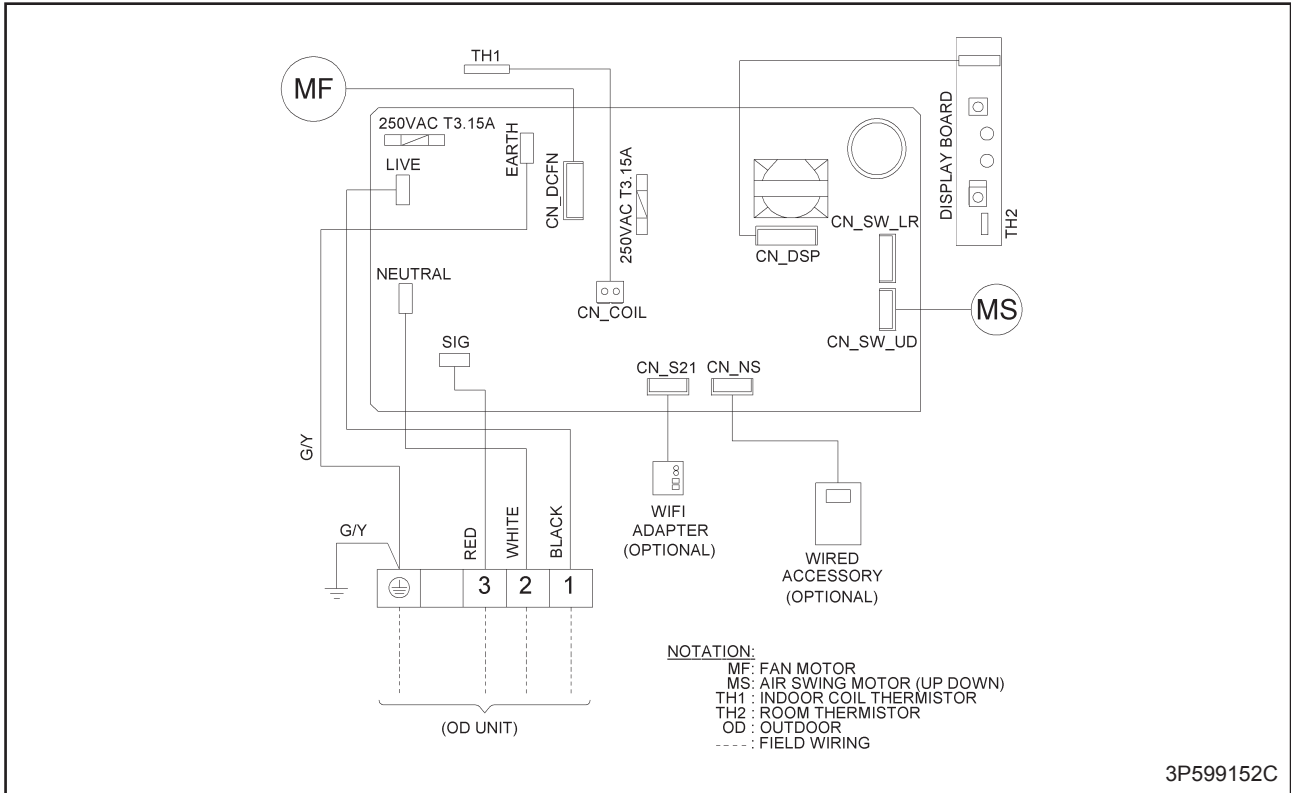
Note: Dimension in inch (mm)

Wiring Diagrams

Indoor Unit

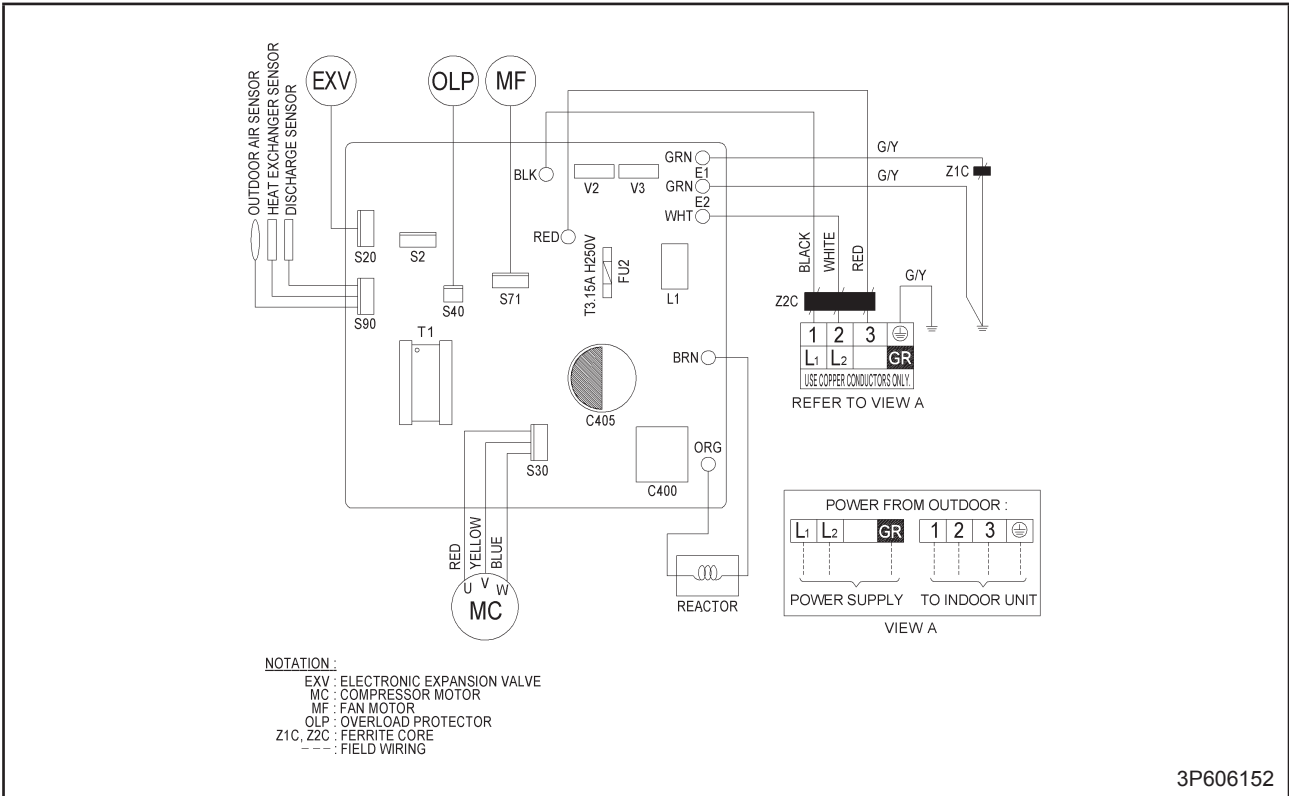
Cooling Only

Model : FTKA09/12/18/24A, FTXA09/12/18/24A

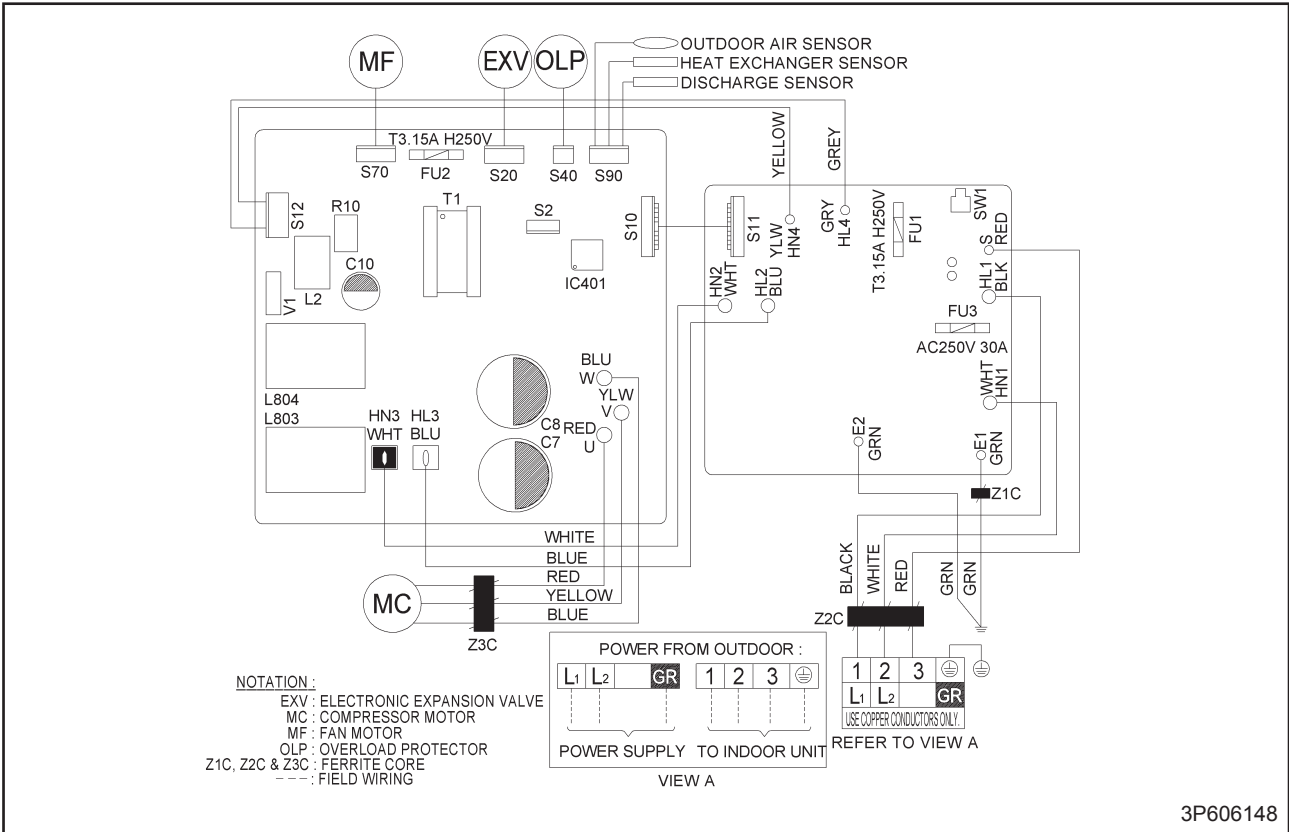


Outdoor Unit

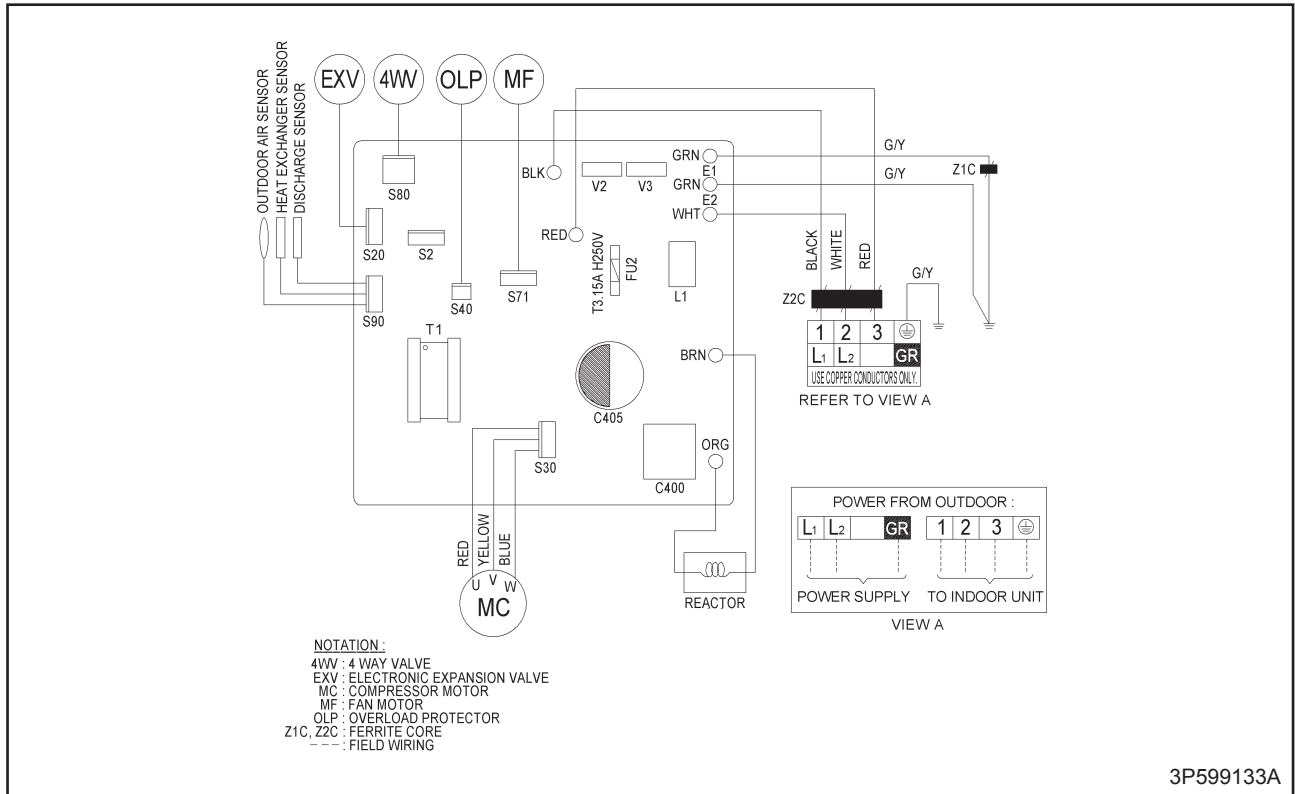
Model : RK09/12A



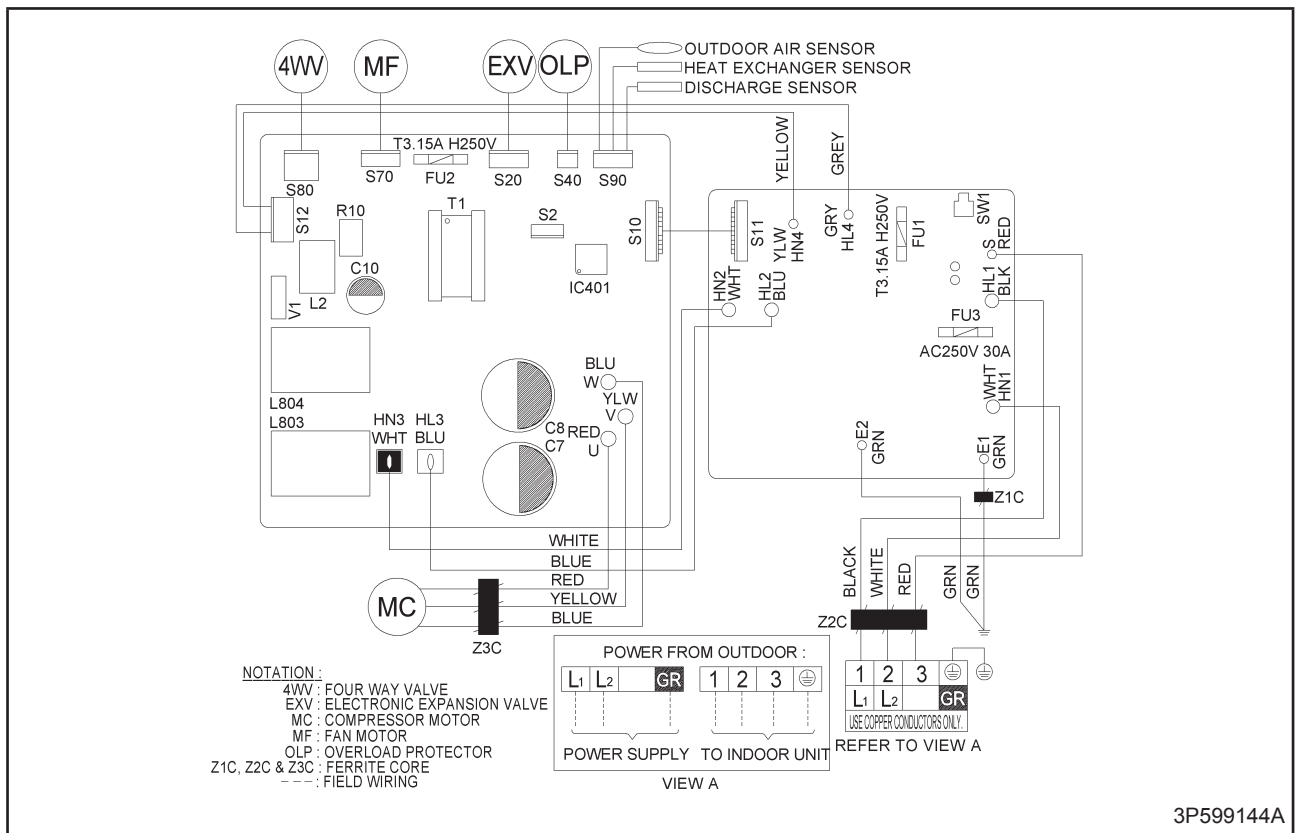
Model : RK18/24A



Model : RX09/12A



Model : RX18/24A

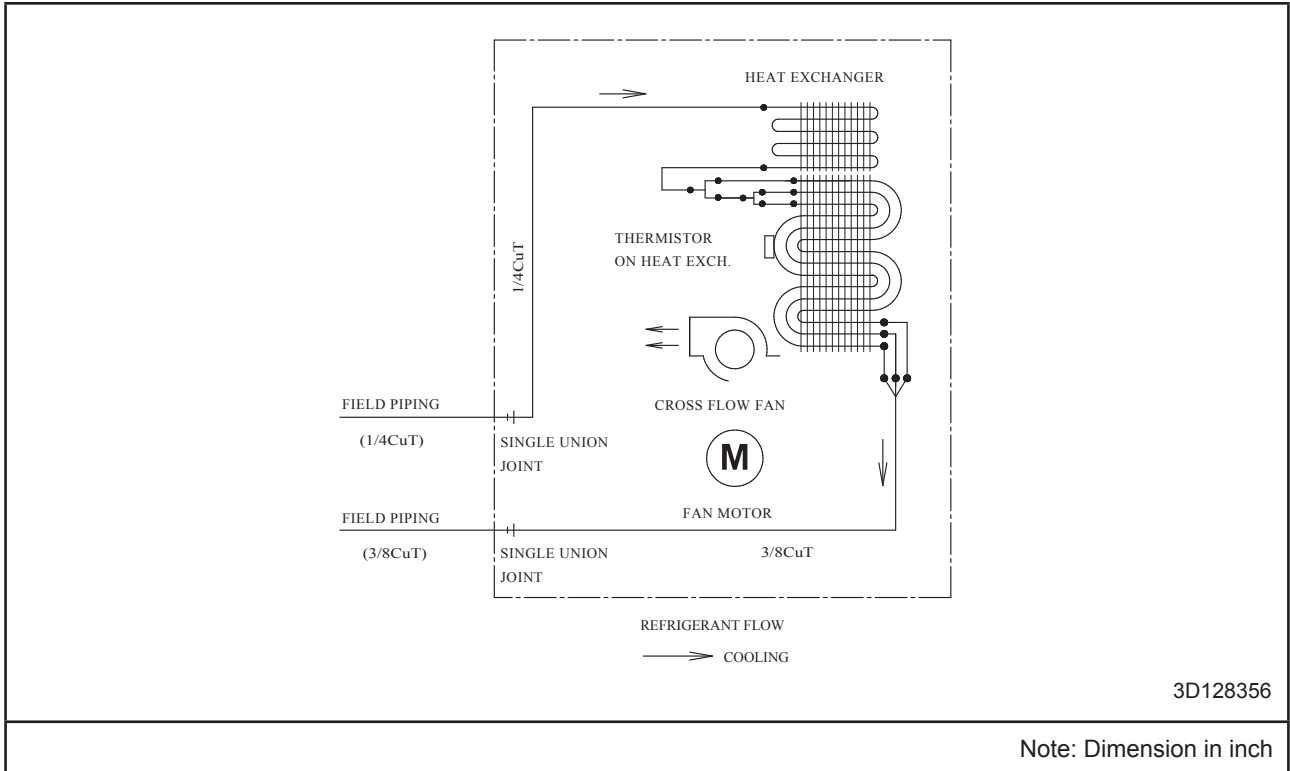


Piping Diagrams

Indoor Unit

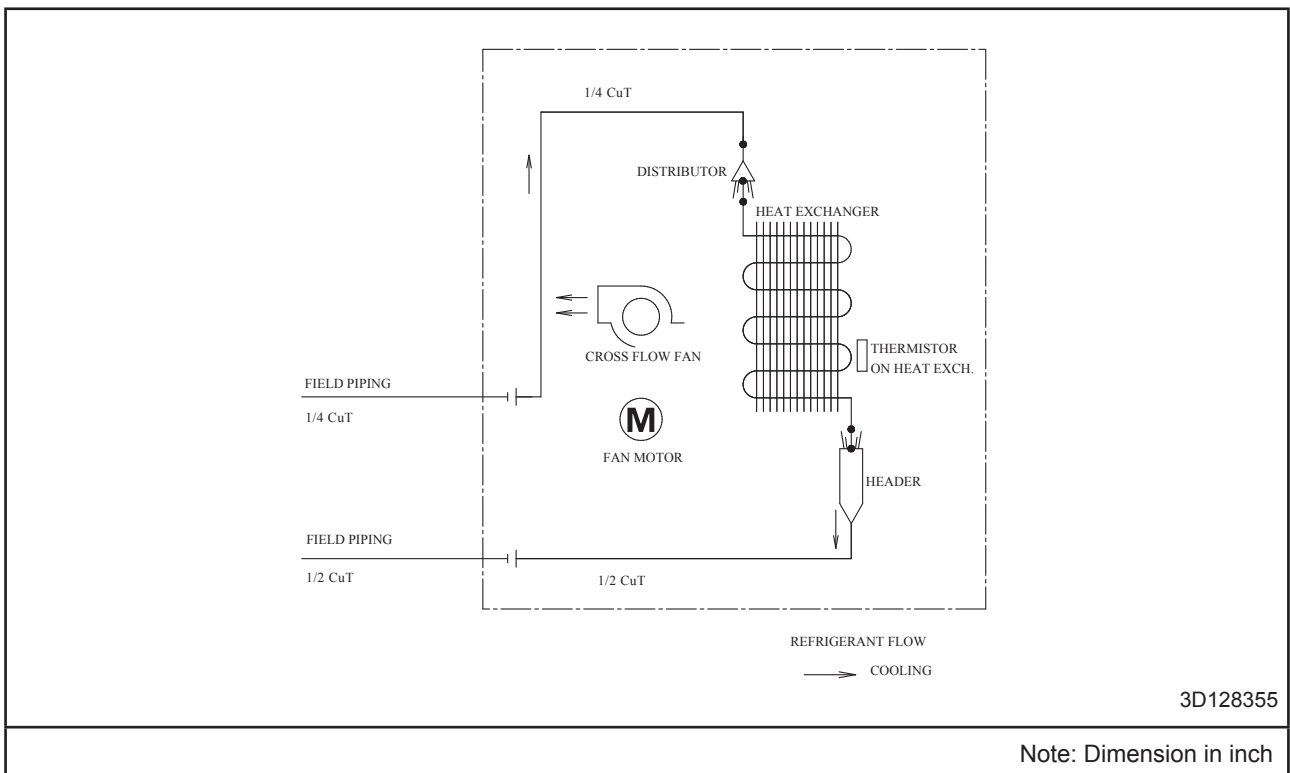
Cooling Only

Model : FTK09/12A



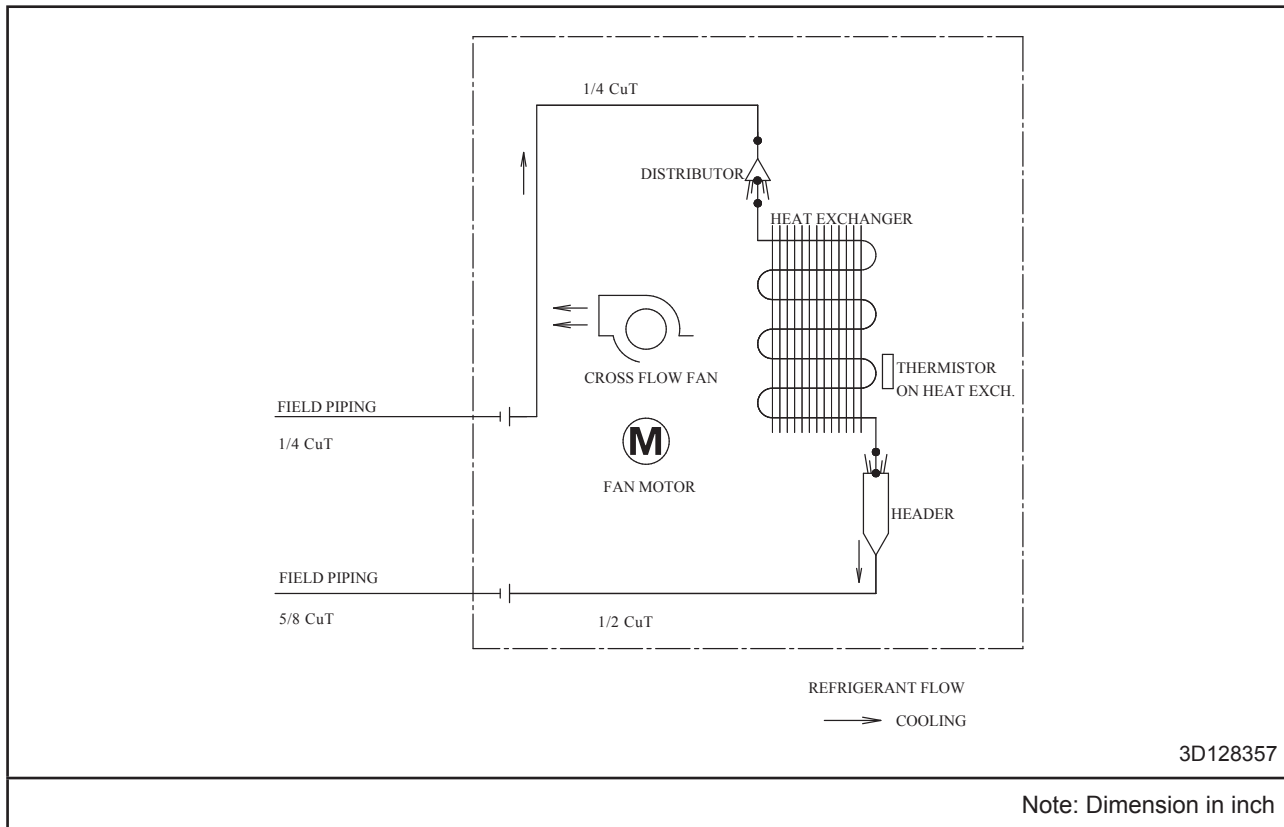
Note: Dimension in inch

Model : FTK18A



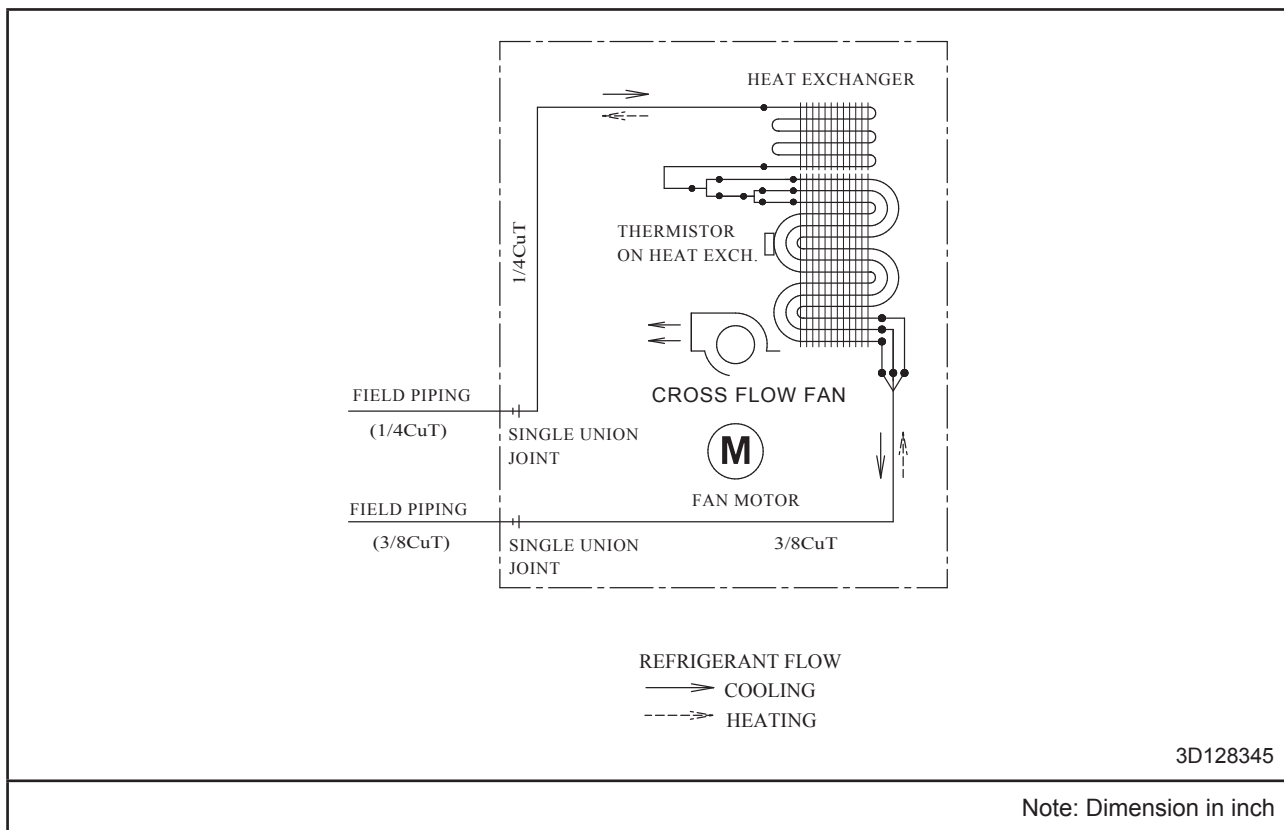
Note: Dimension in inch

Model : FTK24A

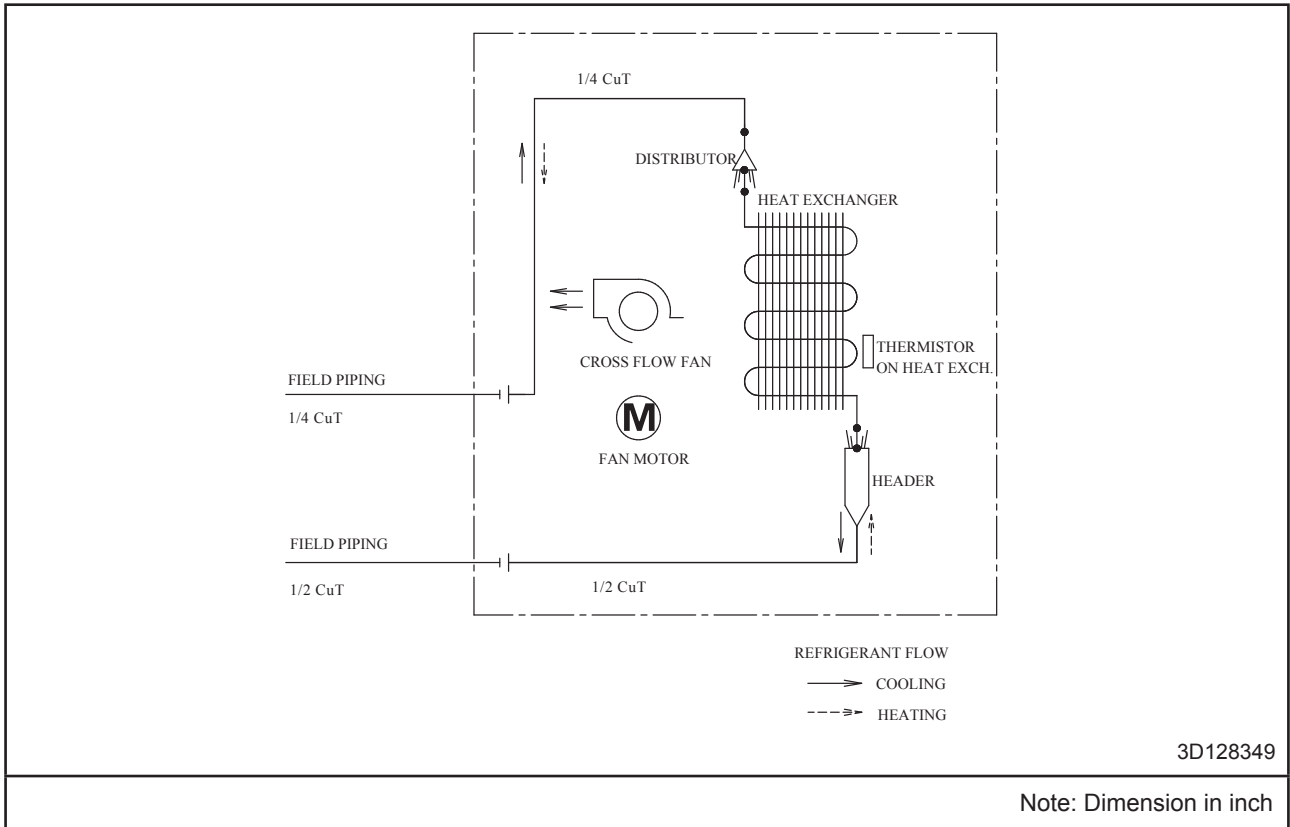


Heatpump

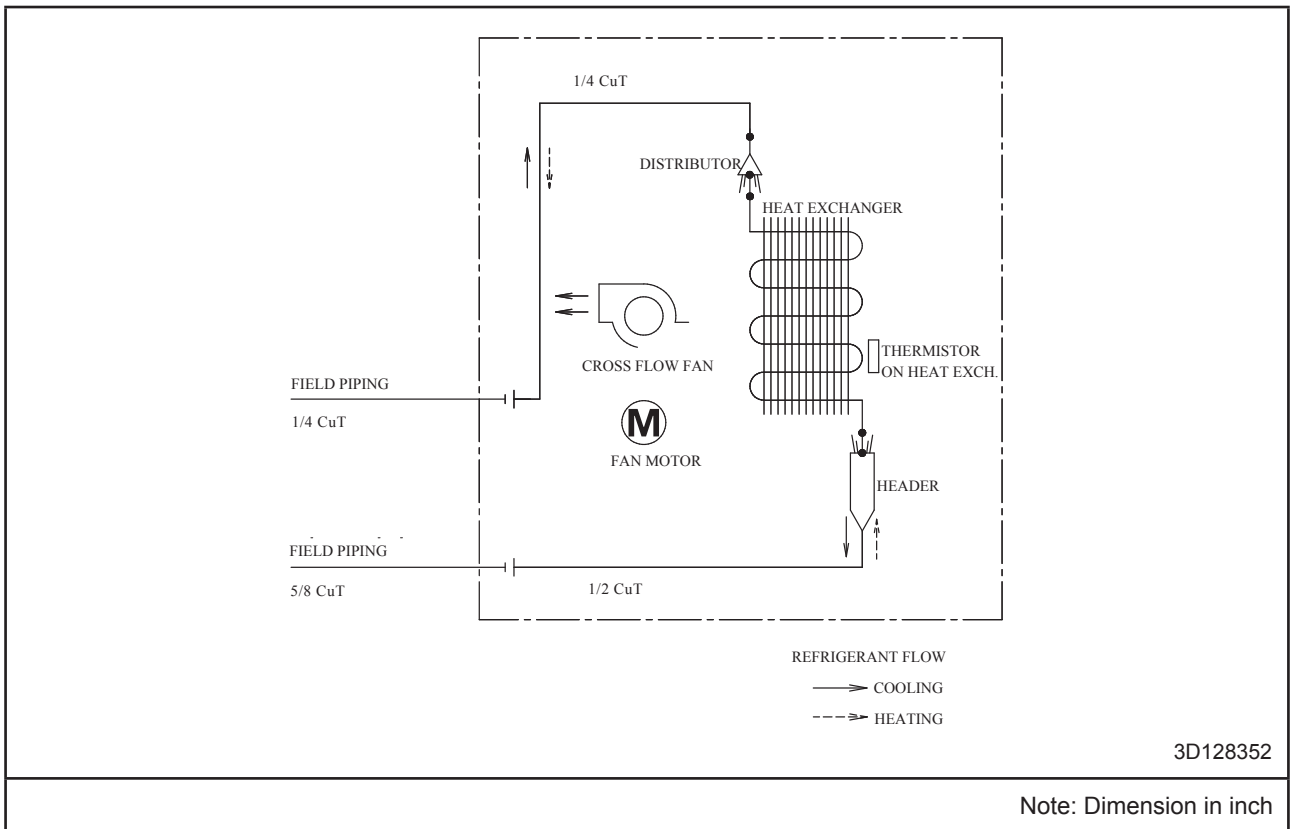
Model : FTX09/12A



Model : FTX18A



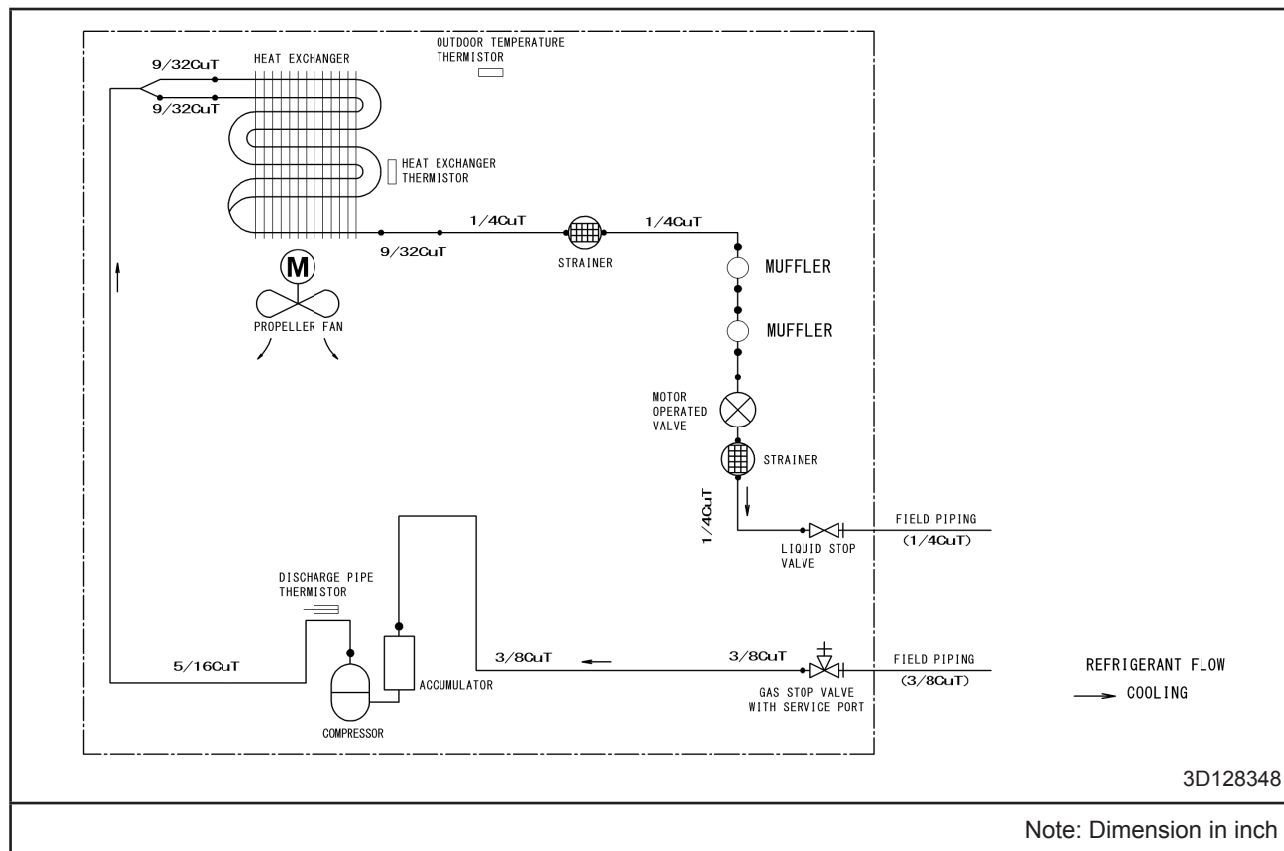
Model : FTX24A



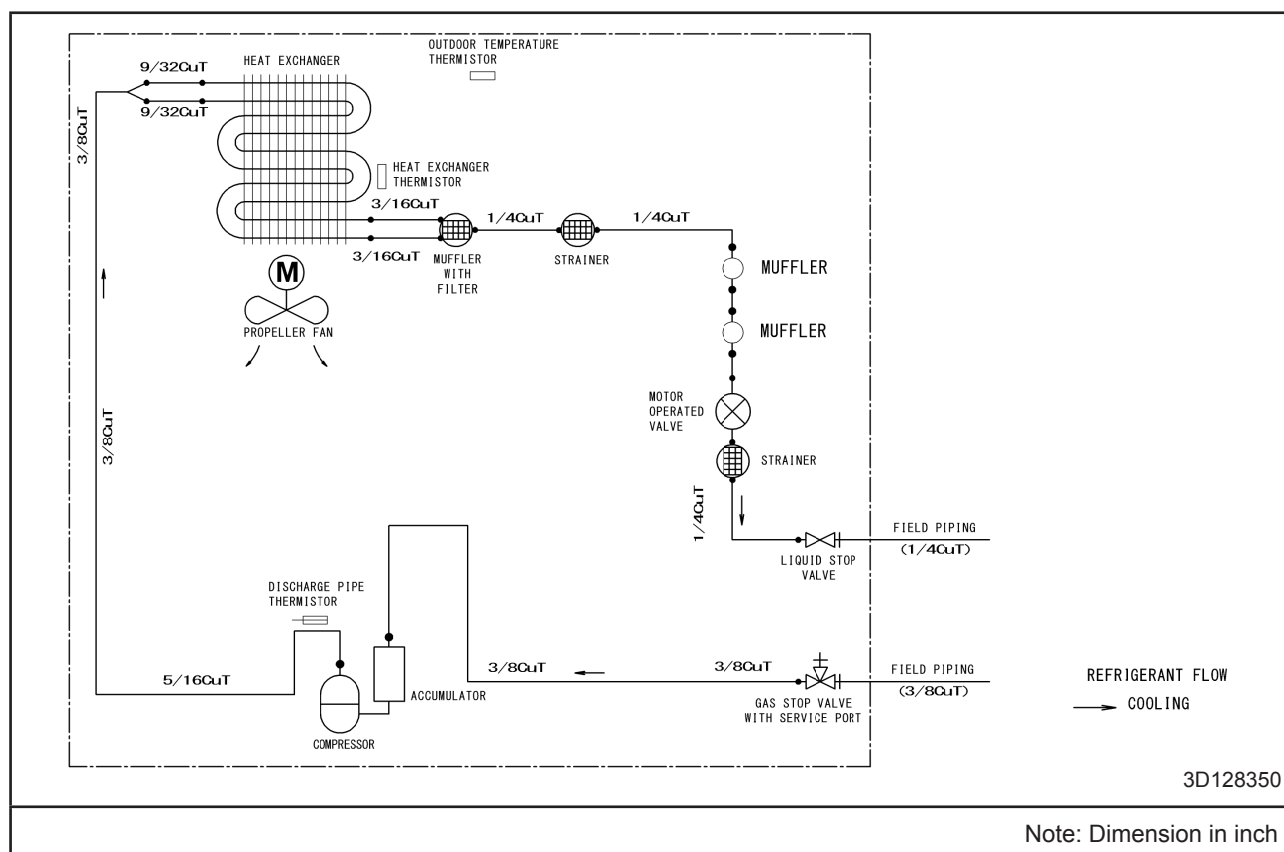
Outdoor Unit

Cooling Only

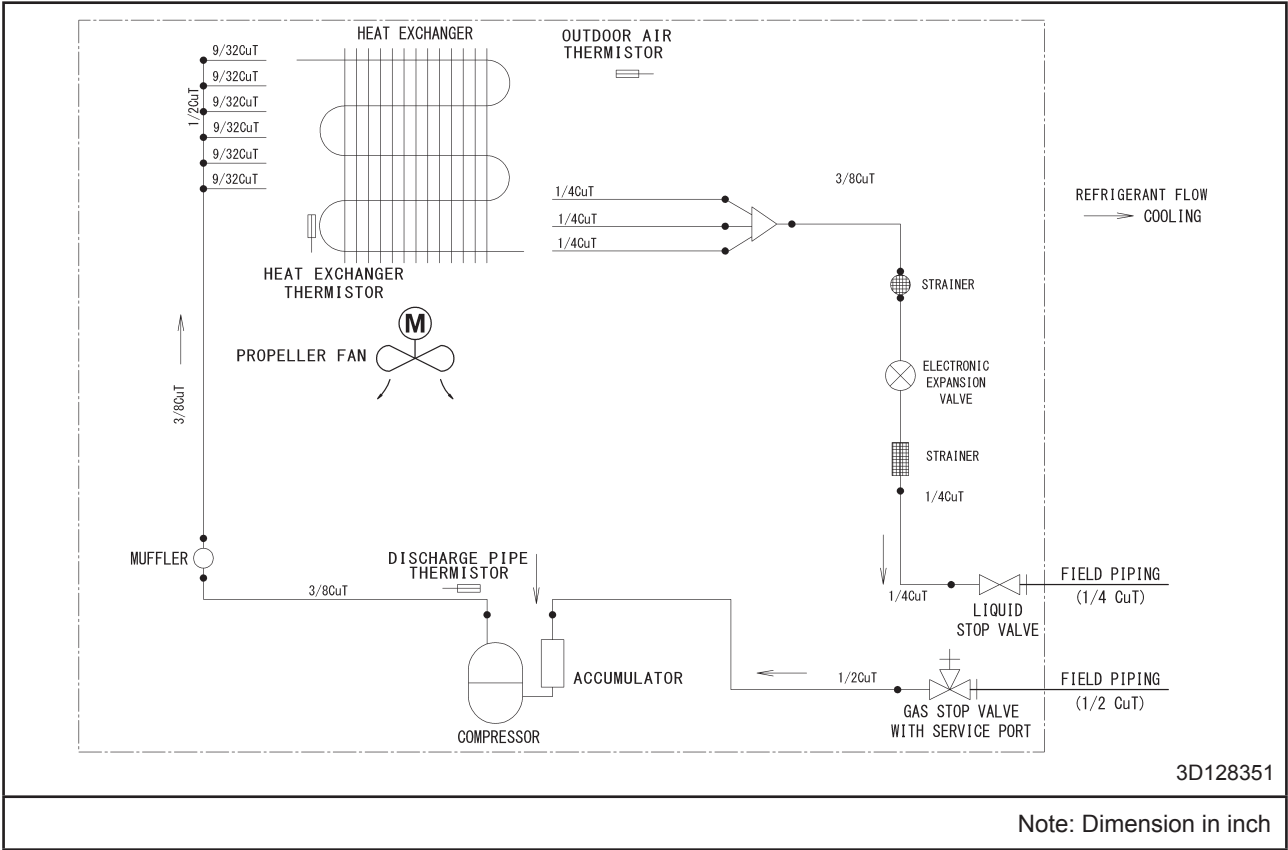
Model : RK09A



Model : RK12A

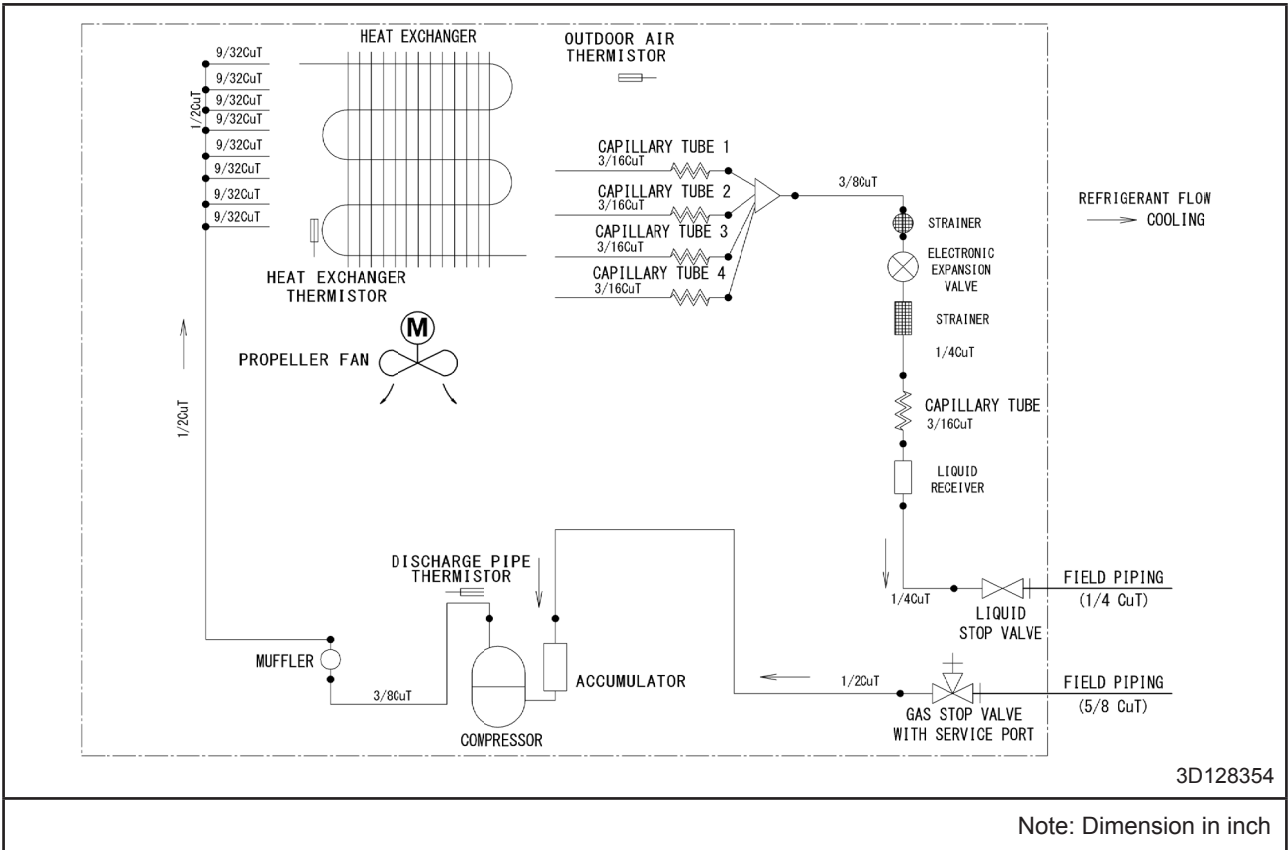


Model : RK18A



Note: Dimension in inch

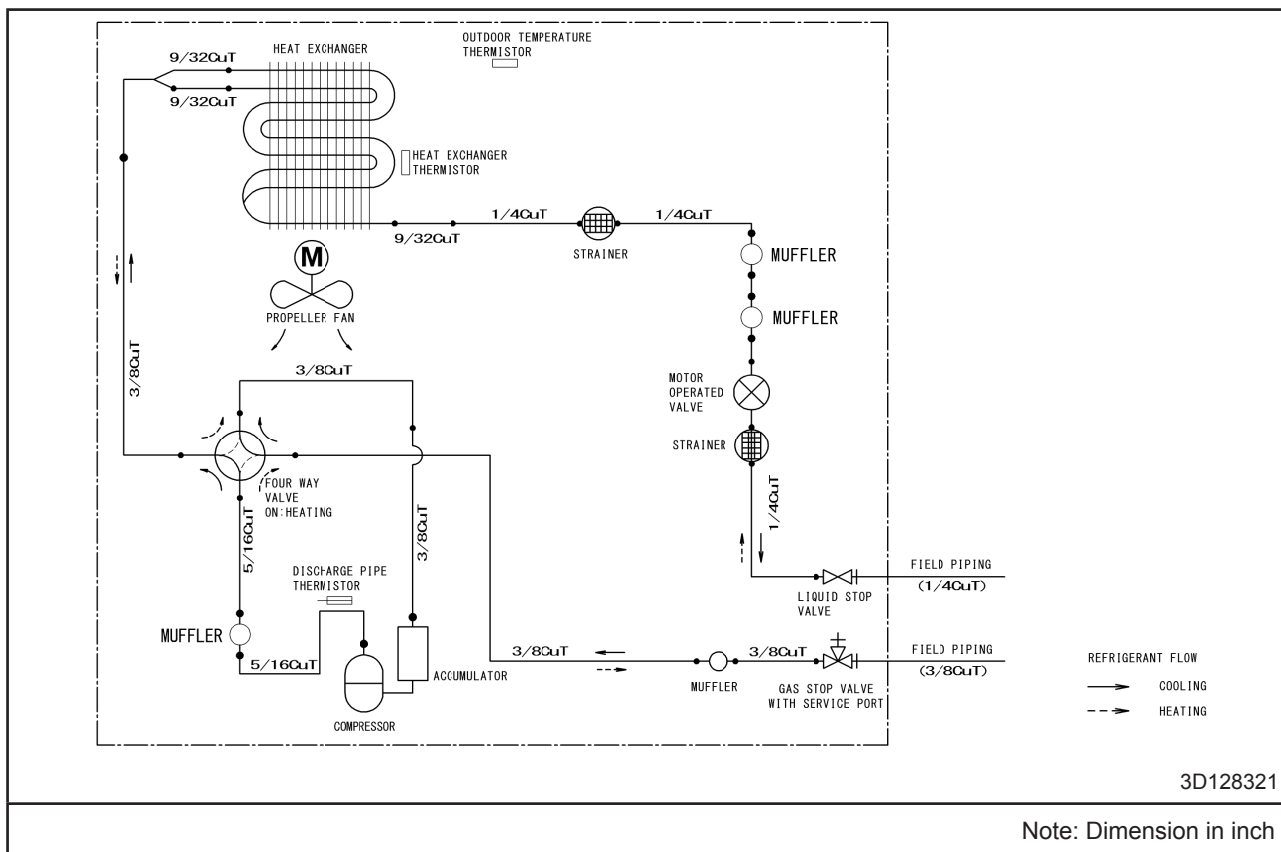
Model : RK24A



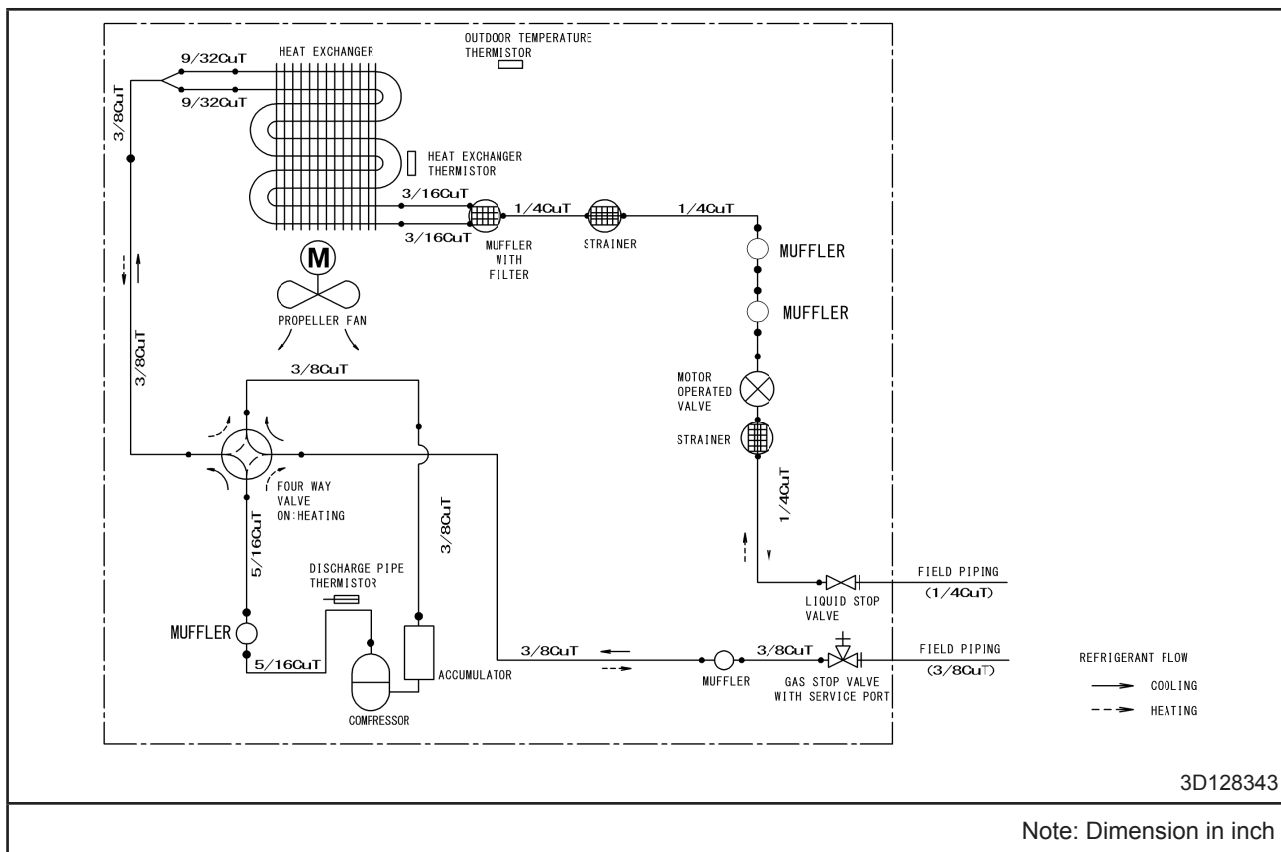
Note: Dimension in inch

Heatpump

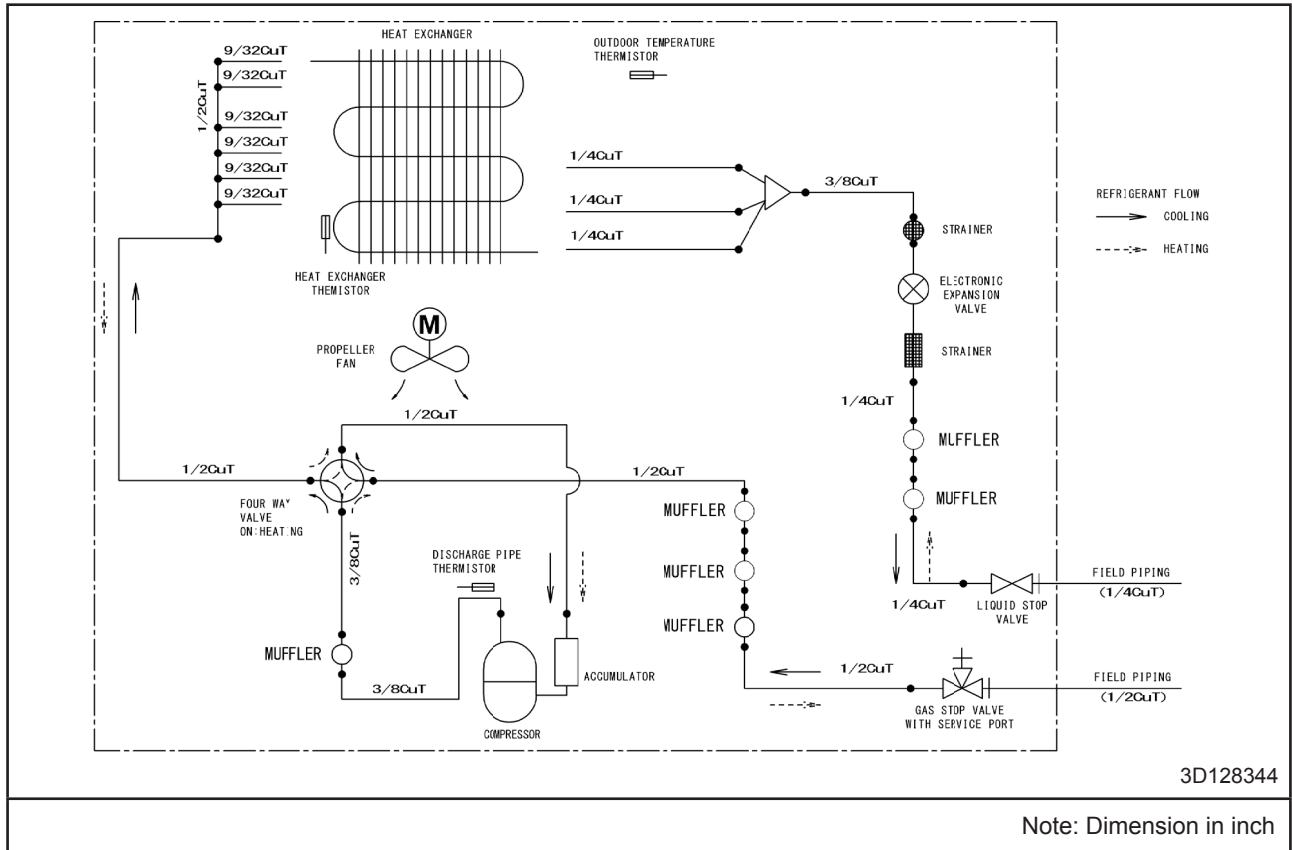
Model : RX09A



Model : RX12A

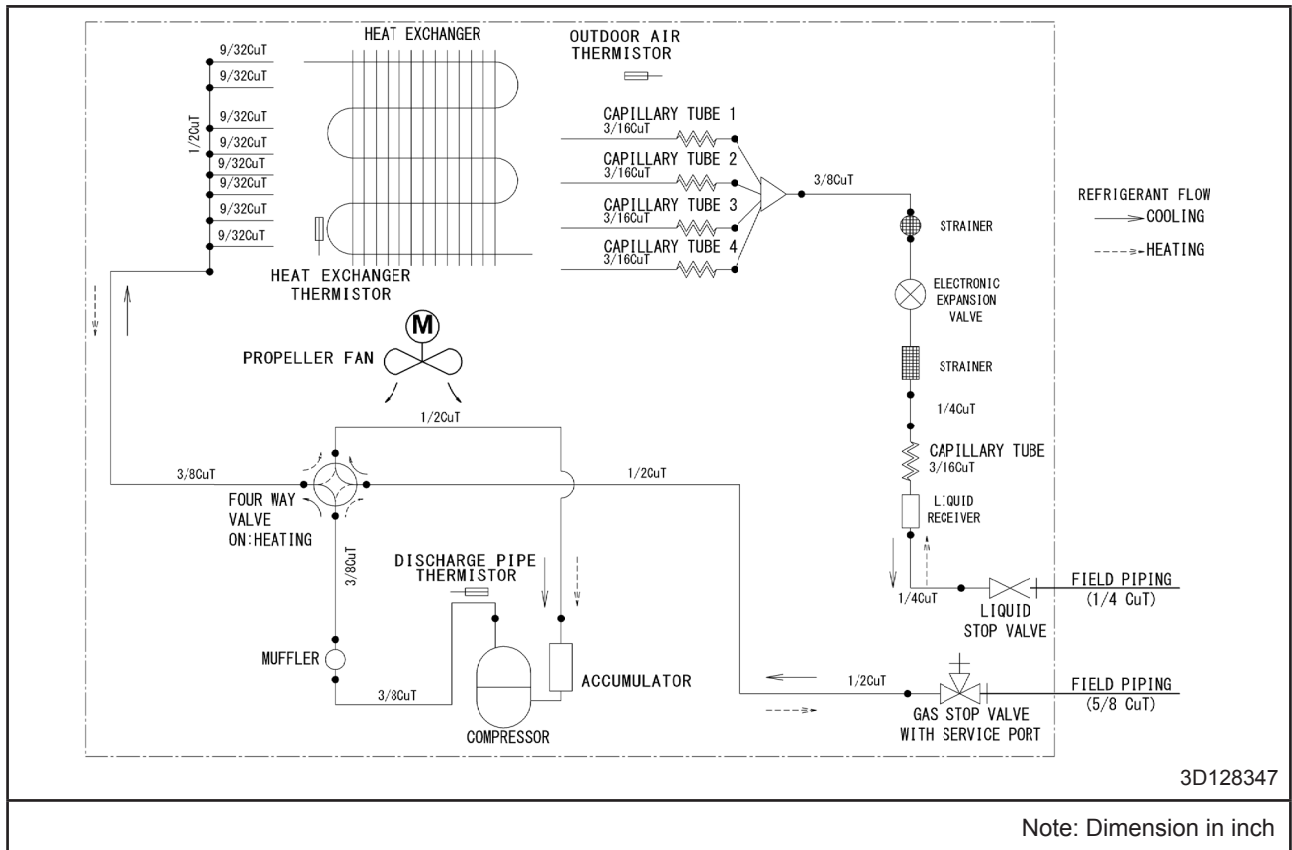


Model : RX18A



Note: Dimension in inch

Model : RX24A



Note: Dimension in inch

Capacity Tables

Cooling Only

Model : FTK09A - RK09A

AFR	12.2
BF	0.22

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC, SHC, PI: kW

Indoor Temperature		Outdoor temperature [°C DB]																							
		20			25			30			32			35			40			46					
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI			
14.0	20.0	3.15	2.62	0.52	2.67	2.36	0.54	2.55	2.29	0.60	2.43	2.21	0.65	2.38	2.18	0.67	2.31	2.14	0.70	2.18	2.06	0.76	1.27	1.25	0.56
16.0	22.0	3.39	2.68	0.53	2.80	2.32	0.55	2.67	2.30	0.60	2.55	2.18	0.65	2.50	2.15	0.68	2.43	2.11	0.70	2.31	2.05	0.76	1.34	1.32	0.55
18.0	25.0	3.62	2.74	0.54	2.92	2.42	0.55	2.80	2.36	0.61	2.67	2.29	0.66	2.62	2.26	0.68	2.55	2.23	0.71	2.43	2.17	0.76	1.41	1.39	0.53
19.4	26.7	3.85	2.80	0.55	2.97	2.55	0.55	2.85	2.48	0.61	2.73	2.42	0.66	2.68	2.39	0.68	2.61	2.36	0.71	2.49	2.30	0.77	1.47	1.45	0.52
22.0	30.0	4.09	2.86	0.56	3.15	2.45	0.56	3.03	2.40	0.61	2.91	2.34	0.66	2.86	2.32	0.68	2.79	2.29	0.72	2.67	2.23	0.77	1.54	1.52	0.51
24.0	32.0	4.32	2.92	0.57	3.27	2.39	0.56	3.15	2.34	0.61	3.03	2.29	0.67	2.98	2.27	0.69	2.91	2.23	0.72	2.79	2.18	0.77	1.61	1.59	0.50

Cooling: 208 - 230V 60Hz
Temp: Fahrenheit / TC, SHC, PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
		68			77			86			90			95			104			115					
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI			
57.2	68.0	10.76	8.92	0.52	9.12	8.06	0.54	8.70	7.80	0.60	8.28	7.55	0.65	8.12	7.45	0.67	7.88	7.29	0.70	7.45	7.03	0.76	4.34	4.27	0.56
60.8	71.6	11.56	9.13	0.53	9.54	7.92	0.55	9.12	8.06	0.60	8.69	7.44	0.65	8.54	7.35	0.68	8.28	7.19	0.70	7.88	6.98	0.76	4.57	4.50	0.55
64.4	77.0	12.35	9.34	0.54	9.95	8.27	0.55	9.54	8.06	0.61	9.12	7.82	0.66	8.95	7.73	0.68	8.69	7.59	0.71	8.28	7.39	0.76	4.80	4.73	0.53
67.0	80.0	13.15	9.55	0.55	10.14	8.69	0.55	9.73	8.47	0.61	9.31	8.26	0.66	9.15	8.17	0.68	8.90	8.04	0.71	8.49	7.85	0.77	5.03	4.96	0.52
71.6	86.0	13.95	9.75	0.56	10.76	8.37	0.56	10.35	8.18	0.61	9.93	7.99	0.66	9.77	7.93	0.68	9.51	7.80	0.72	9.12	7.62	0.77	5.26	5.18	0.51
75.2	89.6	14.75	9.96	0.57	11.17	8.14	0.56	10.76	7.97	0.61	10.35	7.80	0.67	10.18	7.73	0.69	9.93	7.62	0.72	9.51	7.44	0.77	5.49	5.41	0.50

Cooling capacity at -15°C / 5°F
Temp: Celsius / TC, SHC, PI: kW

Indoor Temperature		Outdoor temperature [°C DB]		
		-15		
EWB	EDB	TC	SHC	PI
14.0	20.0	2.94	2.52	0.37

Temp: Fahrenheit / TC, SHC, PI: kW

Indoor temperature		Outdoor temperature [°F DB]		
		5		
EWB	EDB	TC	SHC	PI
57.2	68.0	10.02	8.59	0.37

Symbols

- AFR : Air flow rate
- BF : Bypass factor
- EWB : Entering wet bulb temp.
- EDB : Entering dry bulb temp.
- TC : Total capacity
- SHC : Sensible heat capacity
- PI : Power input

(m³ /min.)

(°C)/(°F)

(°C)/(°F)

(kW)/(kBtu/h)

(kW)/(kBtu/h)

(kW)

NOTES:

1. shows nominal (rated) capacities and power input.
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 : 25ft
Level difference : 0ft

3D12773A

Model : FTK12A - RK12A

AFR	12.3
BF	0.16

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC,SHC,PI; kW

Indoor Temperature		Outdoor temperature (°C DB)																					
		10		20		25		30		32		35		40		46							
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI				
14.0	20.0	4.01	3.12	0.87	3.28	2.67	0.67	3.12	2.50	0.79	2.92	2.47	0.82	2.83	2.41	0.86	2.68	2.33	0.93	1.50	1.50	0.70	
16.0	22.0	4.26	3.17	0.88	3.42	2.63	0.67	3.27	2.54	0.73	3.12	2.46	0.80	3.07	2.43	0.83	2.87	2.83	0.93	1.59	1.59	0.69	
18.0	25.0	4.51	3.21	0.90	3.57	2.74	0.67	3.42	2.67	0.74	3.27	2.59	0.80	3.21	2.56	0.83	3.12	2.52	0.87	2.97	2.45	1.68	0.69
19.4	26.7	4.76	3.26	0.91	3.64	2.88	0.67	3.49	2.81	0.74	3.34	2.74	0.80	3.28	2.71	0.83	3.20	2.66	0.87	3.05	2.60	1.78	0.69
22.0	30.0	5.01	3.30	0.93	3.86	2.77	0.68	3.72	2.71	0.75	3.56	2.65	0.81	3.51	2.63	0.84	3.42	2.58	0.88	3.27	2.52	1.87	0.68
24.0	32.0	5.26	3.35	0.94	4.01	2.70	0.69	3.86	2.64	0.75	3.72	2.58	0.82	3.65	2.56	0.84	3.42	2.52	0.88	3.42	2.47	1.96	0.68

Cooling: 208 - 230V 60Hz
Temp: Fahrenheit / TC,SHC; kBtu/h / Pi; kW

Indoor Temperature		Outdoor temperature (°F DB)																						
		50		68		77		86		90		95		104		115								
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI					
57.2	68.0	13.68	10.66	0.87	11.18	9.11	0.67	10.66	8.82	0.73	10.66	8.53	0.79	9.95	8.42	0.82	9.65	8.24	0.86	9.13	7.95	5.13	5.13	0.70
60.8	71.6	14.53	10.81	0.88	11.69	8.96	0.67	11.17	8.66	0.73	10.64	8.41	0.80	10.46	8.31	0.83	10.15	8.13	0.86	9.65	7.89	5.44	5.44	0.69
64.4	77.0	15.39	10.96	0.90	12.19	9.35	0.67	11.69	9.11	0.74	11.17	8.84	0.80	10.97	8.74	0.83	10.64	8.58	0.87	10.14	8.35	5.75	5.75	0.69
67.0	80.0	16.24	11.12	0.91	12.43	9.82	0.67	11.92	9.57	0.74	11.41	9.34	0.80	11.21	9.23	0.83	10.90	9.09	0.87	10.40	8.88	6.06	6.06	0.69
71.6	86.0	17.09	11.27	0.93	13.18	9.47	0.68	12.68	9.24	0.75	12.16	9.04	0.81	11.96	8.97	0.84	11.65	8.82	0.88	11.17	8.61	6.36	6.36	0.68
75.2	89.6	17.94	11.42	0.94	13.68	9.21	0.69	13.18	9.01	0.75	12.68	8.82	0.82	12.46	8.74	0.84	12.16	8.61	0.88	11.65	8.41	6.69	6.69	0.68

Cooling capacity at -15°C / 5°F
Temp: Celsius / TC,SHC,PI; kW

Indoor Temperature		Outdoor temperature (°C DB)	
EWB	EDB	TC	SHC
14.0	20.0	3.56	2.73
		PI	0.52

Temp: Fahrenheit / TC,SHC; kBtu/h / Pi; kW

Indoor Temperature		Outdoor temperature (°F DB)	
EWB	EDB	TC	SHC
57.2	68.0	12.13	9.33
		PI	0.52

Symbols

- AFR : Air flow rate
- BF : Bypass factor
- EWB : Entering wet bulb temp.
- EDB : Entering dry bulb temp.
- TC : Total capacity
- SHC : Sensible heat capacity
- PI : Power input

(m³ / min.)

- (°C)/(°F)
- (°C)/(°F)
- (kW)/(kBtu/h)
- (kW)/(kBtu/h)

NOTES:

1. shows nominal (rated) capacities and power input.
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 : 25ft
Level difference : 0ft

Model : FTK18A - RK18A

AFR	20.3
BF	0.13

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC,SHC,PI: kW

Indoor Temperature	Outdoor temperature [°C DB]																											
	10		20		25		30		32		35		40		46													
°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI										
14.0	20.0	5.54	4.35	0.92	5.41	4.25	1.10	5.16	4.11	1.21	4.91	3.98	1.31	4.81	3.93	1.36	4.67	3.84	1.43	4.42	3.71	1.53	4.22	3.56	1.54	2.34	2.34	0.82
16.0	22.0	5.91	4.42	0.94	5.65	4.18	1.11	5.40	4.04	1.22	5.15	3.92	1.33	5.06	3.88	1.37	4.91	3.79	1.43	4.67	3.68	1.54	4.33	3.68	1.54	2.56	2.56	0.84
18.0	25.0	6.28	4.50	0.96	5.90	4.36	1.12	5.65	4.25	1.23	5.40	4.13	1.33	5.31	4.08	1.37	5.15	4.01	1.44	4.91	3.90	1.54	4.54	3.90	1.54	2.78	2.78	0.86
19.4	26.7	6.64	4.58	0.98	6.01	4.58	1.12	5.77	4.47	1.23	5.52	4.36	1.33	5.42	4.31	1.37	5.28	4.24	1.44	5.03	4.14	1.55	4.78	4.14	1.55	2.78	2.78	0.86
22.0	30.0	7.01	4.65	1.00	6.38	4.42	1.13	6.13	4.31	1.24	5.88	4.22	1.34	5.79	4.19	1.38	5.64	4.11	1.45	5.40	4.02	1.56	5.00	4.02	1.56	3.00	3.00	0.89
24.0	32.0	7.38	4.73	1.02	6.62	4.30	1.14	6.38	4.21	1.24	6.13	4.11	1.35	6.03	4.08	1.40	5.88	4.02	1.46	5.64	3.93	1.57	5.00	3.93	1.57	3.21	3.21	0.91

Cooling: 208 - 230V 60Hz
Temp: Fahrenheit / TC,SHC: kBTu/h / PI: kW

Indoor Temperature	Outdoor temperature [°F DB]																								
	50		68		77		86		90		95		104		115										
°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI							
57.2	68.0	18.89	14.83	0.92	18.45	14.51	1.10	17.59	14.04	1.21	16.75	13.59	1.31	16.42	13.41	1.36	15.93	13.12	1.43	15.07	12.66	1.53	7.23	7.23	0.79
60.8	71.6	20.15	15.09	0.94	19.29	14.27	1.11	18.44	13.80	1.22	17.57	13.39	1.33	17.27	13.23	1.37	16.75	12.95	1.43	15.93	12.56	1.54	7.98	7.98	0.82
64.4	77.0	21.41	15.35	0.96	20.12	14.89	1.12	19.29	14.51	1.23	18.44	14.08	1.33	18.11	13.91	1.37	17.57	13.67	1.44	16.74	13.30	1.54	8.72	8.72	0.84
67.0	80.0	22.67	15.62	0.98	20.51	15.64	1.12	19.68	15.25	1.23	18.83	14.88	1.33	18.50	14.71	1.37	18.00	14.48	1.44	17.17	14.14	1.55	9.47	9.47	0.86
71.6	86.0	23.93	15.88	1.00	21.76	15.08	1.13	20.93	14.72	1.24	20.08	14.39	1.34	19.75	14.28	1.38	19.24	14.04	1.45	18.44	13.71	1.56	10.22	10.22	0.89
75.2	89.6	25.19	16.14	1.02	22.59	14.66	1.14	21.76	14.35	1.24	20.93	14.04	1.35	20.58	13.92	1.40	20.08	13.71	1.46	19.24	13.40	1.57	10.97	10.97	0.91

Cooling capacity at -15°C / 5°F
Temp: Celsius / TC,SHC,PI: kW
60Hz 208 - 230V

Indoor Temperature	Outdoor temperature [°C DB]			
	°C	TC	SHC	PI
14.0	20.0	6.01	4.64	0.71

Temp: Fahrenheit / TC,SHC: kBTu/h / PI: kW
60Hz 208 - 230V

Indoor Temperature	Outdoor temperature [°F DB]			
	°F	TC	SHC	PI
57.2	68.0	20.50	15.83	0.71

Symbols

- AFR : Air flow rate
- BF : Bypass factor
- EWB : Entering wet bulb temp.
- EDB : Entering dry bulb temp.
- TC : Total capacity
- SHC : Sensible heat capacity
- PI : Power input

(m³ /min.)

(°C)/(°F)

(°C)/(°F)

(kW)/(kBTu/h)

(kW)

NOTES:

1. shows nominal (rated) capacities and power input.
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 : 25ft
Level difference : 0ft

3D12775A

Heatpump

Model : FTX09A - RX09A

AFR	12.2
BF	0.22

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC,SHC,PI: kW

Indoor Temperature		Outdoor temperature [°C DB]																							
		10		20		25		30		32		35		40		46									
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI						
14.0	20.0	3.15	2.62	0.52	2.67	2.36	0.54	2.55	2.29	0.60	2.43	2.21	0.65	2.38	2.14	0.67	2.31	2.14	0.70	2.18	2.06	0.76	1.27	1.25	0.56
16.0	22.0	3.39	2.68	0.53	2.80	2.32	0.55	2.67	2.25	0.60	2.55	2.18	0.65	2.50	2.15	0.68	2.43	2.11	0.70	2.31	2.05	0.76	1.34	1.32	0.55
18.0	25.0	3.62	2.74	0.54	2.92	2.42	0.55	2.80	2.36	0.61	2.67	2.29	0.66	2.62	2.26	0.68	2.55	2.23	0.71	2.43	2.17	0.76	1.41	1.39	0.53
19.4	26.7	3.85	2.80	0.55	2.97	2.55	0.55	2.85	2.48	0.61	2.73	2.42	0.66	2.68	2.39	0.68	2.61	2.36	0.71	2.49	2.30	0.77	1.47	1.45	0.52
22.0	30.0	4.09	2.86	0.56	3.15	2.45	0.56	3.03	2.40	0.61	2.91	2.34	0.66	2.86	2.32	0.68	2.79	2.29	0.72	2.67	2.23	0.77	1.54	1.52	0.51
24.0	32.0	4.32	2.92	0.57	3.27	2.39	0.56	3.15	2.34	0.61	3.03	2.29	0.67	2.88	2.27	0.69	2.81	2.23	0.72	2.79	2.18	0.77	1.61	1.59	0.50

Cooling: 208 - 230V 60Hz

Temp: Fahrenheit / TC,SHC,PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
		50		68		77		86		90		95		104		115									
EWB	EDB	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI					
57.2	68.0	10.76	8.92	0.52	9.12	8.06	0.54	8.70	7.80	0.60	8.28	7.55	0.65	8.12	7.45	0.67	7.88	7.29	0.70	7.45	7.03	0.76	4.34	4.27	0.56
60.8	71.6	11.56	9.13	0.53	9.54	7.92	0.55	9.12	7.66	0.60	8.69	7.44	0.65	8.54	7.35	0.68	8.28	7.19	0.70	7.88	6.98	0.76	4.57	4.50	0.55
64.4	77.0	12.35	9.34	0.54	9.95	8.27	0.55	9.54	8.06	0.61	9.12	7.82	0.66	8.95	7.73	0.68	8.69	7.59	0.71	8.28	7.39	0.76	4.80	4.73	0.53
67.0	80.0	13.15	9.55	0.55	10.14	8.69	0.55	9.73	8.47	0.61	9.31	8.26	0.66	9.15	8.17	0.68	8.90	8.04	0.71	8.49	7.85	0.77	5.03	4.96	0.52
71.6	86.0	13.95	9.75	0.56	10.76	8.97	0.56	10.35	8.18	0.61	9.93	7.99	0.66	9.77	7.93	0.68	9.51	7.80	0.72	9.12	7.62	0.77	5.26	5.18	0.51
75.2	89.6	14.75	9.96	0.57	11.17	8.14	0.56	10.76	7.97	0.61	10.35	7.80	0.67	10.18	7.73	0.69	9.93	7.62	0.72	9.51	7.44	0.77	5.49	5.41	0.50

Heating: 208 - 230V 60Hz

Temp: Celsius / TC,PI: kW

AFR	11.4
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Indoor Temperature		Outdoor temperature [°C WB]													
		-15		-10		-5		0		6		10		18	
EDB	°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	1.39	0.46	1.68	0.49	1.96	0.51	2.24	0.67	3.03	0.71	3.30	0.73	4.93	1.25	
21.1	1.31	0.48	1.59	0.50	1.87	0.52	2.16	0.69	2.93	0.72	3.20	0.74	4.77	1.23	
22.0	1.27	0.48	1.56	0.50	1.84	0.53	2.12	0.69	2.89	0.72	3.16	0.75	4.61	1.21	
24.0	1.24	0.48	1.52	0.51	1.80	0.53	2.08	0.70	2.85	0.73	3.11	0.76	4.44	1.20	
25.0	1.22	0.49	1.50	0.51	1.79	0.54	2.07	0.70	2.83	0.73	3.09	0.76	4.28	1.18	
27.0	1.19	0.49	1.47	0.52	1.75	0.54	2.03	0.71	2.79	0.74	3.05	0.77	4.12	1.17	

Heating: 208 - 230V 60Hz

Temp: Fahrenheit / TC,PI: kW

Indoor Temperature		Outdoor temperature [°F WB]													
		5		14		23		32		43		50		64	
EDB	°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	4.75	0.46	5.72	0.49	6.68	0.51	7.66	0.67	10.34	0.71	11.25	0.73	16.83	1.25	
70.0	4.48	0.48	5.43	0.50	6.39	0.52	7.36	0.69	10.00	0.72	10.91	0.74	16.27	1.23	
71.6	4.35	0.48	5.31	0.50	6.28	0.53	7.24	0.69	9.85	0.72	10.77	0.75	15.72	1.21	
75.2	4.23	0.48	5.20	0.51	6.15	0.53	7.11	0.70	9.72	0.73	10.63	0.76	15.17	1.20	
77.0	4.17	0.49	5.12	0.51	6.10	0.54	7.07	0.70	9.66	0.73	10.55	0.76	14.61	1.18	
80.6	4.06	0.49	5.02	0.52	5.97	0.54	6.94	0.71	9.51	0.74	10.42	0.77	14.05	1.17	

Cooling capacity at -15°C / 5°F

Temp: Celsius / TC,SHC,PI: kW

Temp: Fahrenheit / TC,SHC,PI: kW

60Hz 208 - 230V

Indoor Temperature		Outdoor temperature [°F DB]			
		EWB	EDB	°F	TC
57.2	68.0	10.02	8.59	0.37	

Indoor Temperature		Outdoor temperature [°C DB]			
		EWB	EDB	-15	TC
14.0	20.0	2.94	2.52	0.37	

Symbols

- AFR : Air flow rate
- BF : Bypass factor
- EWB : Entering wet bulb temp.
- EDB : Entering dry bulb temp.
- TC : Total capacity
- SHC : Sensible heat capacity
- PI : Power input

(m³/min.)

(°C)/(°F)

(°C)/(°F)

(kW)/(kBTU/h)

(kW)/(kBTU/h)

(kW)

NOTES:

1. shows nominal (rated) capacities and power input.
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 : 25ft
 - Level difference : 0ft

3D127781A

Model : FTX12A - RX12A

AFR	12.3
BF	0.16

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC,SHC,PI: kW

Indoor Temperature		Outdoor temperature [°C DB]																							
		30			32			35			40			46											
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI									
14.0	20.0	4.01	3.12	0.87	3.28	2.67	0.67	3.12	2.58	0.73	2.97	2.92	2.47	0.82	2.83	2.41	0.86	2.68	2.33	0.83	1.50	1.50	0.70		
16.0	22.0	4.26	3.17	0.88	3.42	2.63	0.67	3.27	2.64	0.73	3.12	2.46	0.80	3.07	2.43	0.83	2.97	2.38	0.86	2.83	2.31	0.93	1.59	1.59	0.69
18.0	25.0	4.51	3.21	0.90	3.57	2.74	0.67	3.42	2.67	0.74	3.27	2.69	0.83	3.12	2.56	0.83	3.12	2.52	0.87	2.97	2.45	0.93	1.69	1.68	0.69
19.4	26.7	4.76	3.26	0.91	3.64	2.88	0.67	3.49	2.81	0.74	3.34	2.74	0.80	3.28	2.71	0.83	3.20	2.66	0.87	3.05	2.60	0.94	1.78	1.77	0.69
22.0	30.0	5.01	3.30	0.93	3.86	2.77	0.68	3.72	2.71	0.75	3.56	2.65	0.81	3.51	2.63	0.84	3.42	2.56	0.88	3.27	2.52	0.94	1.87	1.87	0.68
24.0	32.0	5.26	3.35	0.94	4.01	2.70	0.69	3.86	2.64	0.75	3.72	2.58	0.82	3.65	2.56	0.84	3.56	2.52	0.88	3.42	2.47	0.95	1.96	1.96	0.68

Cooling: 208 - 230V 60Hz
Temp: Fahrenheit / TC,SHC: kBTU/h / PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
		86			90			95			104			115											
EWB	EDB	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI									
57.2	68.0	13.68	10.66	0.87	11.18	9.11	0.67	10.66	8.82	0.73	10.15	8.53	0.79	9.95	8.42	0.82	9.65	8.24	0.86	9.13	7.95	0.93	5.13	5.13	0.70
60.8	71.6	14.53	10.81	0.88	11.69	9.86	0.67	11.17	9.66	0.73	10.64	8.41	0.80	10.46	8.31	0.83	10.15	8.13	0.86	9.65	7.89	0.93	5.44	5.44	0.69
64.4	77.0	15.39	10.96	0.90	12.19	9.35	0.67	11.69	9.11	0.74	11.17	8.84	0.80	10.97	8.74	0.83	10.64	8.58	0.87	10.14	8.35	0.93	5.75	5.75	0.69
67.0	80.0	16.24	11.12	0.91	12.43	9.82	0.67	11.92	9.57	0.74	11.41	9.34	0.80	11.21	9.23	0.83	10.90	9.09	0.87	10.40	8.88	0.94	6.06	6.06	0.69
71.6	86.0	17.09	11.27	0.93	13.18	9.47	0.68	12.68	9.24	0.75	12.16	9.04	0.81	11.96	8.97	0.84	11.65	8.82	0.88	11.17	8.61	0.94	6.38	6.38	0.68
75.2	89.6	17.94	11.42	0.94	13.68	9.21	0.69	13.18	9.01	0.75	12.68	8.82	0.82	12.46	8.74	0.84	12.16	8.61	0.88	11.65	8.41	0.95	6.69	6.69	0.68

Heating: 208 - 230V 60Hz
Temp: Celsius / TC,PI: kW

Indoor Temperature		Outdoor temperature [°C WB]																			
		-15			-10			-5			0			6			10			18	
EWB	EDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	1.88	0.67	2.27	0.70	2.65	0.74	3.03	0.96	4.09	1.02	4.45	1.05	5.62	1.39							
21.1	1.77	0.69	2.15	0.72	2.53	0.75	2.91	0.99	3.96	1.04	4.32	1.07	5.52	1.40							
22.0	1.72	0.70	2.10	0.73	2.48	0.76	2.86	1.00	3.90	1.05	4.26	1.08	5.42	1.41							
24.0	1.67	0.70	2.06	0.74	2.43	0.77	2.81	1.01	3.85	1.05	4.21	1.09	5.33	1.41							
25.0	1.65	0.71	2.03	0.74	2.42	0.78	2.80	1.01	3.82	1.06	4.18	1.10	5.23	1.42							
27.0	1.61	0.71	1.99	0.75	2.36	0.78	2.75	1.02	3.77	1.07	4.12	1.11	5.13	1.43							

Heating: 208 - 230V 60Hz
Temp: Fahrenheit / TC: kBTU/h / PI: kW

Indoor Temperature		Outdoor temperature [°F WB]																			
		5			14			23			32			43			50			64	
EWB	EDB	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	6.41	0.67	7.73	0.70	9.03	0.74	10.34	0.96	13.97	1.02	15.19	1.05	19.16	1.39							
70.0	6.05	0.69	7.33	0.72	8.64	0.75	9.94	0.99	13.50	1.04	14.73	1.07	18.83	1.40							
71.6	5.87	0.70	7.18	0.73	8.48	0.76	9.78	1.00	13.31	1.05	14.54	1.08	18.50	1.41							
75.2	5.71	0.70	7.02	0.74	8.31	0.77	9.60	1.01	13.13	1.05	14.36	1.09	18.18	1.41							
77.0	5.63	0.71	6.92	0.74	8.25	0.78	9.55	1.01	13.04	1.06	14.25	1.10	17.85	1.42							
80.6	5.48	0.71	6.78	0.75	8.07	0.78	9.37	1.02	12.85	1.07	14.07	1.11	17.52	1.43							

Cooling capacity at -15°C / 5°F
Temp: Celsius / TC,SHC,PI: kW

Indoor Temperature		Outdoor temperature [°C DB]	
		EWB	EDB
14.0	20.0	3.56	2.73
14.0	20.0	57.2	68.0
		°F	°F
		TC	SHC
		PI	PI
		5	5

Temp: Fahrenheit / TC,SHC: kBTU/h / PI: kW
60Hz 208 - 230V

Indoor Temperature		Outdoor temperature [°F DB]	
		EWB	EDB
57.2	68.0	12.13	9.33
		°F	°F
		TC	SHC
		PI	PI
		5	5

Symbols
AFR : Air flow rate
BF : Bypass factor
EWB : Entering wet bulb temp.
EDB : Entering dry bulb temp.
TC : Total capacity
SHC : Sensible heat capacity
PI : Power input

(m³ / min.)
(°C)/(°F)
(°C)/(°F)
(kW)/(kBTU/h)
(kW)/(kBTU/h)
(kW)

NOTES:
1. [] shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables.
3. Capacities out of the tables should not be used for calculation.)
Corresponding refrigerant piping length : 25ft
Level difference : Off

Model : FTX18A - RX18A

AFR	20.3
BF	0.13

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC, SHC, PI; kW

Indoor Temperature		Outdoor temperature [°C DB]																														
		20				25				30				32				35				40				46						
°C	°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI				
		14.0	57.2	20.0	5.54	4.35	0.92	5.41	4.25	1.10	5.16	4.11	1.21	4.91	3.98	1.31	4.81	3.93	1.36	4.67	3.84	1.43	4.42	3.71	1.53	4.21	3.52	1.62	4.02	3.34	1.71	3.83
16.0	60.8	22.0	5.91	4.42	0.94	5.90	4.18	1.11	5.40	4.13	1.23	5.15	3.92	1.33	5.06	3.88	1.37	4.91	3.79	1.43	4.67	3.68	1.54	4.34	3.56	1.62	4.15	3.48	1.71	4.00	3.40	1.79
18.0	64.4	25.0	6.28	4.50	0.96	6.01	4.36	1.12	5.65	4.25	1.23	5.40	4.13	1.33	5.31	4.08	1.37	5.15	4.01	1.44	4.91	3.90	1.54	4.59	3.80	1.62	4.41	3.72	1.71	4.25	3.64	1.79
19.4	66.7	26.7	6.64	4.58	0.98	6.01	4.58	1.12	5.77	4.47	1.23	5.52	4.36	1.33	5.42	4.31	1.37	5.28	4.24	1.44	5.03	4.14	1.55	4.78	3.86	1.62	4.59	4.02	1.71	4.41	3.86	1.79
22.0	71.6	30.0	7.01	4.65	1.00	6.38	4.42	1.13	6.13	4.31	1.24	5.88	4.22	1.34	5.79	4.19	1.38	5.64	4.11	1.45	5.40	4.02	1.56	5.00	3.90	1.62	4.89	4.22	1.71	4.69	4.07	1.79
24.0	75.2	32.0	7.38	4.73	1.02	6.62	4.30	1.14	6.38	4.21	1.24	6.13	4.11	1.35	6.03	4.08	1.40	5.88	4.02	1.46	5.64	3.93	1.57	5.21	3.91	1.62	5.00	4.32	1.71	4.89	4.22	1.79

Cooling: 208 - 230V 60Hz
Temp: Fahrenheit / TC, SHC, PI; kW

Indoor Temperature		Outdoor temperature [°F DB]																														
		68				77				86				90				95				104				115						
°F	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
		57.2	14.0	68.0	18.89	14.83	0.92	18.45	14.51	1.10	17.59	14.04	1.21	16.75	13.59	1.31	16.42	13.41	1.36	15.93	13.12	1.43	15.07	12.66	1.53	14.21	12.12	1.62	13.34	11.67	1.71	12.47
60.8	16.0	71.6	20.15	15.09	0.94	19.29	14.27	1.11	18.44	13.80	1.22	17.57	13.39	1.33	17.27	13.23	1.37	16.75	12.95	1.43	15.93	12.56	1.54	14.78	12.07	1.62	13.54	11.97	1.71	13.00	11.54	1.79
64.4	18.0	75.2	21.41	15.35	0.96	20.12	14.89	1.12	19.29	14.51	1.23	18.44	14.08	1.33	18.11	13.91	1.37	17.57	13.67	1.44	16.74	13.30	1.54	15.44	12.56	1.62	14.21	12.47	1.71	13.80	12.12	1.79
67.0	19.4	80.0	22.67	15.62	0.98	20.51	15.64	1.12	19.68	15.25	1.23	18.83	14.88	1.33	18.50	14.71	1.37	18.00	14.48	1.44	17.17	14.14	1.55	16.44	13.86	1.62	15.00	13.54	1.71	14.14	13.12	1.79
71.6	22.0	86.0	23.93	15.88	1.00	21.76	15.08	1.13	20.93	14.72	1.24	20.08	14.39	1.34	19.75	14.28	1.38	19.24	14.04	1.45	18.44	13.71	1.56	17.78	13.40	1.62	16.44	13.22	1.71	14.84	13.00	1.79
75.2	24.0	89.6	25.19	16.14	1.02	22.59	14.86	1.14	21.76	14.95	1.24	20.93	14.04	1.35	20.58	13.92	1.40	20.08	13.71	1.46	19.24	13.40	1.57	18.44	13.00	1.62	17.44	12.84	1.71	15.00	12.84	1.79

Heating: 208 - 230V 60Hz
Temp: Celsius / TC, PI; kW

Indoor Temperature		Outdoor temperature [°C WB]																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
		-15				-10				-5				0				6				10				18																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
°C	°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
		15.0	59.0	3.01	1.13	3.62	1.19	4.23	1.25	4.85	1.63	5.55	1.72	7.12	1.78	7.45	1.63	7.88	1.68	8.21	1.73	8.54	1.78	8.87	1.83	9.20	1.88	9.53	1.93	9.86	1.98	10.19	2.03	10.52	2.08	10.85	2.13	11.18	2.18	11.51	2.23	11.84	2.28	12.17	2.33	12.50	2.38	12.83	2.43	13.16	2.48	13.49	2.53	13.82	2.58	14.15	2.63	14.48	2.68	14.81	2.73	15.14	2.78	15.47	2.83	15.80	2.88	16.13	2.93	16.46	2.98	16.79	3.03	17.12	3.08	17.45	3.13	17.78	3.18	18.11	3.23	18.44	3.28	18.77	3.33	19.10	3.38	19.43	3.43	19.76	3.48	20.09	3.53	20.42	3.58	20.75	3.63	21.08	3.68	21.41	3.73	21.74	3.78	22.07	3.83	22.40	3.88	22.73	3.93	23.06	3.98	23.39	4.03	23.72	4.08	24.05	4.13	24.38	4.18	24.71	4.23	25.04	4.28	25.37	4.33	25.70	4.38	26.03	4.43	26.36	4.48	26.69	4.53	27.02	4.58	27.35	4.63	27.68	4.68	28.01	4.73	28.34	4.78	28.67	4.83	29.00	4.88	29.33	4.93	29.66	4.98	29.99	5.03	30.32	5.08	30.65	5.13	30.98	5.18	31.31	5.23	31.64	5.28	31.97	5.33	32.30	5.38	32.63	5.43	32.96	5.48	33.29	5.53	33.62	5.58	33.95	5.63	34.28	5.68	34.61	5.73	34.94	5.78	35.27	5.83	35.60	5.88	35.93	5.93	36.26	5.98	36.59	6.03	36.92	6.08	37.25	6.13	37.58	6.18	37.91	6.23	38.24	6.28	38.57	6.33	38.90	6.38	39.23	6.43	39.56	6.48	39.89	6.53	40.22	6.58	40.55	6.63	40.88	6.68	41.21	6.73	41.54	6.78	41.87	6.83	42.20	6.88	42.53	6.93	42.86	6.98	43.19	7.03	43.52	7.08	43.85	7.13	44.18	7.18	44.51	7.23	44.84	7.28	45.17	7.33	45.50	7.38	45.83	7.43	46.16	7.48	46.49	7.53	46.82	7.58	47.15	7.63	47.48	7.68	47.81	7.73	48.14	7.78	48.47	7.83	48.80	7.88	49.13	7.93	49.46	7.98	49.79	8.03	50.12	8.08	50.45	8.13	50.78	8.18	51.11	8.23	51.44	8.28	51.77	8.33	52.10	8.38	52.43	8.43	52.76	8.48	53.09	8.53	53.42	8.58	53.75	8.63	54.08	8.68	54.41	8.73	54.74	8.78	55.07	8.83	55.40	8.88	55.73	8.93	56.06	8.98	56.39	9.03	56.72	9.08	57.05	9.13	57.38	9.18	57.71	9.23	58.04	9.28	58.37	9.33	58.70	9.38	59.03	9.43	59.36	9.48	59.69	9.53	60.02	9.58	60.35	9.63	60.68	9.68	61.01	9.73	61.34	9.78	61.67	9.83	62.00	9.88	62.33	9.93	62.66	9.98	62.99	10.03	63.32	10.08	63.65	10.13	63.98	10.18	64.31	10.23	64.64	10.28	64.97	10.33	65.30	10.38	65.63	10.43	65.96	10.48	66.29	10.53	66.62	10.58	66.95	10.63	67.28	10.68	67.61	10.73	67.94	10.78	68.27	10.83	68.60	10.88	68.93	10.93	69.26	10.98	69.59	11.03	69.92	11.08	70.25	11.13	70.58	11.18	70.91	11.23	71.24	11.28	71.57	11.33	71.90	11.38	72.23	11.43	72.56	11.48	72.89	11.53	73.22	11.58	73.55	11.63	73.88	11.68	74.21	11.73	74.54	11.78	74.87	11.83	75.20	11.88	75.53	11.93	75.86	11.98	76.19	12.03	76.52	12.08	76.85	12.13	77.18	12.18	77.51	12.23	77.84	12.28	78.17	12.33	78.50	12.38	78.83	12.43	79.16	12.48	79.49	12.53	79.82	12.58	80.15	12.63	80.48	12.68	80.81	12.73	81.14	12.78	81.47	12.83	81.80	12.88	82.13	12.93	82.46	12.98	82.79	13.03	83.12	13.08	83.45	13.13	83.78	13.18	84.11	13.23	84.44	13.28	84.77	13.33	85.10	13.38	85.43	13.43	85.76	13.48	86.09	13.53	86.42	13.58	86.75	13.63	87.08	13.68	87.41	13.73	87.74	13.78	88.07	13.83	88.40	13.88	88.73	13.93	89.06	13.98	89.39	14.03	89.72	14.08	90.05	14.13	90.38	14.18	90.71	14.23	91.04	14.28	91.37	14.33	91.70	14.38	92.03	14.43	92.36	14.48	92.69	14.53	93.02	14.58	93.35	14.63	93.68	14.68	94.01	14.73	94.34	14.78	94.67	14.83	95.00	14.88	95.33	14.93	95.66	14.98	95.99	15.03	96.32	15.08	96.65	15.13	96.98	15.18	97.31	15.23	97.64	15.28	97.97	15.33	98.30	15.38	98.63	15.43	98.96	15.48	99.29	15.53	99.62	15.58	99.95	15.63	100.28	15.68	100.61	15.73	100.94	15.78	101.27	15.83	101.60	15.88	101.93	15.93	102.26	15.98	102.59	16.03	102.92	16.08	103.25	16.13	103.58	16.18	103.91	16.23	104.24	16.28	104.57	16.33	104.90	16.38	105.23	16.43	105.56	16.48	105.89	16.53	106.22	16.58	106.55	16.63	106.88	16.68	107.21	16.73	107.54	16.78	107.87	16.83	108.20	16.88	108.53	16.93	108.86	16.98	109.19	17.03	109.52	17.08	109.85	17.13	110.18	17.18	110.51	17.23	110.84	17.28	111.17	17.33	111.50	17.38	111.83	17.43	112.16	17.48	112.49	17.53	112.82	17.58	113.15	17.63	113.48	17.68	113.81	17.73	114.14	17.78	114.47	17.83	114.80	17.88	115.13	17.93	115.46	17.98	115.79	18.03	116.12	18.08	116.45	18.13	116.78	18.18	117.11	18.23	117.44	18.28	117.77	18.33	118.10	18.38	118.43	18.43	118.76	18.48	119.09	18.53	119.42	18.58	119.75	18.63	120.08	18.68	120.41	18.73	120.74	18.78	121.07	18.83	121.40	18.88	121.73	18.93	122.06	18.98	122.39	19.03	122.72	19.08	123.05	19.13	123.38

Model : FTX24A - RX24A

AFR	20.3
BF	0.13

Cooling: 208 - 230V 60Hz
Temp: Celsius / TC, SHC, PI: kW

Indoor Temperature EWB EDB	Outdoor temperature [°C/DB]																								
	10			20			25			30			32			35			40			46			
°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
14.0	20.0	5.95	4.75	1.17	6.37	4.60	1.33	6.07	4.45	1.46	5.78	4.31	1.59	5.67	4.26	1.64	5.50	4.16	1.72	5.20	4.02	1.85	4.60	3.96	1.93
16.0	22.0	6.41	4.85	1.22	6.66	4.52	1.34	6.36	4.38	1.47	6.06	4.25	1.60	5.96	4.20	1.65	5.78	4.11	1.72	5.50	3.99	1.86	4.60	4.05	1.91
18.0	25.0	6.87	4.94	1.28	6.94	4.42	1.35	6.66	4.60	1.48	6.36	4.47	1.60	6.25	4.41	1.65	6.06	4.34	1.74	5.78	4.22	1.86	5.17	4.15	1.90
19.4	26.7	7.33	5.04	1.33	7.08	4.36	1.35	6.79	4.88	1.49	6.50	4.72	1.60	6.38	4.67	1.66	6.21	4.59	1.74	5.93	4.48	1.88	5.45	4.24	1.88
22.0	30.0	7.79	5.14	1.38	7.51	4.78	1.36	7.22	4.67	1.49	6.93	4.57	1.62	6.82	4.53	1.67	6.64	4.45	1.75	6.36	4.35	1.88	5.74	4.33	1.86
24.0	32.0	8.25	5.24	1.43	7.79	4.65	1.37	7.51	4.55	1.50	7.22	4.45	1.63	7.10	4.42	1.69	6.93	4.35	1.76	6.64	4.25	1.89	6.02	4.43	1.84

Cooling: 208 - 230V 60Hz

Temp: Fahrenheit / TC, SHC, PI: kW

Indoor Temperature EWB EDB	Outdoor temperature [°F/DB]																								
	50			68			77			86			90			95			104			115			
°F	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
57.2	68.0	20.30	16.20	1.17	21.72	15.70	1.33	20.71	15.20	1.46	19.73	14.70	1.59	19.34	14.52	1.64	18.75	14.20	1.72	17.74	13.71	1.85	15.71	13.51	1.93
60.8	71.6	21.88	16.54	1.22	22.71	15.44	1.34	21.71	14.94	1.47	20.68	14.49	1.60	20.33	14.32	1.65	19.73	14.01	1.72	18.75	13.60	1.86	16.67	13.83	1.91
64.4	77.0	23.45	16.87	1.28	23.69	16.12	1.35	22.71	15.70	1.48	21.71	15.24	1.60	21.32	15.06	1.66	20.88	14.80	1.74	19.71	14.40	1.86	17.64	14.15	1.90
67.0	80.0	25.02	17.21	1.33	24.15	16.93	1.35	23.18	16.50	1.48	22.17	16.10	1.60	21.78	15.92	1.66	21.20	15.67	1.74	20.22	15.30	1.88	18.61	14.47	1.88
71.6	86.0	26.59	17.54	1.38	25.62	16.32	1.36	24.65	15.93	1.49	23.64	15.58	1.62	23.25	15.46	1.67	22.65	15.20	1.75	21.71	14.84	1.88	19.57	14.79	1.86
75.2	89.6	28.16	17.88	1.43	26.59	15.87	1.37	25.62	15.53	1.50	24.65	15.20	1.63	24.23	15.07	1.69	23.64	14.84	1.76	22.65	14.50	1.89	20.54	15.11	1.84

Heating: 208 - 230V 60Hz

Temp: Celsius / TC, PI: kW

Indoor Temperature EDB	Outdoor temperature [°C/WB]																
	-15			-10			-5			0			10			18	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	
15.0	3.29	1.28	3.96	1.35	4.62	1.42	5.30	1.86	7.15	1.96	7.78	2.03	8.49	1.82			
21.1	3.10	1.32	3.75	1.39	4.42	1.45	5.09	1.91	6.92	2.01	7.55	2.07	8.36	1.91			
22.0	3.01	1.34	3.68	1.41	4.34	1.47	5.01	1.92	6.82	2.02	7.45	2.09	8.24	2.01			
24.0	2.89	1.35	3.60	1.42	4.26	1.49	4.92	1.94	6.73	2.03	7.35	2.11	8.12	2.10			
25.0	2.89	1.36	3.54	1.42	4.22	1.50	4.89	1.96	6.68	2.05	7.30	2.12	7.99	2.19			
27.0	2.81	1.37	3.47	1.45	4.13	1.51	4.80	1.96	6.58	2.07	7.21	2.13	7.87	2.29			

Heating: 208 - 230V 60Hz

Temp: Fahrenheit / TC, PI: kW

Indoor Temperature EDB	Outdoor temperature [°F/WB]																					
	5			14			23			32			43			50			64			
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	11.21	1.28	13.51	1.35	15.78	1.42	18.08	1.86	24.41	1.96	26.56	2.03	28.96	1.82								
70.0	10.58	1.32	12.81	1.39	15.10	1.45	17.38	1.91	23.60	2.01	25.75	2.07	28.53	1.91								
71.6	10.26	1.34	12.55	1.41	14.82	1.47	17.09	1.92	23.26	2.02	25.42	2.09	28.11	2.01								
75.2	9.98	1.35	12.27	1.42	14.52	1.49	16.79	1.94	22.95	2.03	25.09	2.11	27.69	2.10								
77.0	9.85	1.36	12.10	1.42	14.41	1.50	16.70	1.96	22.80	2.05	24.91	2.12	27.27	2.19								
80.6	9.58	1.37	11.85	1.45	14.10	1.51	16.38	1.96	22.46	2.07	24.60	2.13	26.85	2.29								

Cooling capacity at -15°C / 5°F

Temp: Celsius / TC, SHC, PI: kW

Temp: Fahrenheit / TC, SHC, PI: kW

60Hz 208 - 230V

Indoor Temperature Outdoor temperature [°F/DB]

EWB EDB °F °F TC SHC PI

57.2 68.0 22.38 17.29 0.96

Symbols

- AFR : Air flow rate
- 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)
- PI : Power input

(m³ /min.)

(°C)/(°F)

(°C)/(°F)

(kW)/(kBtu/h)

(kW)/(kBtu/h)

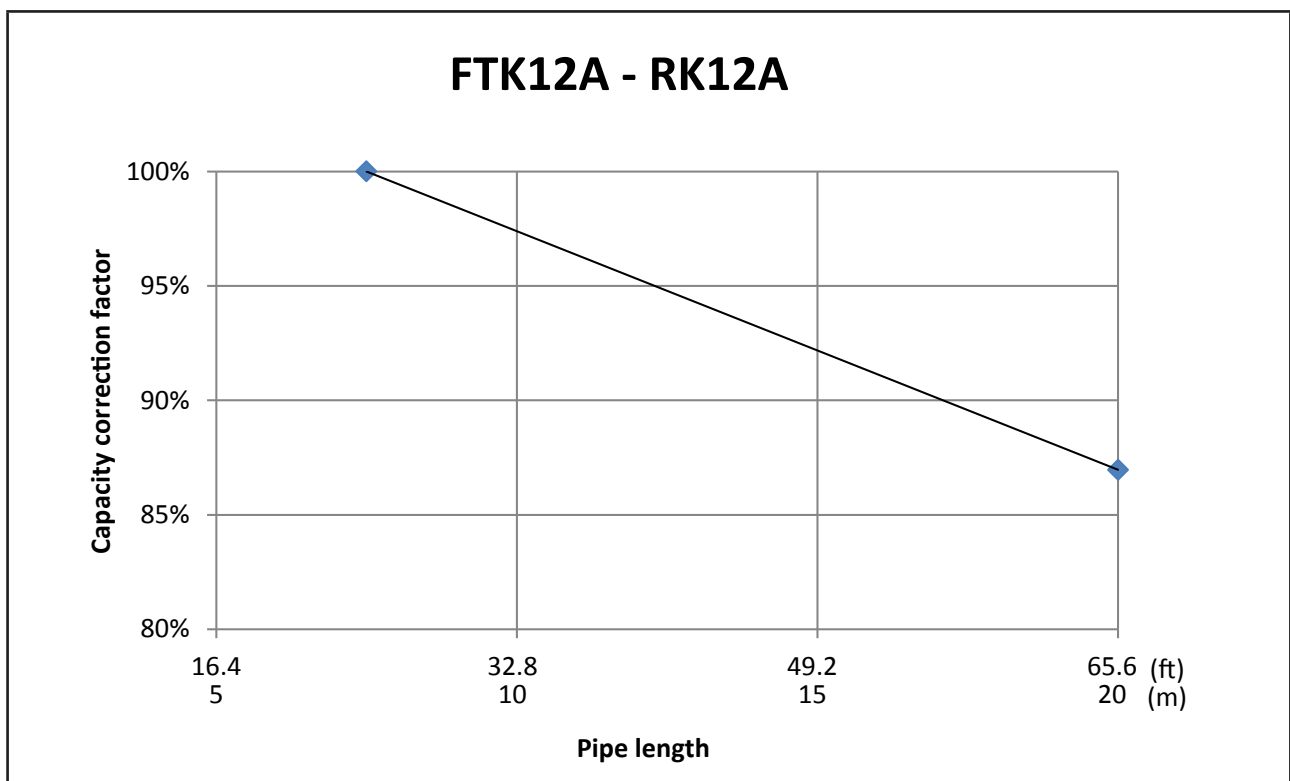
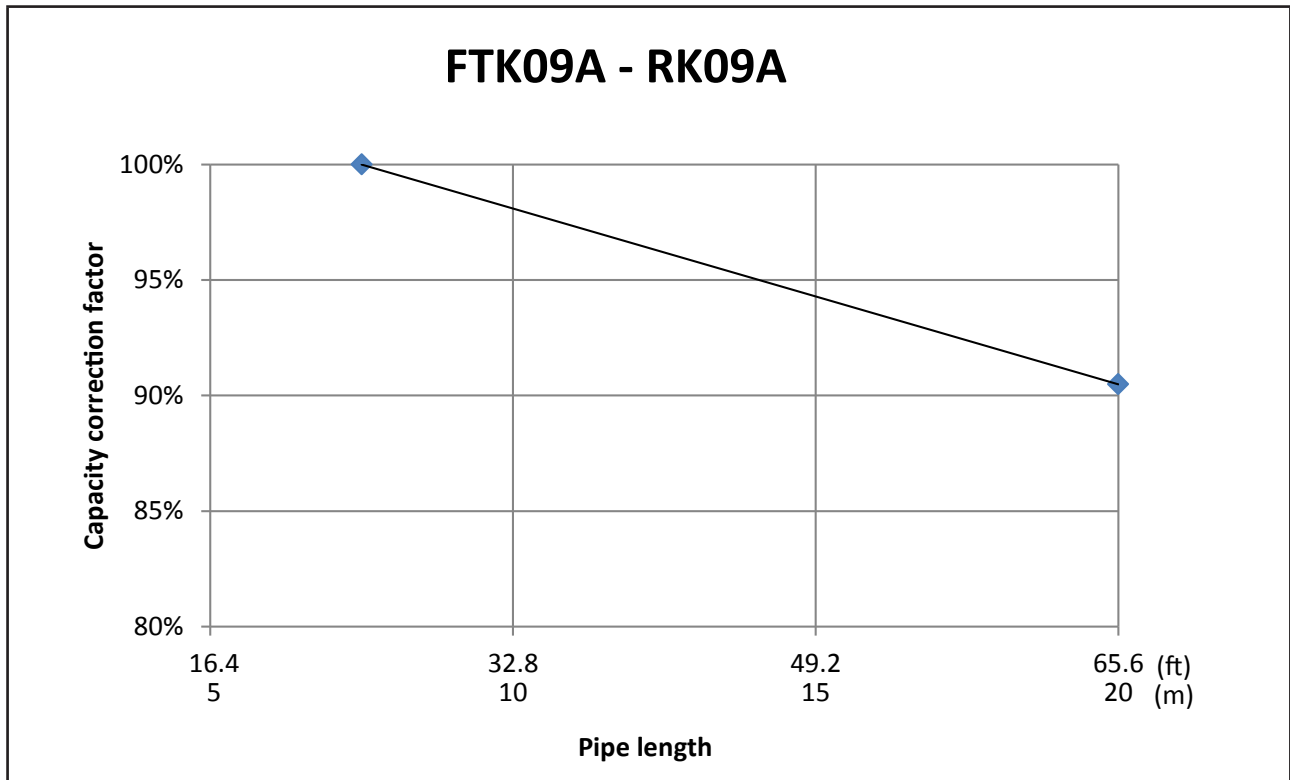
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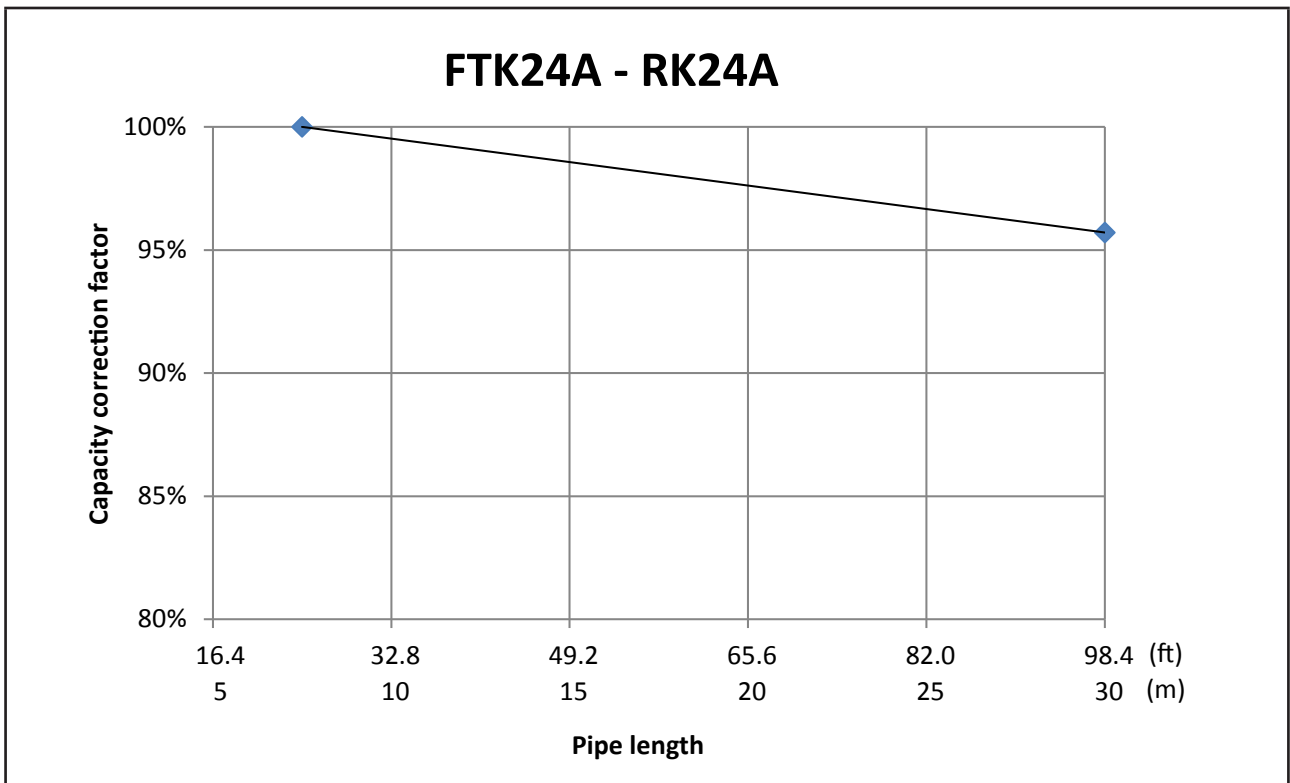
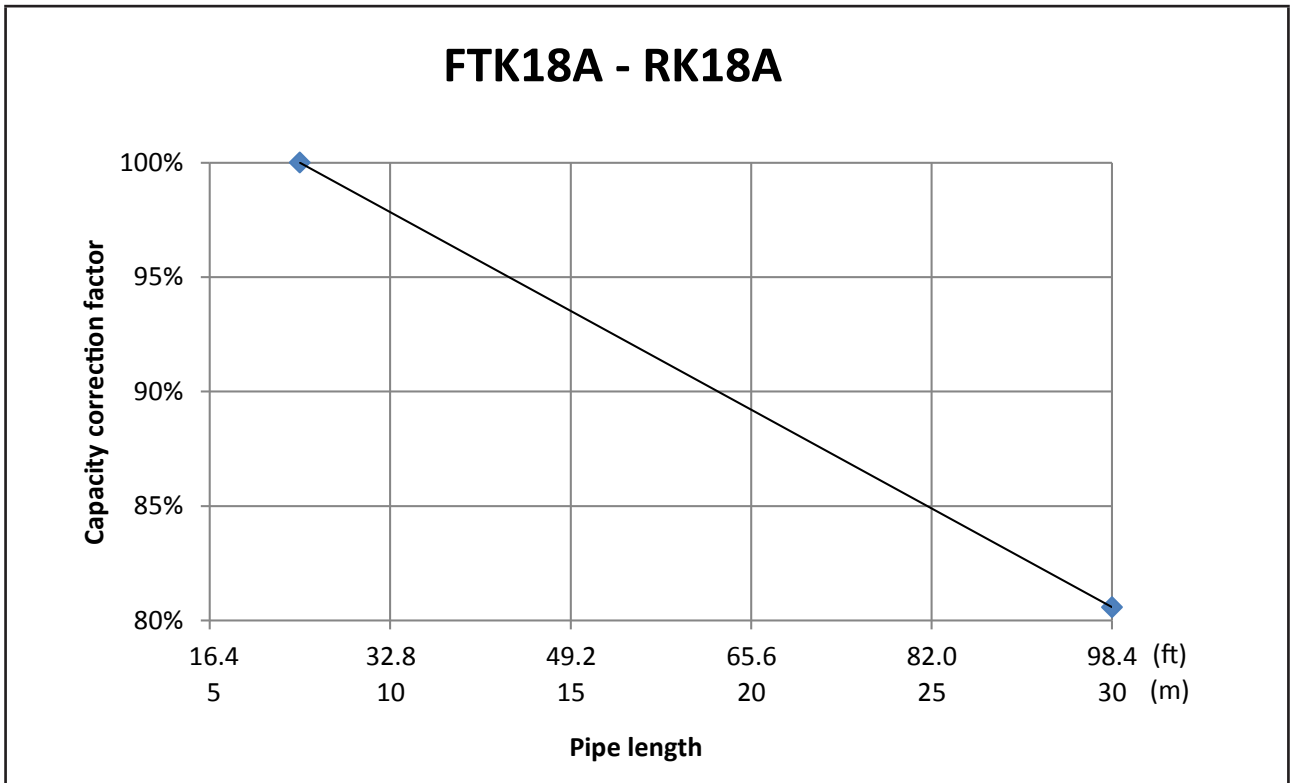
(kW)

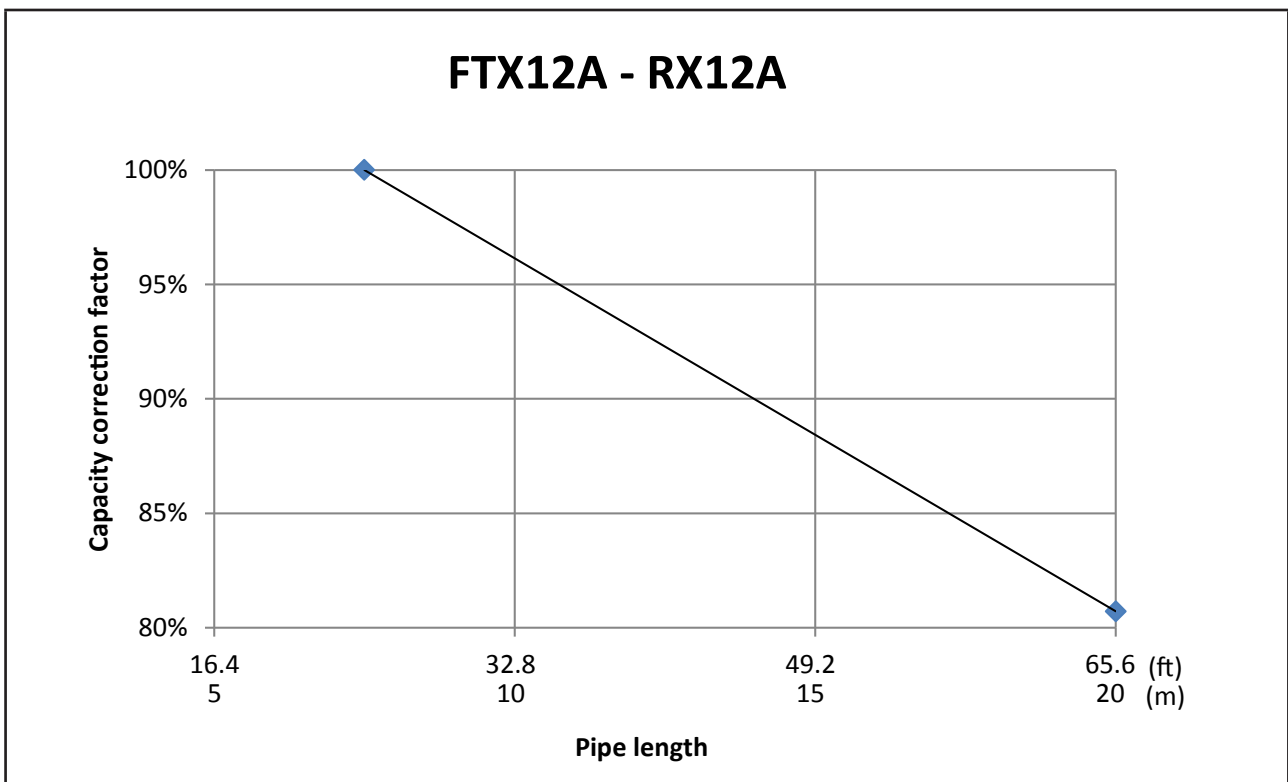
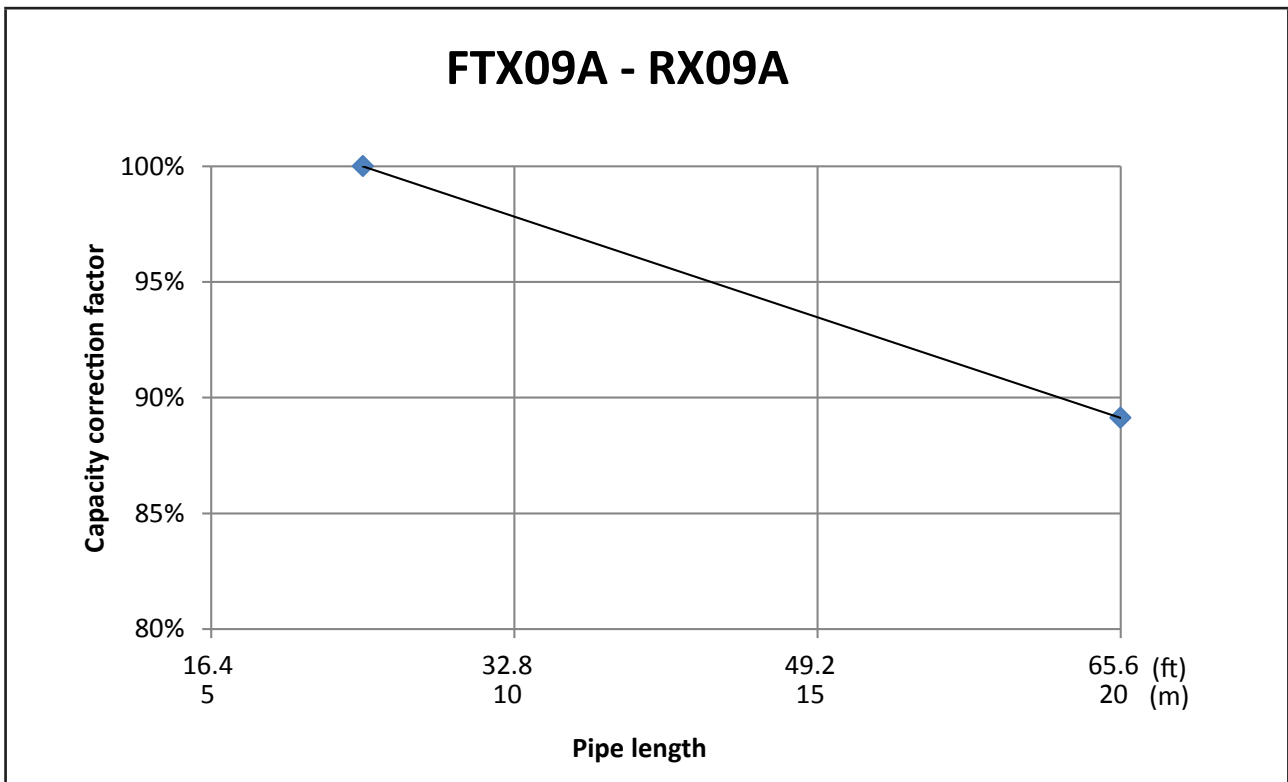
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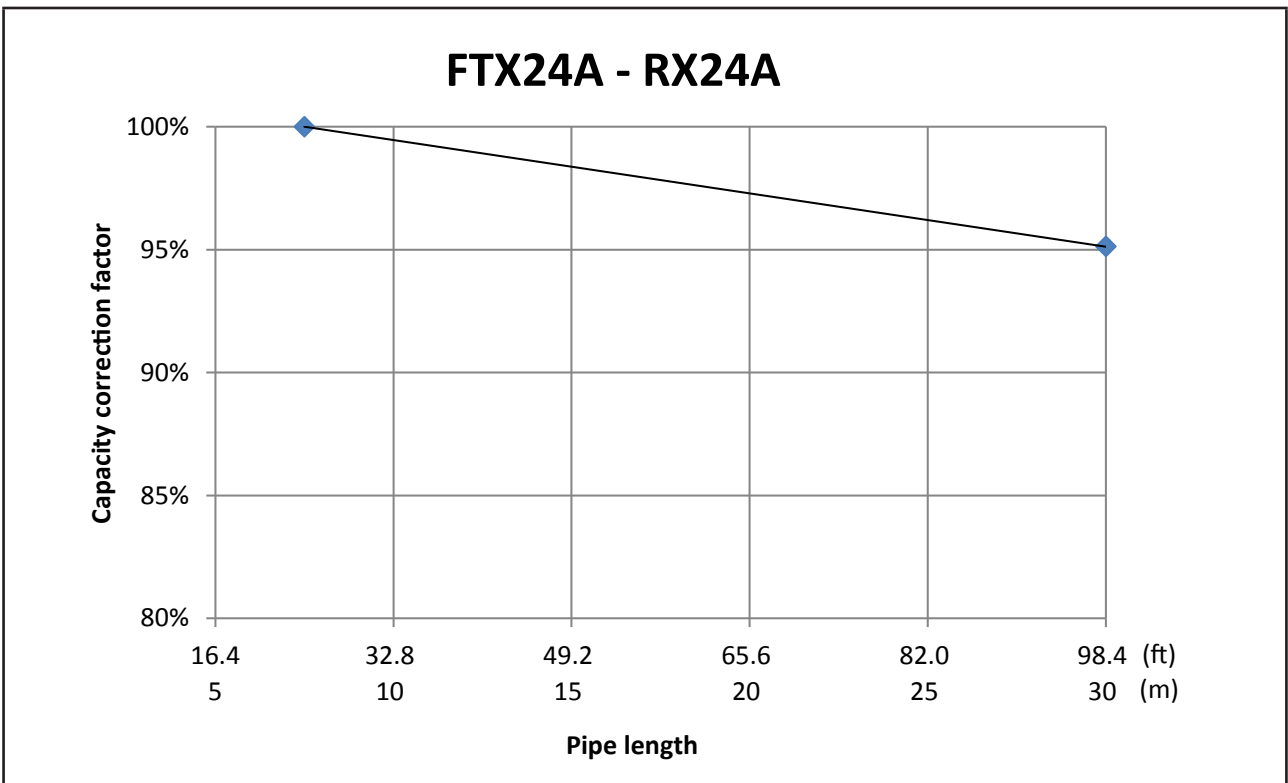
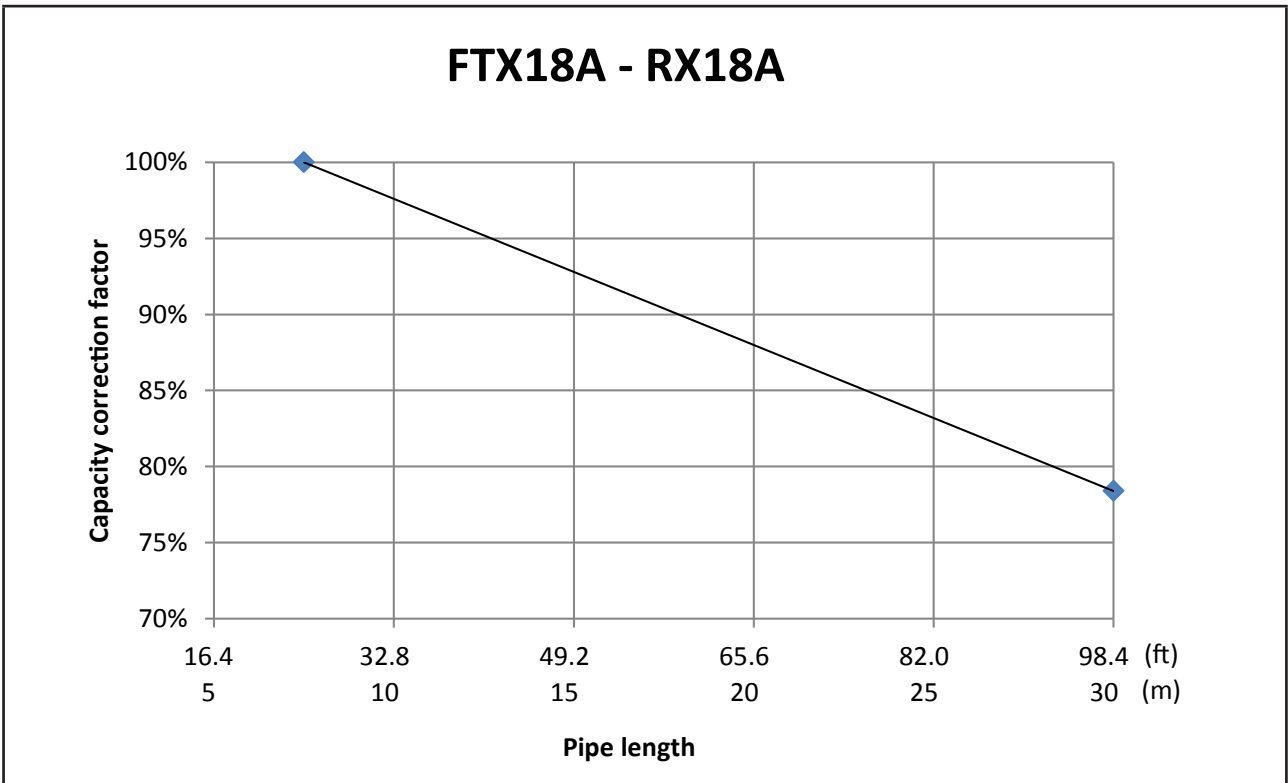
1. [] shows nominal (rated) capacities and power input.
2. TC, PI and SHC must be calculated by interpolation using the figures in the above tables. (Figures out of the tables should not be used for calculation.)
3. Capacities are based on the following conditions.
 - Corresponding refrigerant piping length : 25ft
 - Level difference : 0ft

Capacity correction factor by the length of refrigerant piping









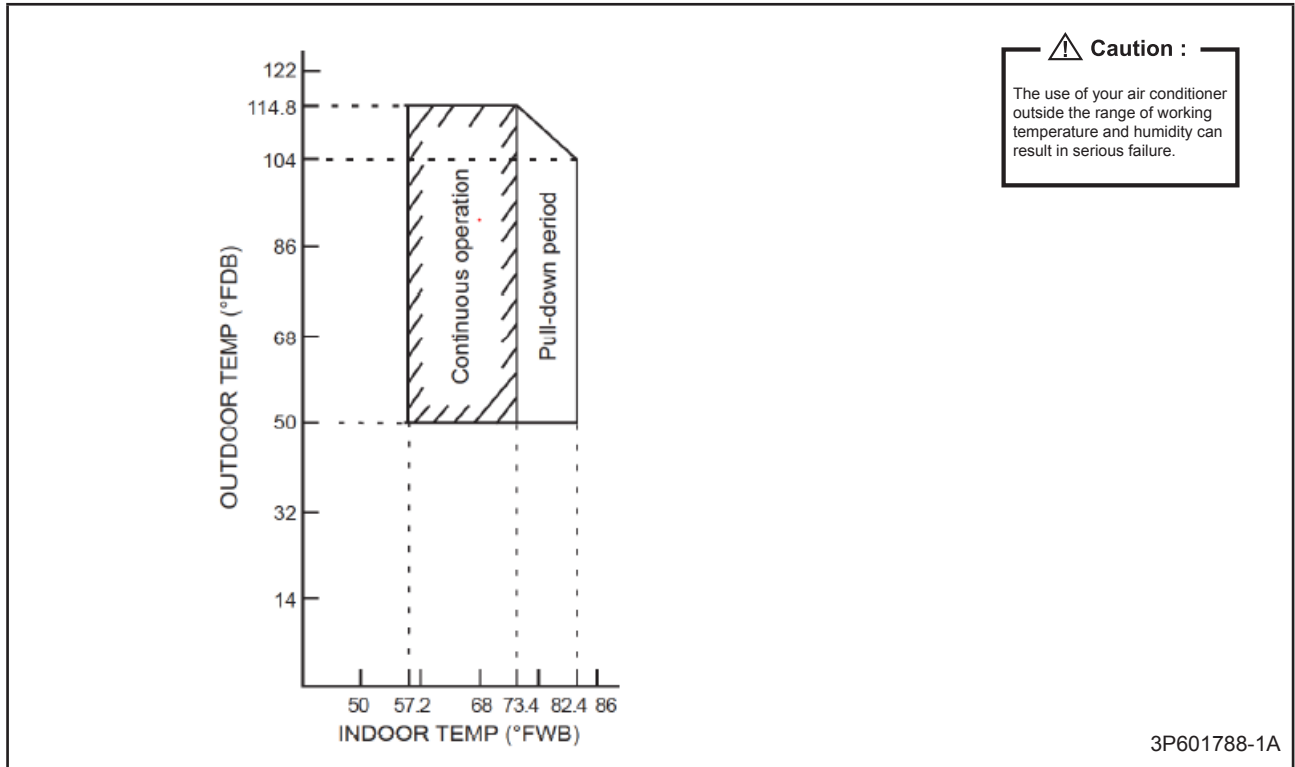
Notes:

- 1.----- represents the capacity correction factor for the capacity when additional refrigerant of the proper quantity is charged.
- 2.The correction ratio remains the same whether the outdoor unit is to be installed above or below the unit.
- 3.Calculation method for capacity
Capacity = capacity obtained from engineering data x capacity correction factor
- 4.The actual unit piping length shall not exceed the maximum piping length shown on the table.

Operation Limit

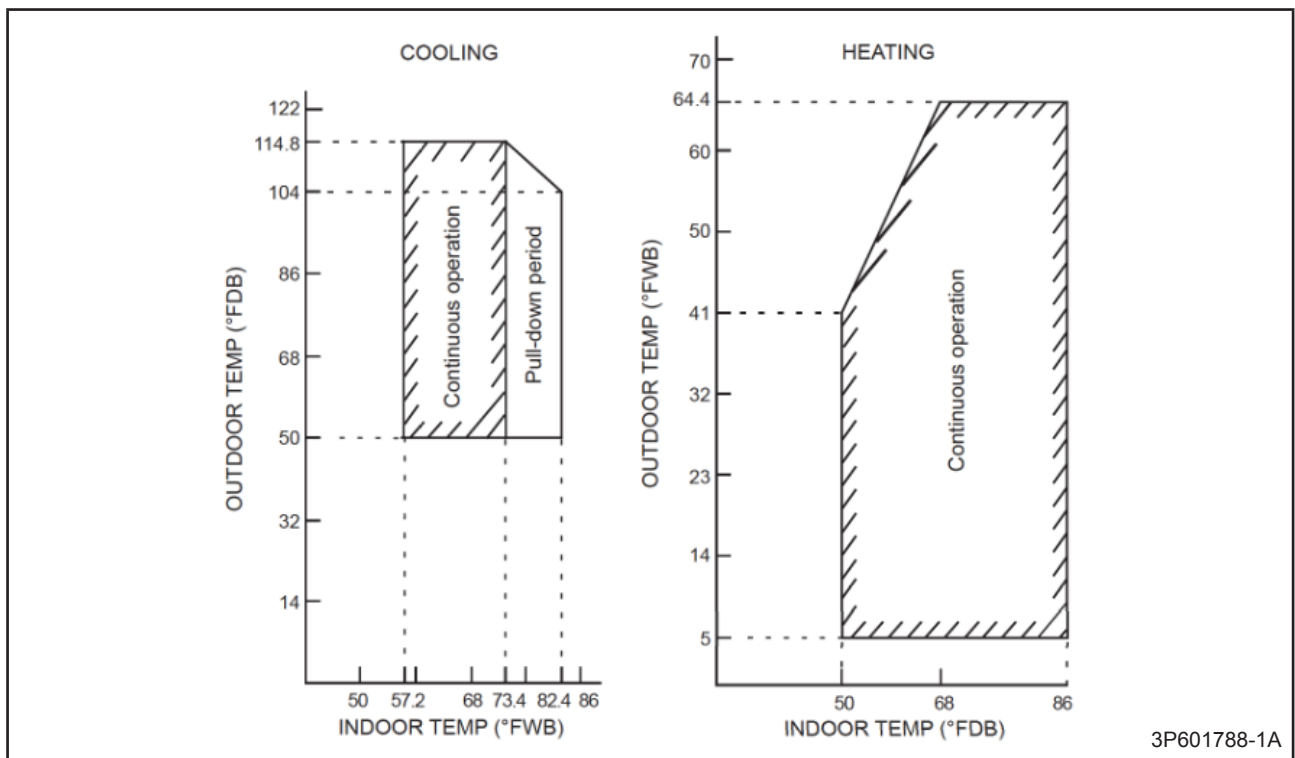
Cooling Only

Model : RK-A



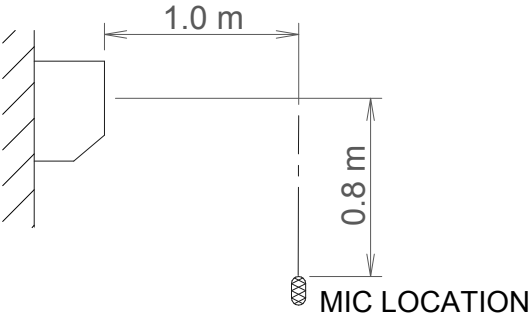
Heatpump

Model : RX-A



Sound Level

Measuring Location

Model	Measuring Location
<p>FTK/FTX09A FTK/FTX12A FTK/FTX18A FTK/FTX24A</p>	 <p>The diagram illustrates the microphone placement for sound level measurement. A device is shown on the left, with a microphone (MIC) located 1.0 m horizontally and 0.8 m vertically from the device's center. The microphone is labeled "MIC LOCATION".</p>

Notes:

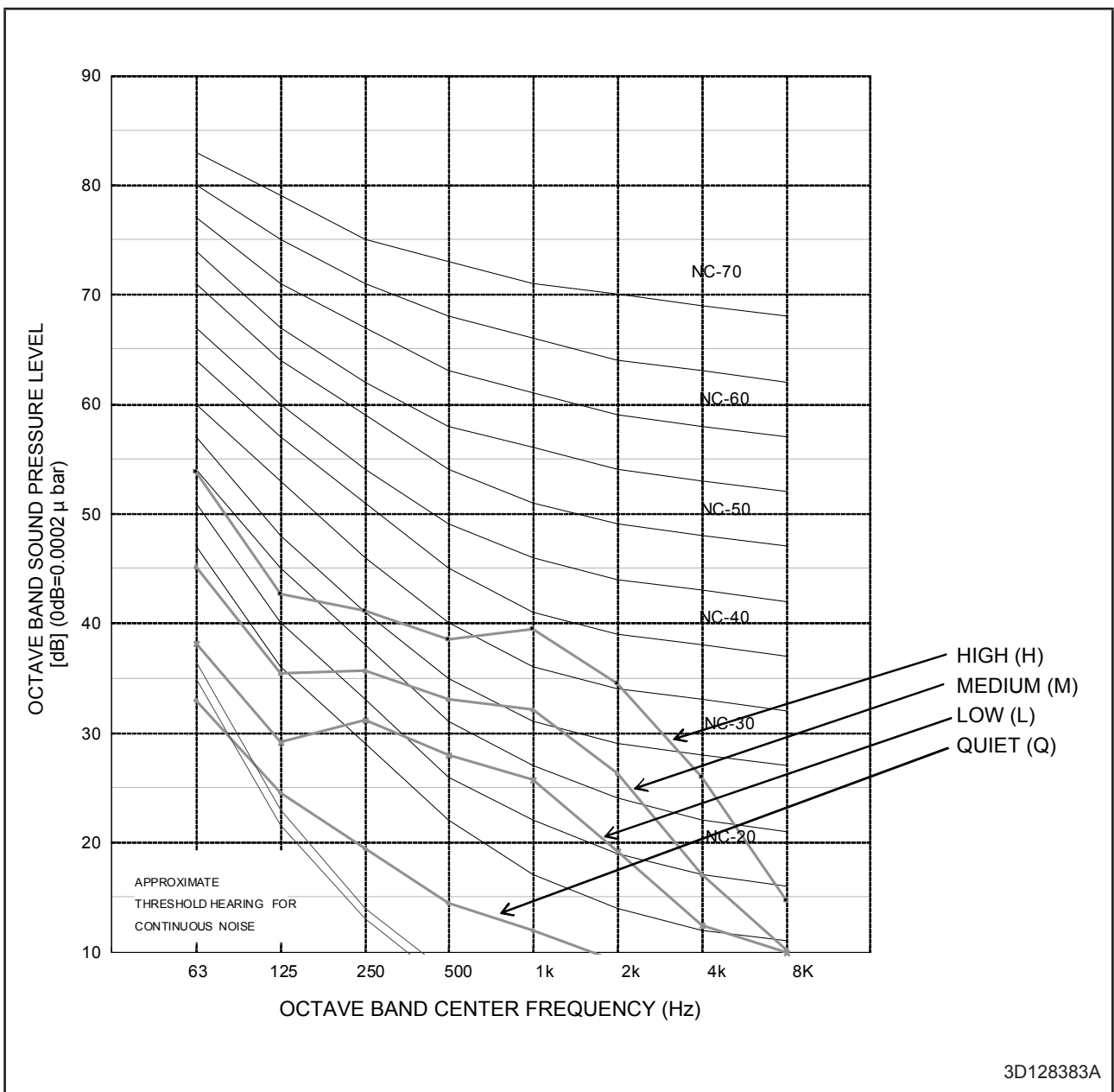
1. Operation sound is measured in an anechoic chamber.
2. The operation noise measuring method is in accordance with **JISC9612**.

Cooling Only

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTK09A	High	54	43	41	39	39	35	26	15	43	38
	Med	45	35	36	33	32	26	17	10	36	31
	Low	38	29	31	28	26	19	12	10	30	24
	Quiet	33	25	19	15	12	9	9	9	19	N/A

NC Curve

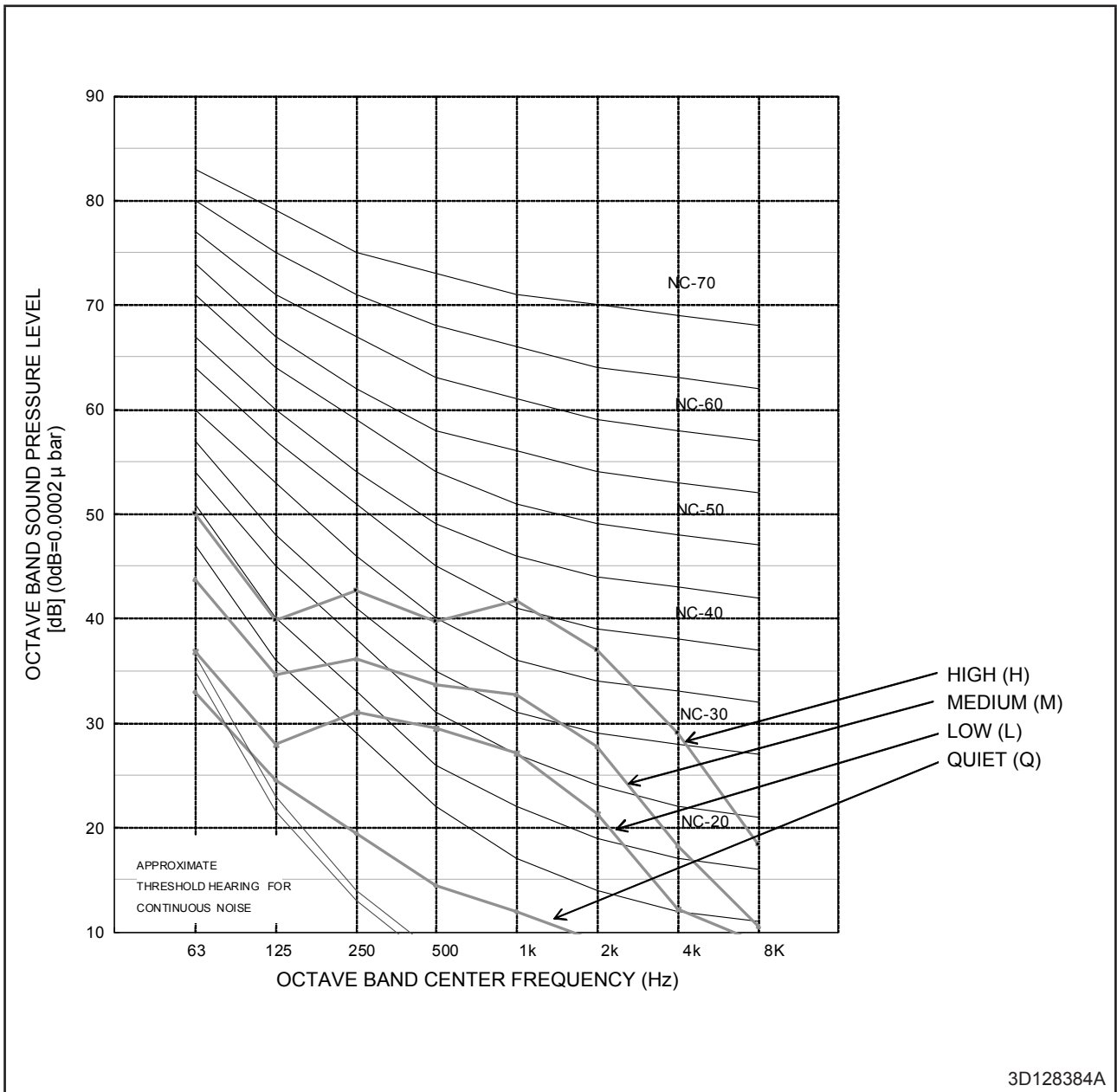


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Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTK12A	High	50	40	43	40	42	37	29	18	45	41
	Med	44	35	36	34	33	28	18	11	37	32
	Low	37	28	31	30	27	21	12	9	31	25
	Quiet	33	25	19	15	12	9	9	9	19	N/A

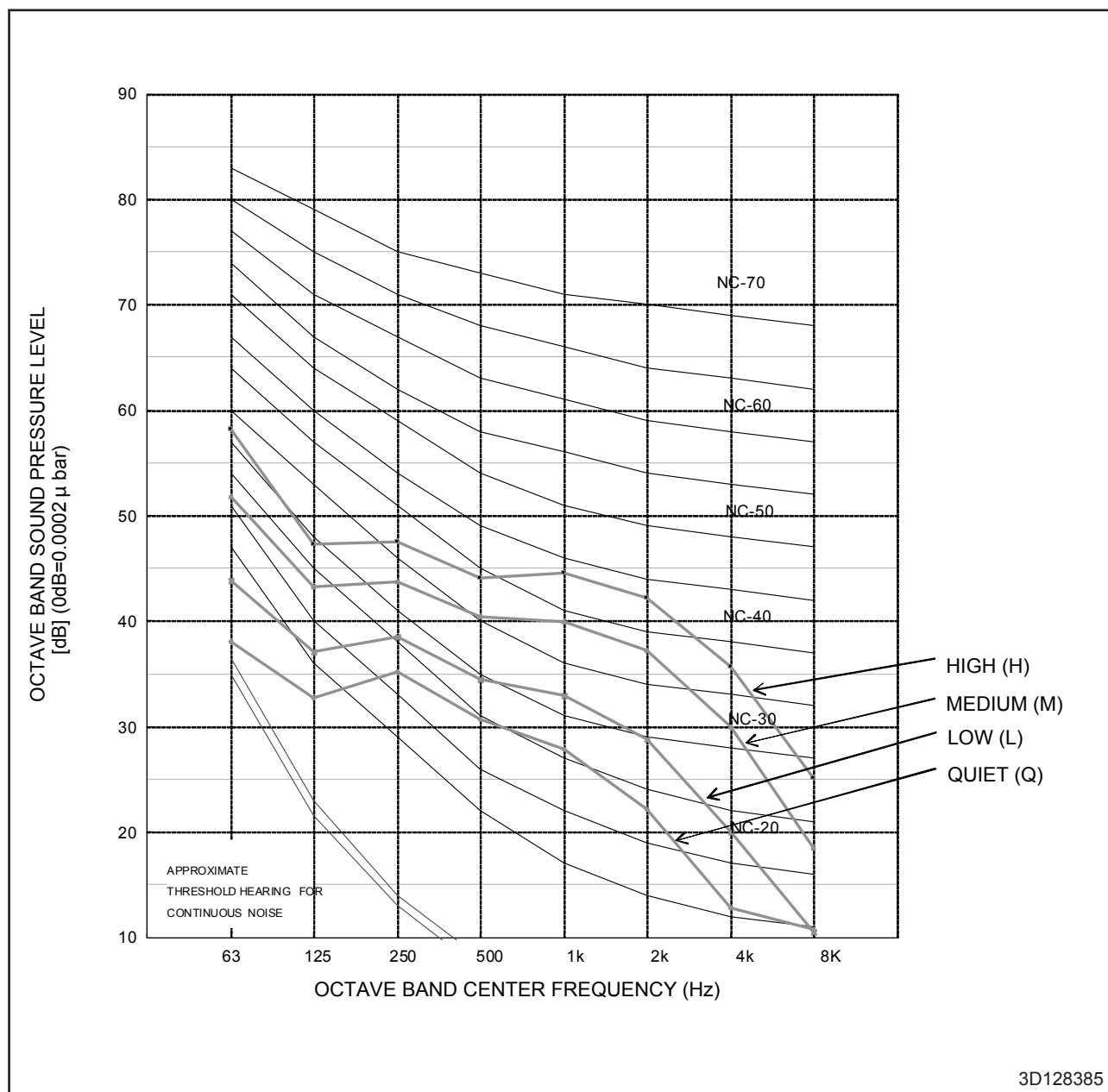
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTK18A	High	58	47	48	44	44	42	36	25	49	43
	Med	52	43	44	40	40	37	30	19	44	39
	Low	44	37	39	34	33	29	20	11	38	32
	Quiet	38	33	35	31	28	22	13	11	33	26

NC Curve

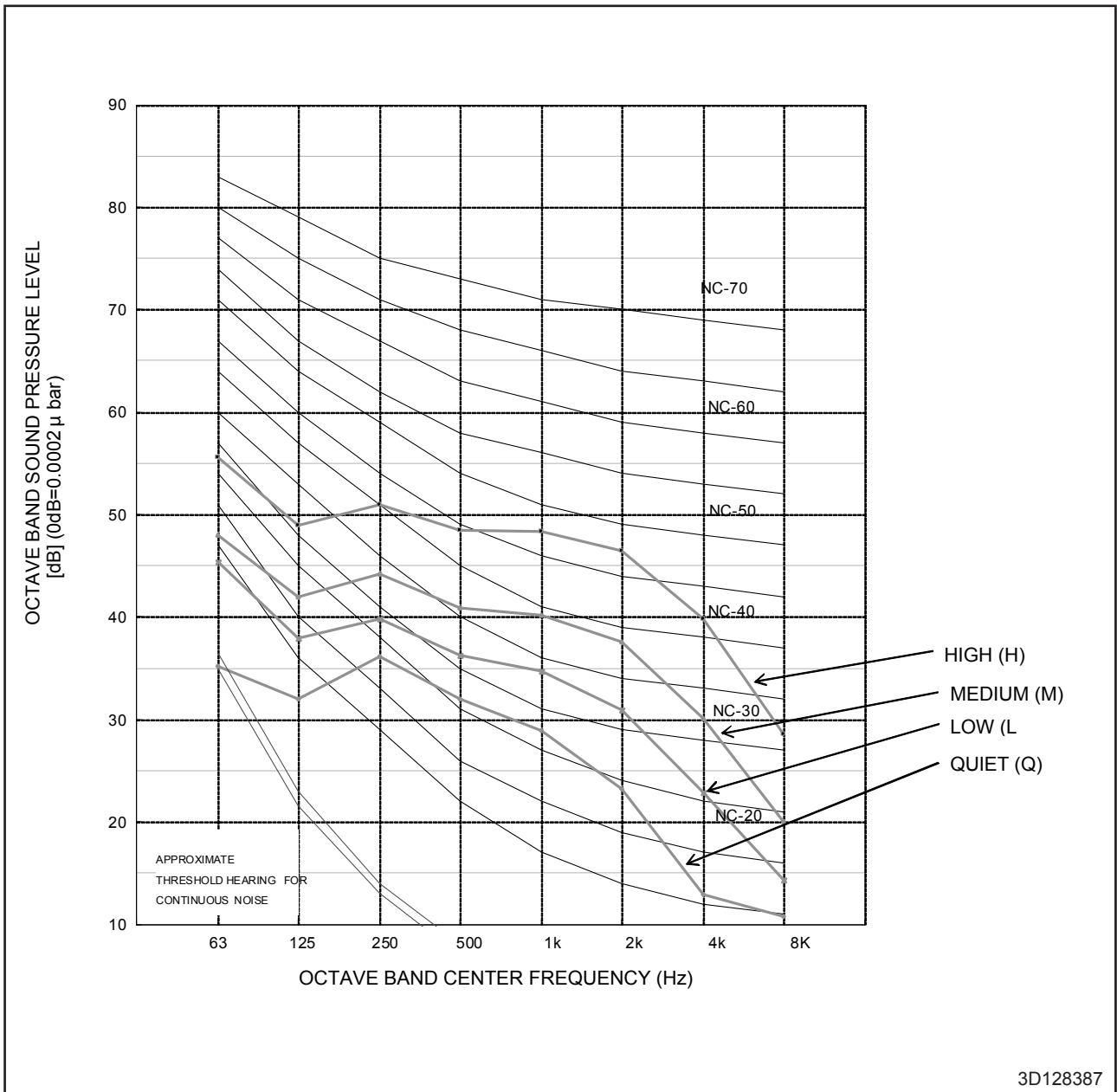


3D128385

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTK24A	High	56	49	51	49	48	46	40	29	53	47
	Med	48	42	44	41	40	38	30	20	45	39
	Low	45	38	40	36	35	31	23	14	39	34
	Quiet	35	32	36	32	29	23	13	11	34	28

NC Curve



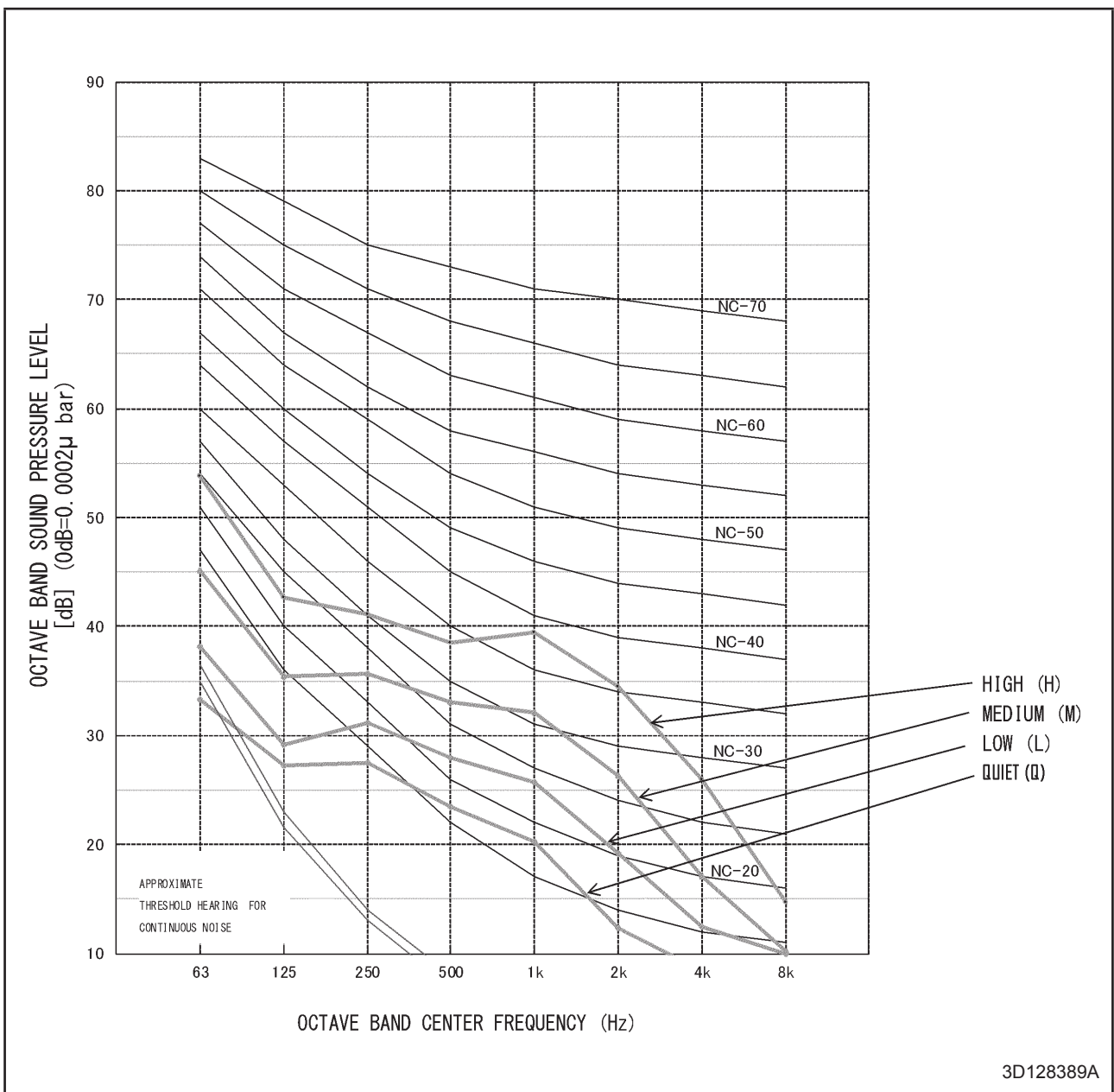
3D128387

Heatpump

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX09A (Cooling)	High	54	43	41	39	39	35	26	15	43	38
	Med	45	35	36	33	32	26	17	10	36	31
	Low	38	29	31	28	26	19	12	10	30	24
	Quiet	33	27	28	24	20	12	8	9	25	18

NC Curve

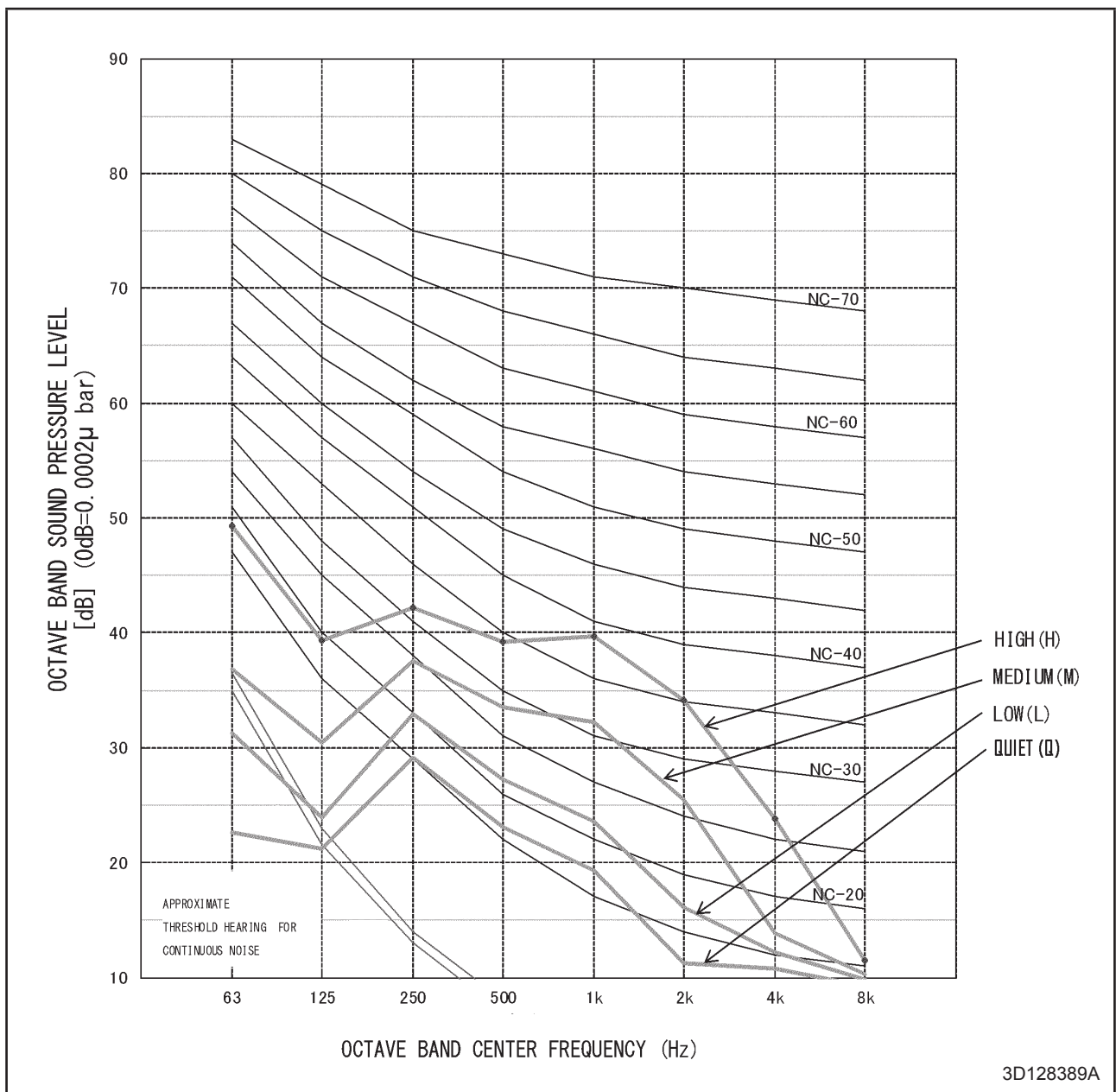


Heatpump

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX09A (Heating)	High	49	39	42	39	40	34	24	11	43	39
	Med	37	30	38	34	32	25	14	10	36	31
	Low	31	24	33	27	24	16	12	10	29	22
	Quiet	23	21	29	23	19	11	11	9	25	17

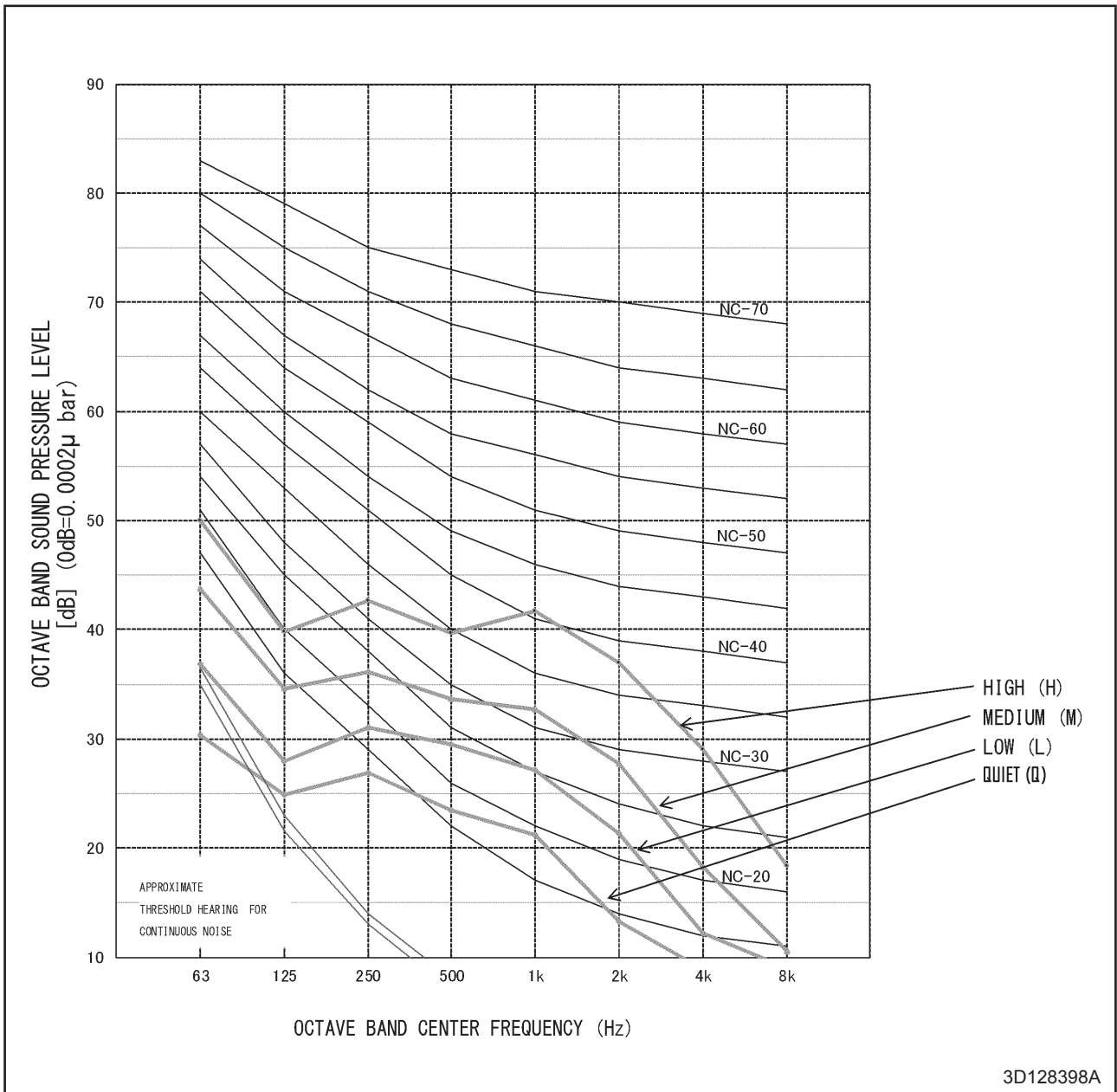
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX12A (Cooling)	High	50	40	43	40	42	37	29	18	45	41
	Med	44	35	36	34	33	28	18	11	37	32
	Low	37	28	31	30	27	21	12	9	31	25
	Quiet	30	25	27	24	21	13	9	9	26	19

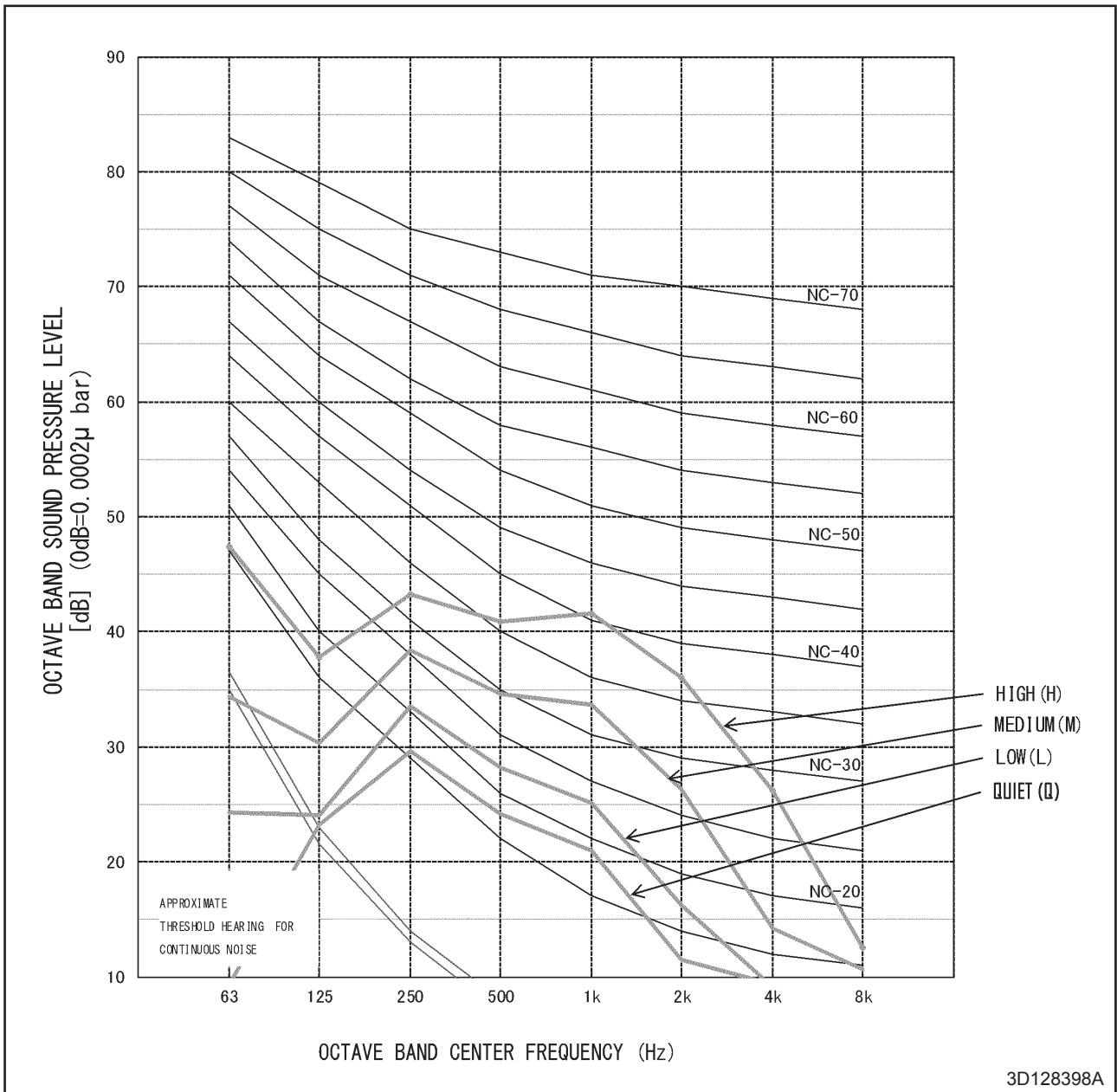
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX12A (Heating)	High	47	38	43	41	42	36	26	13	45	41
	Med	34	30	38	35	34	26	14	11	37	33
	Low	24	24	34	28	25	16	9	9	30	23
	Quiet	9	23	30	24	21	12	9	9	26	19

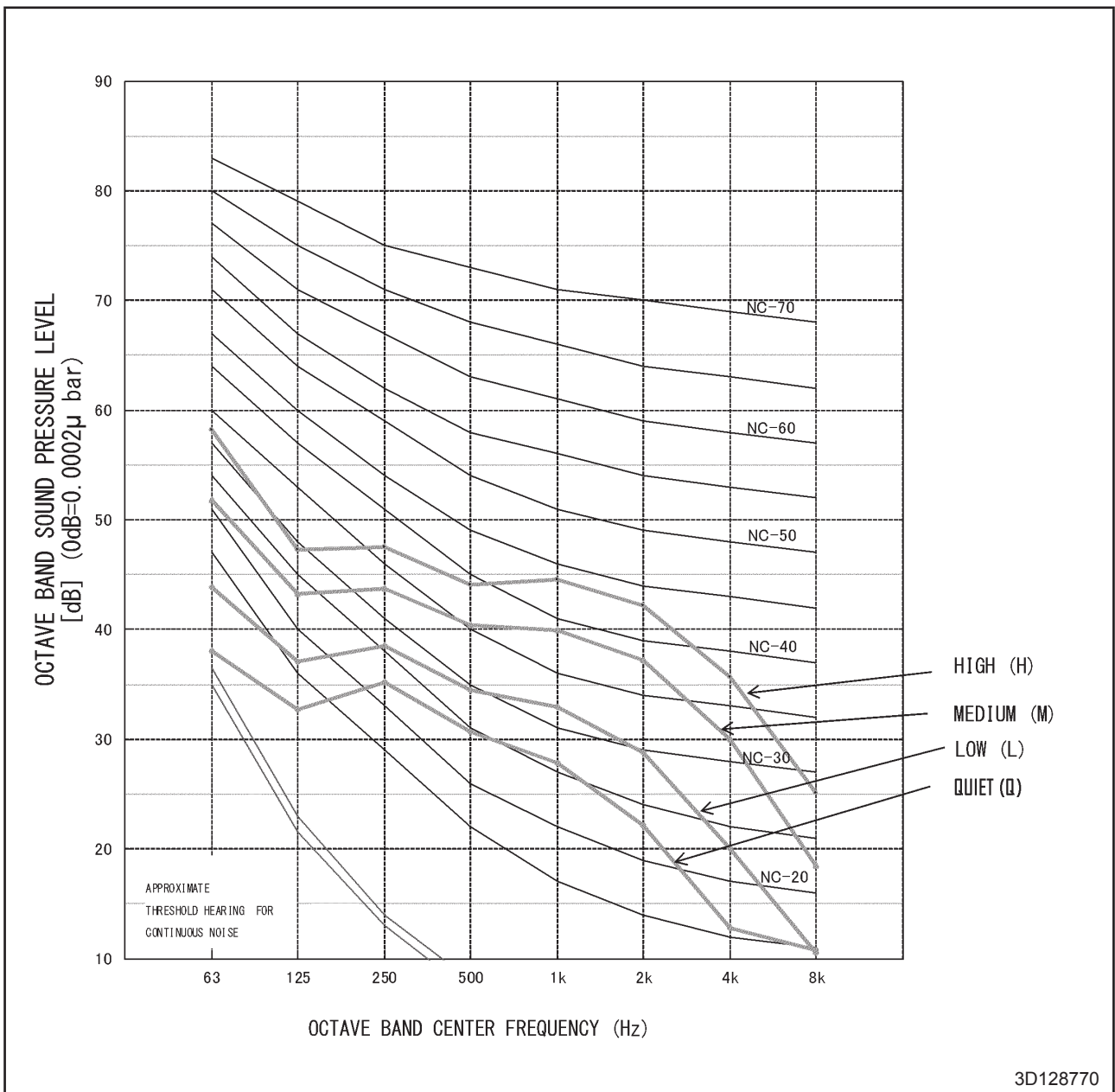
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX18A (Cooling)	High	58	47	48	44	44	42	36	25	49	43
	Med	52	43	44	40	40	37	30	19	44	39
	Low	44	37	39	34	33	29	20	11	38	32
	Quiet	38	33	35	31	28	22	13	11	33	26

NC Curve

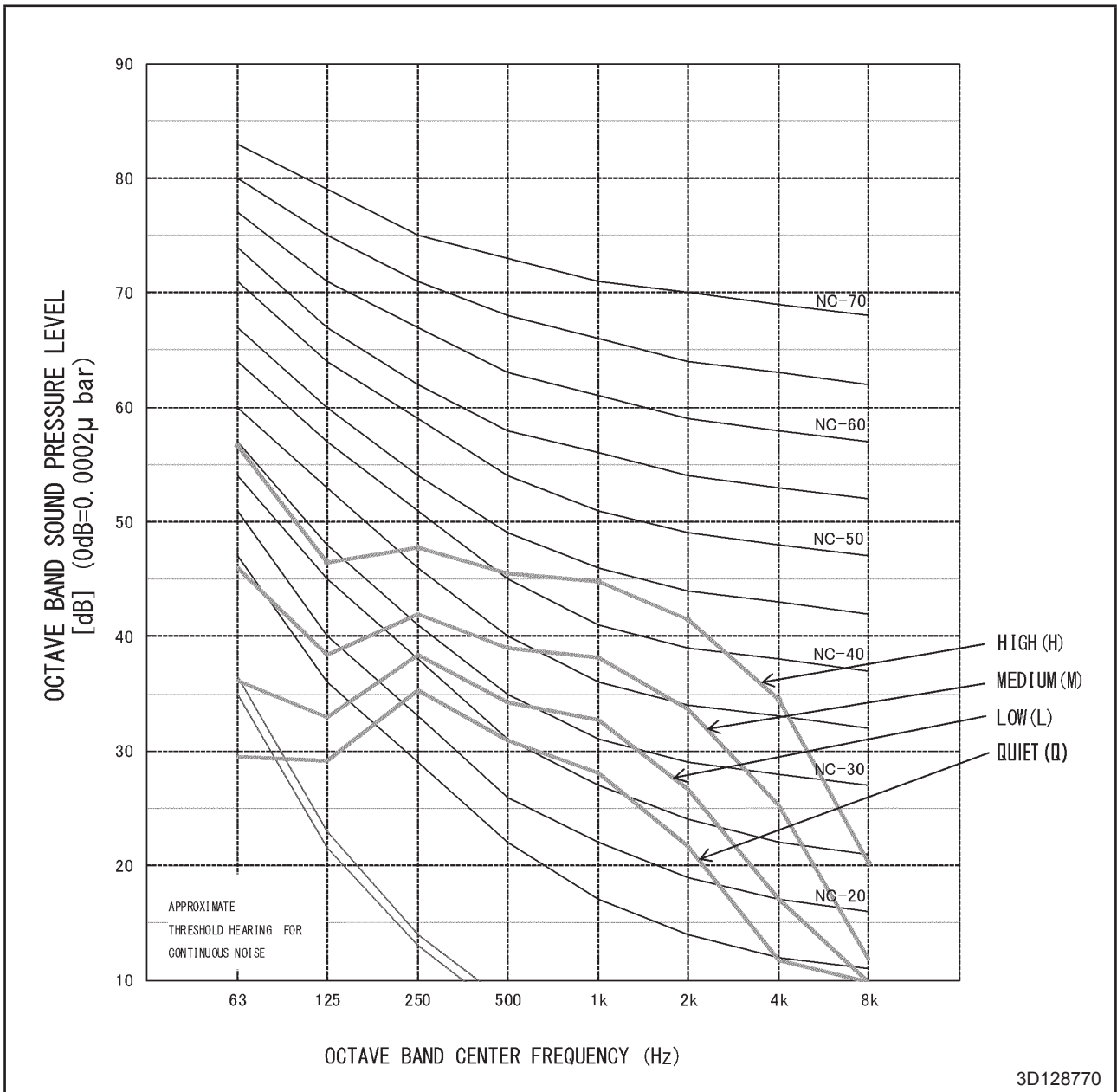


3D128770

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20µPa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX18A (Heating)	High	57	46	48	45	45	41	35	20	49	44
	Med	46	38	42	39	38	34	25	12	42	37
	Low	36	33	38	34	33	27	17	10	37	32
	Quiet	30	29	35	31	28	22	12	10	33	26

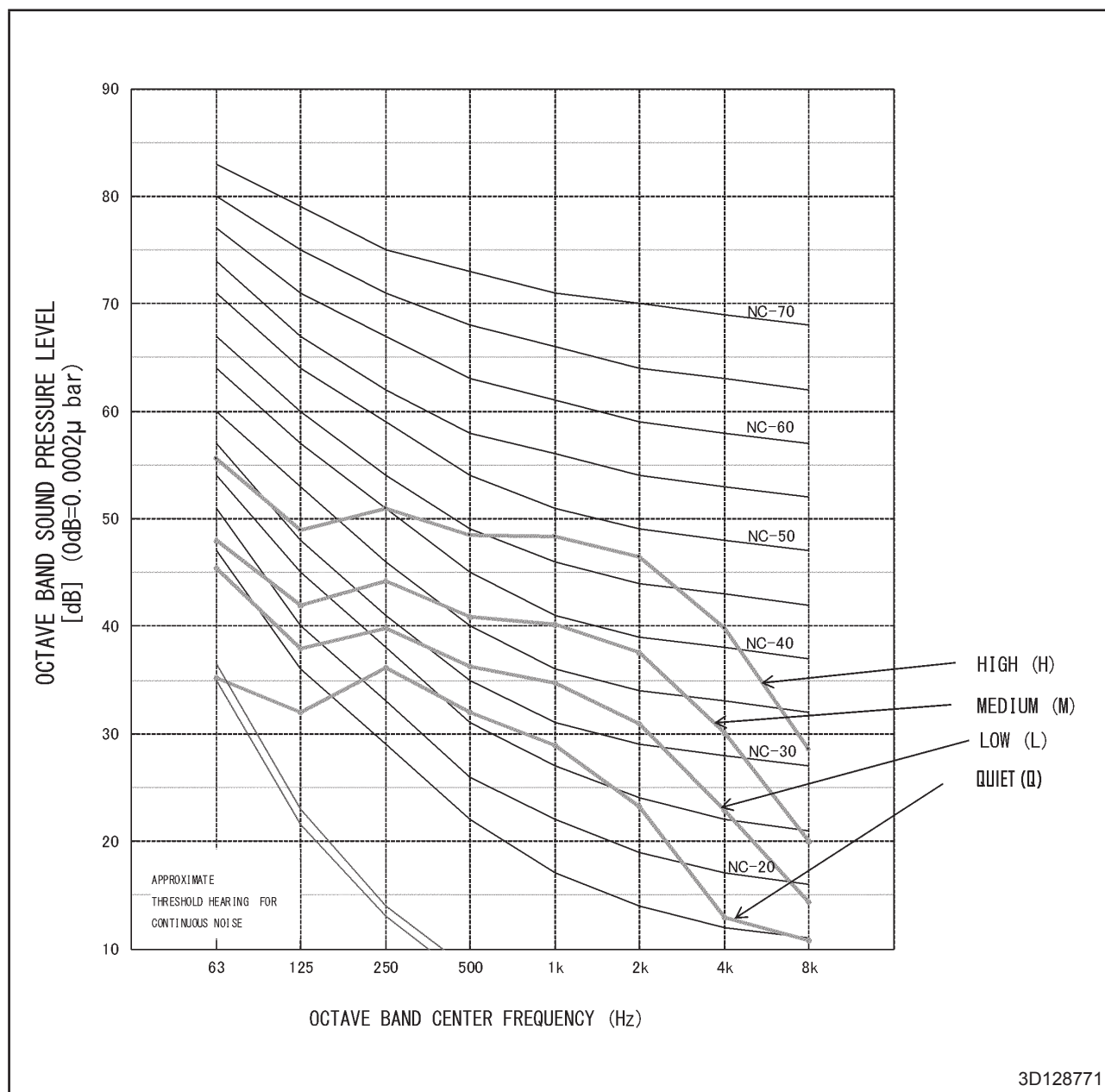
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX24A (Cooling)	High	56	49	51	49	48	46	40	29	53	47
	Med	48	42	44	41	40	38	30	20	45	39
	Low	45	38	40	36	35	31	23	14	39	34
	Quiet	35	32	36	32	29	23	13	11	34	28

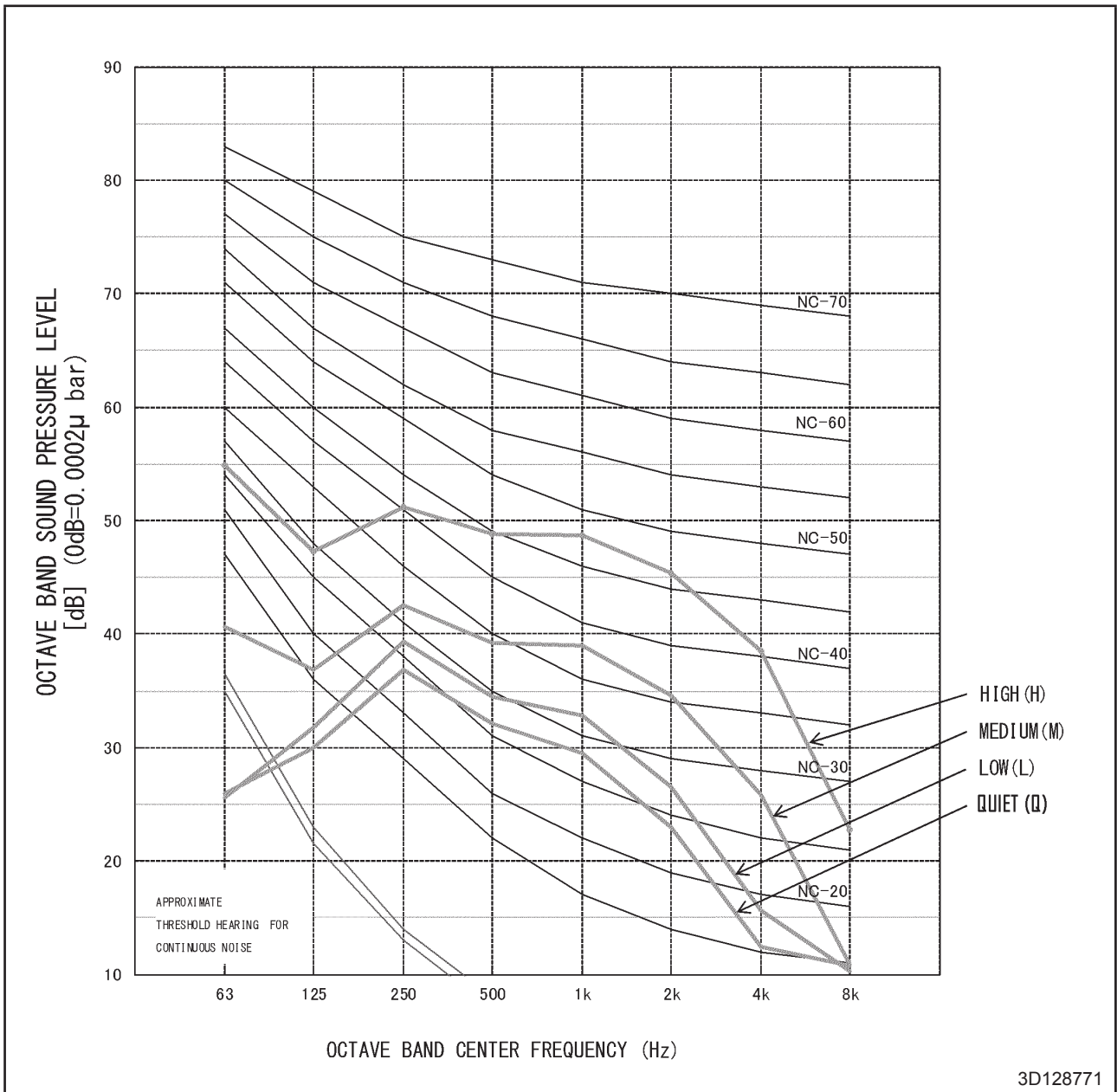
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20 μ Pa)								Overall (dBA)	Noise Criteria
		63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FTX24A (Heating)	High	55	47	51	49	49	45	39	23	53	48
	Med	41	37	43	39	39	35	26	11	43	38
	Low	26	32	39	34	33	27	16	10	37	32
	Quiet	26	30	37	32	29	23	12	11	34	28

NC Curve



Electric Characteristic

Unit Combination		Power Supply				COMP		OFM		IFM	
Indoor Unit	Outdoor Unit	Hz-Volts	Voltage Range	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
FTK09A	RK09A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	7.00	15.0	50.0	6.75	0.041	0.36	0.038	0.30
		60Hz-230V									
FTK12A	RK12A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	7.80	15.0	63.0	7.50	0.041	0.47	0.038	0.36
		60Hz-230V									
FTK18A	RK18A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	13.40	20.0	66.0	13.00	0.128	0.99	0.035	0.50
		60Hz-230V									
FTK24A	RK24A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	13.40	20.0	78.0	13.00	0.128	1.00	0.035	0.50
		60Hz-230V									
FTX09A	RX09A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	8.70	15.0	62.0	8.50	0.041	0.36	0.038	0.30
		60Hz-230V									
FTX12A	RX12A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	8.70	15.0	74.0	8.50	0.041	0.47	0.038	0.36
		60Hz-230V									
FTX18A	RX18A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	16.40	20.0	78.0	16.00	0.128	0.99	0.035	0.50
		60Hz-230V									
FTX24A	RX24A	60Hz-208V	MAX. 60Hz 253V MIN. 60Hz 187V	16.40	20.0	83.0	16.00	0.128	1.00	0.035	0.50
		60Hz-230V									

Symbols:

MCA : Min. circuit amps (A)
 MFA : Max. fuse amps (A)
 RHz : Rated operating frequency (Hz)
 RLA : Rated loads amps (A)
 OFM : Outdoor fan motor
 IFM : Indoor fan motor
 kW : Fan motor rated output (kW)
 FLA : Full load amps (A)
 COMP : Compressor

Notes:

1. RHz is the max frequency that comes in cooling operation and heating operation.
2. RLA is the max current that comes in cooling operation and heating operation.
3. Maximum allowable voltage that is unbalance between phases is 2%.
4. Select wire size based on the larger value of MCA.
5. Use circuit breaker instead of fuse

3D128371

Accessories List

	Optional Accessories	Model Number
Indoor Unit	Wired Controller	BRC51D61
	Wireless Interface Adapter	BRP072A43
Outdoor Unit	Air Directional Change Grille (Class 09/12)	KPW937F4
	Air Directional Change Grille (Class 18/24)	KPW063B4E
	Drain Pan Heater (Class 09/12)	FTDBHMS, KEH067A41E
	Drain Pan Heater (Class 18/24)	KEH063A4EA
	Outdoor Unit Protection Net Grille (Class 09/12)	KKG067A41
	Outdoor Unit Protection Net Grille (Class 18/24)	-

