ENGINEERING DATA

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

FTK-A & FTX-A Series

R410A

ED5WM9S-NA21V1

Supersede : ED5WM9S-NA20V1

Table of Contents

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 / 1Phase / 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 / 1Phase / 60Hz
Country	**U** : United States

Remark:
*Capacity value under Nomenclature is an indication.
Please refer to Specifications 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
	Operation Limit for Heating (°FWB)(O/D)	-	-	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	32-13/16 ft	32-13/16 ft	32-13/16 ft	32-13/16 ft
	Either Side Drain (Right or Left)	●	●	●	●
Remote Control	BAG Connectivity	●*	●*	●*	●*
	WIFI Connectivity	●*	●*	●*	●*
	DIII-NET Connectivity	-	-	-	-
Remote Controller	Wireless	BRC52B64	BRC52B64	BRC52B63	BRC52B63
	Wired (Optional)	BRC51D61	BRC51D61	BRC51D61	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		inch (mm)	3/4 (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	
	Poles		8	
Compressor	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 SUBJECTED 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		inch (mm)	3/4 (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	
	Poles		8	
Compressor	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

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
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		inch (mm)	3/4 (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	
	Poles		8	
Compressor	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

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		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		inch (mm)	3/4 (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	
	Poles		8	
Compressor	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

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		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)	
INDOOR UNIT			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		inch (mm)	3/4 (19.00)	
OUTDOOR UNIT			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	
	Poles		8	
Compressor	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		inch (mm)	3/4 (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	
	Poles		8	
Compressor	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.

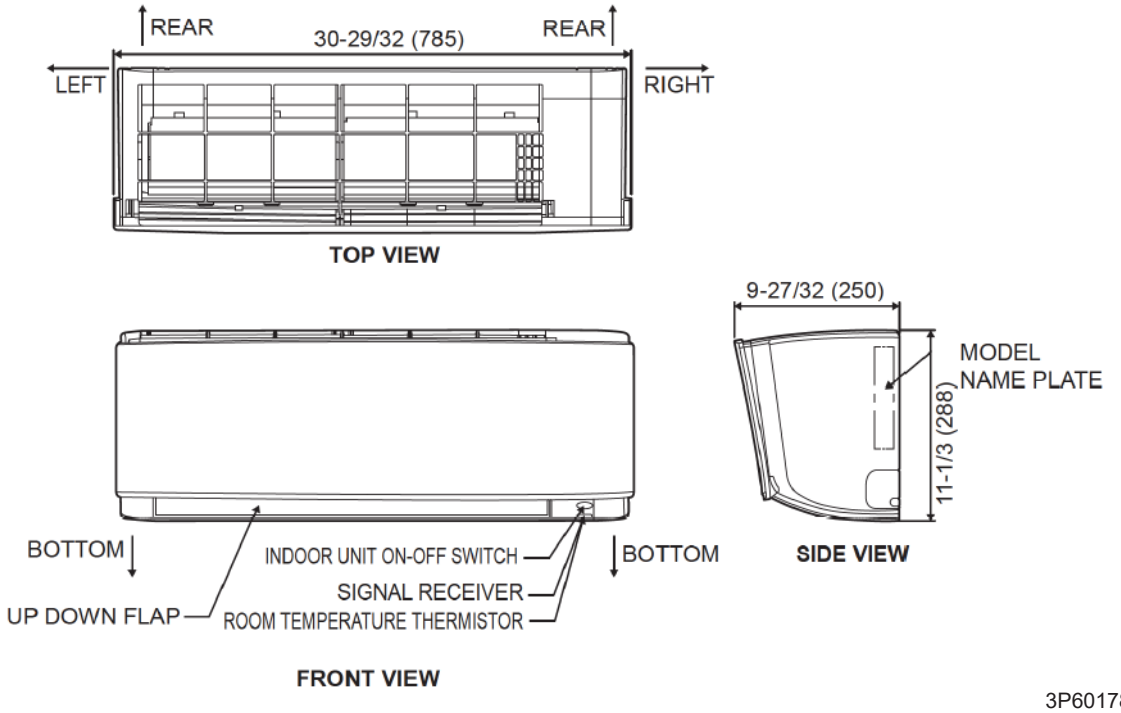
COOLING	HEATING
INDOOR: 80°FDB (26.7°CDB) / 67°FWB (19.4°CWB)	INDOOR: 70°FDB (21.1°CDB)
OUTDOOR: 95°FDB (35°CDB)	OUTDOOR: 47°FDB (8.3°CDB) / 43°FWB (6.1°CWB)

Dimensions

Indoor Unit

Model : FTK09/12A, FTX09/12A

FOR ILLUSTRATIVE PURPOSES ONLY

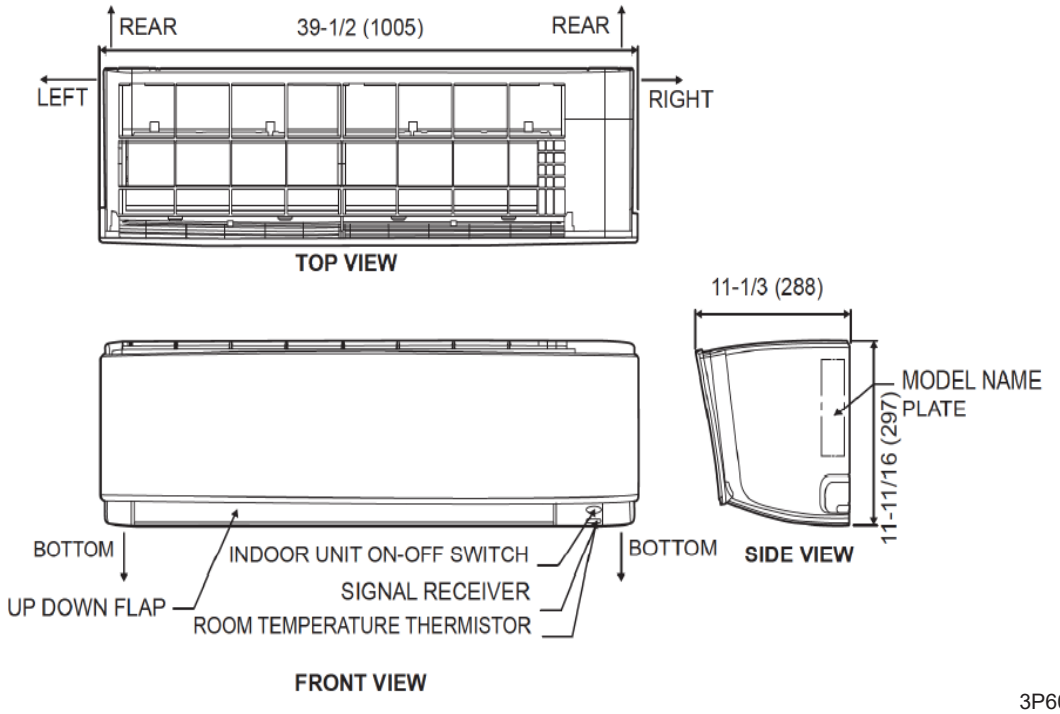


3P601788-1C

Note: Dimension in inch (mm)

Model : FTK18/24A, FTX18/24A

FOR ILLUSTRATIVE PURPOSES ONLY



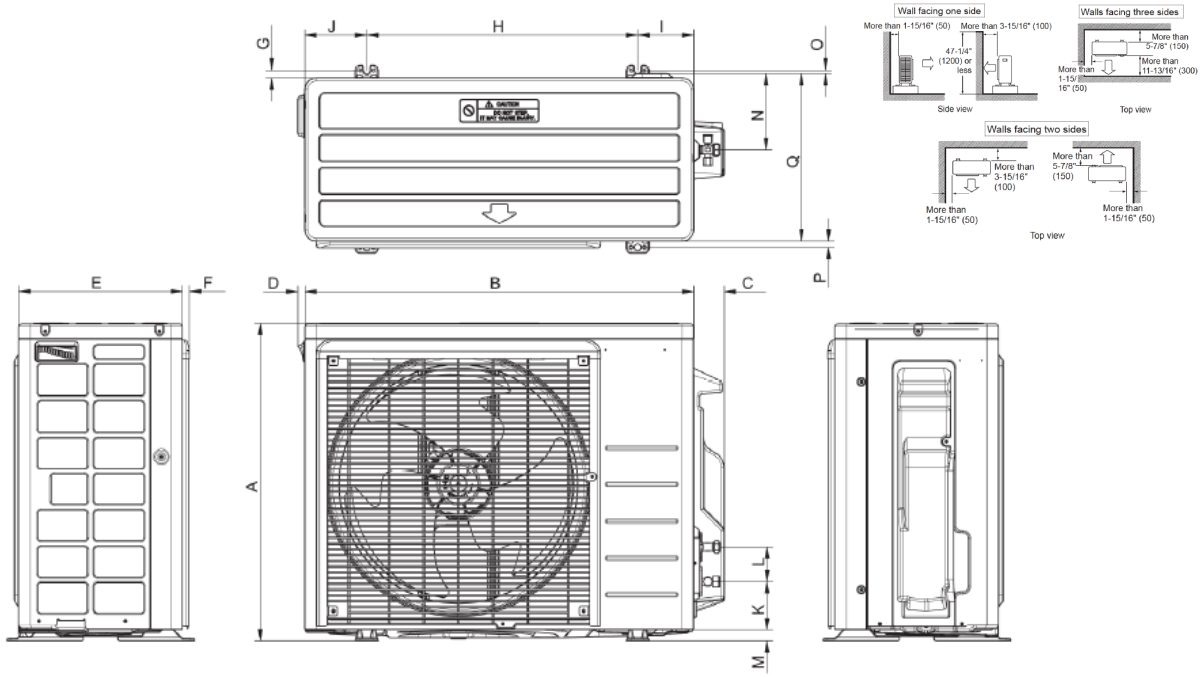
3P601788-1C

Note: Dimension in inch (mm)

Outdoor Unit

Model : RK09/12A, RX09/12A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension / Model	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)

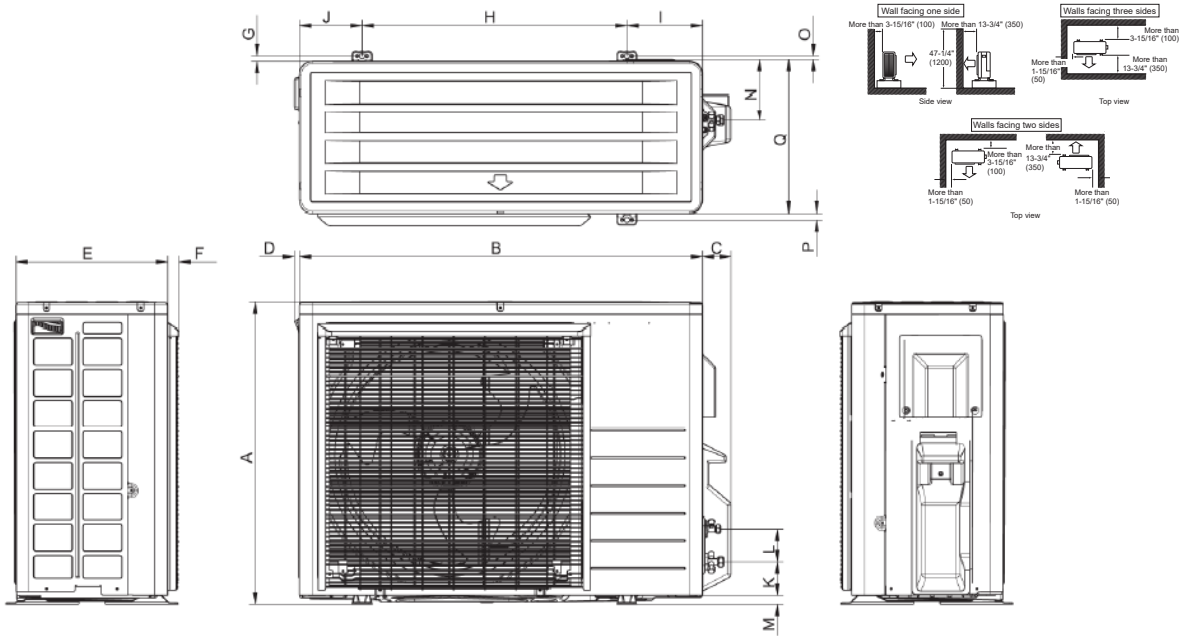
Dimension / Model	J	K	L	M	N	O	p	Q
09/12	4-1/4 (108)	3-3/8 (86)	2-3/8 (60)	25/32 (20)	5-1/4 (133)	3/16 (5)	7/16 (11)	11-1/2 (292)

3P601788-1C

Note: Dimension in inch (mm)

Model : RK18/24A, RX18/24A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension / Model	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)

Dimension / Model	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)

3P601788-1C

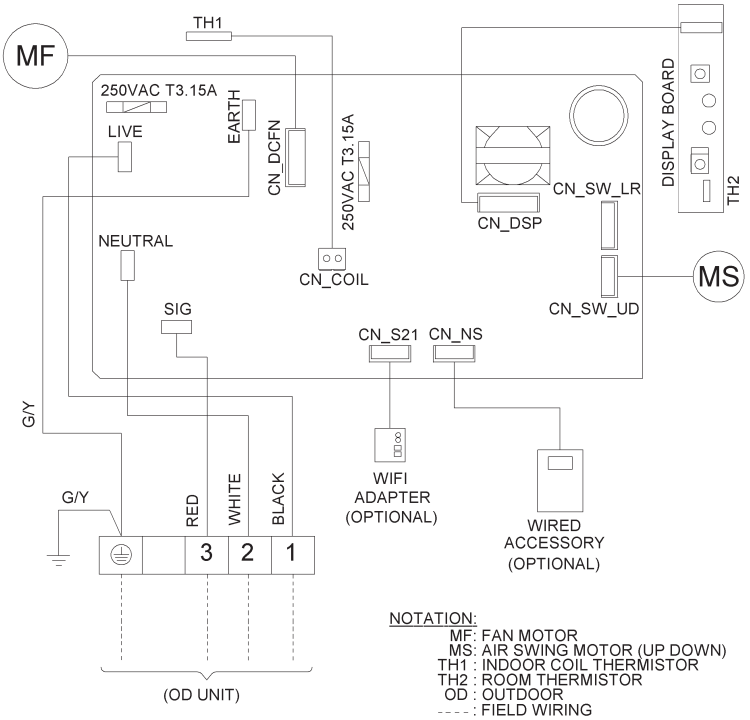
Note: Dimension in inch (mm)

Wiring Diagrams

Indoor Unit

Cooling Only

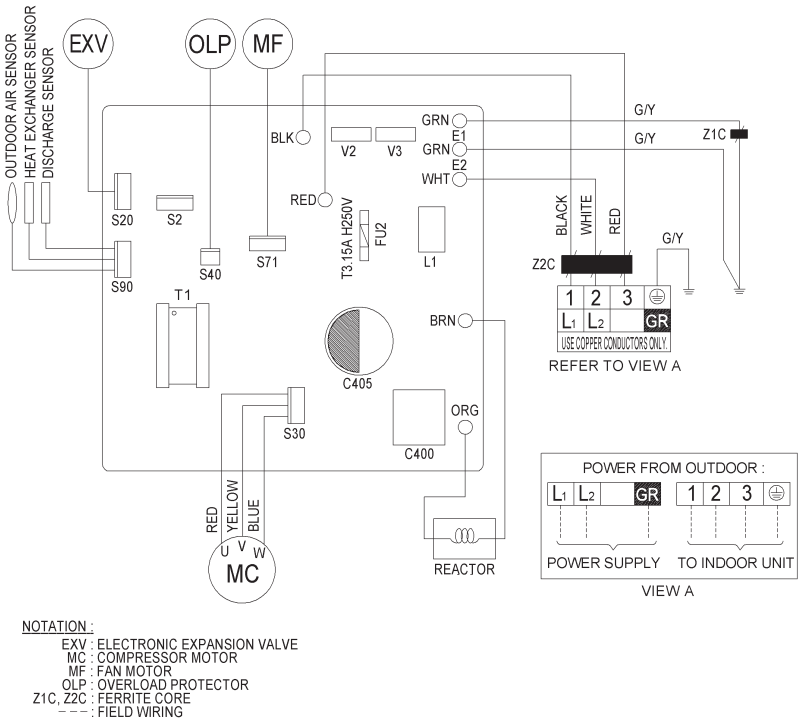
Model : FTKA-A, FTXA-A



3P599152C

Outdoor Unit

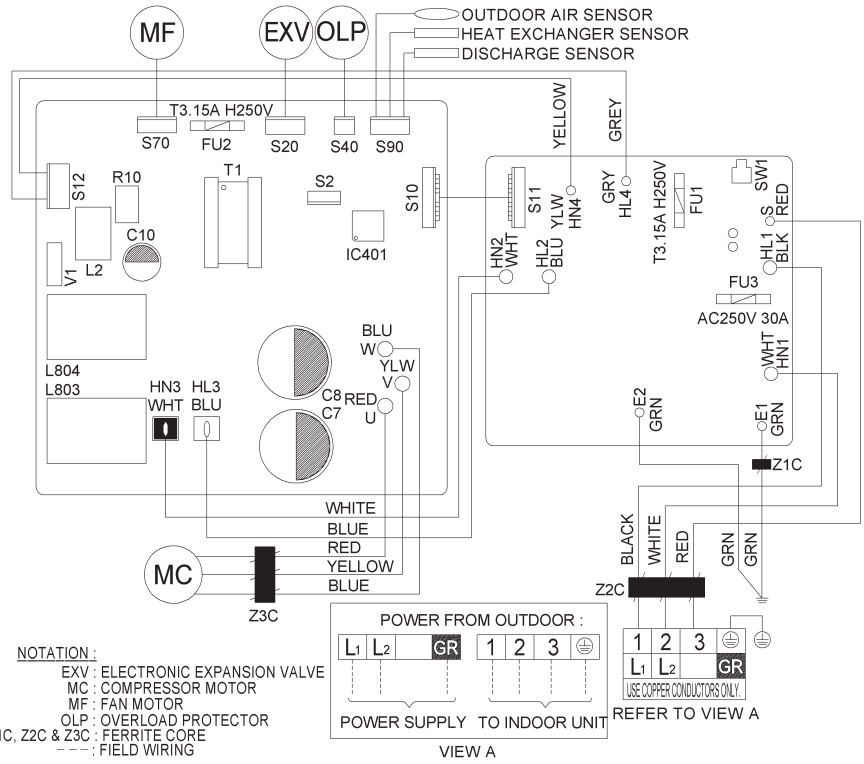
Model : RK09/12A



NOTATION :
EXV : ELECTRONIC EXPANSION VALVE
MC : COMPRESSOR MOTOR
MF : FAN MOTOR
OLP : OVERLOAD PROTECTOR
Z1C, Z2C : FERRITE CORE
– – – : FIELD WIRING

3P606152

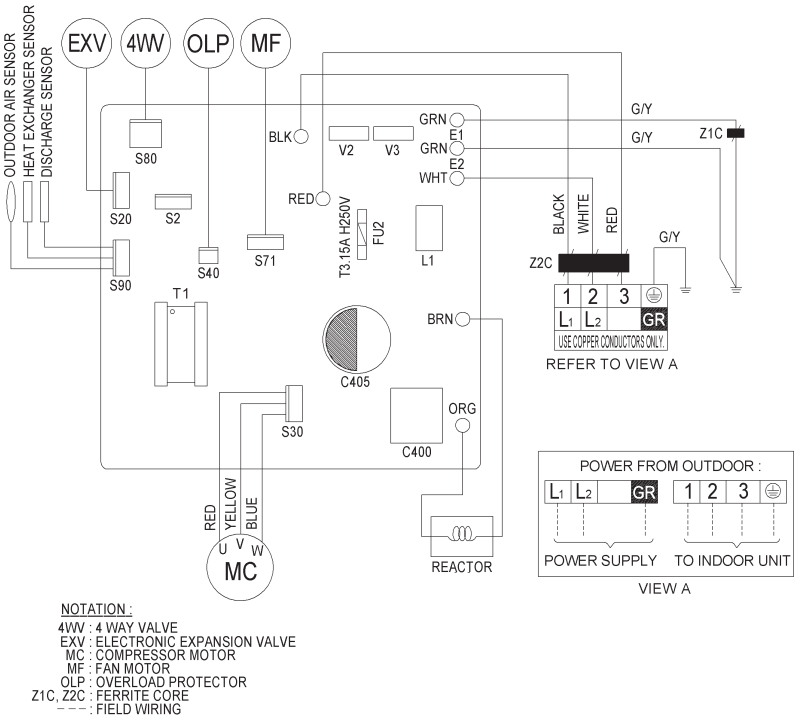
Model : RK18/24A



NOTATION :
EXV : ELECTRONIC EXPANSION VALVE
MC : COMPRESSOR MOTOR
MF : FAN MOTOR
OLP : OVERLOAD PROTECTOR
Z1C, Z2C & Z3C : FERRITE CORE
– – – : FIELD WIRING

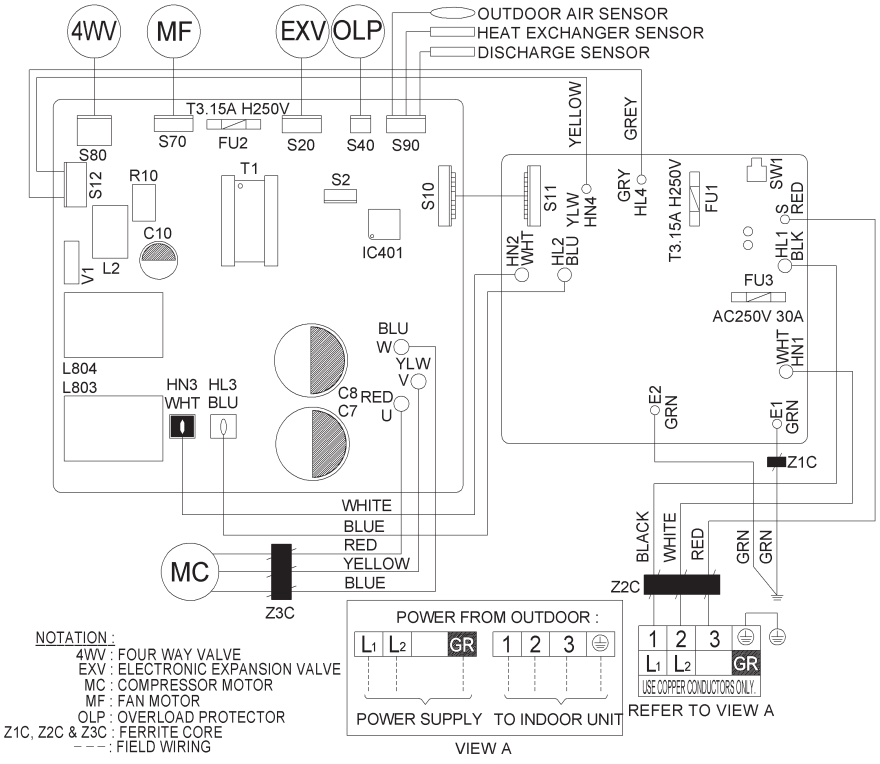
3P606148

Model : RX09/12A



3P599133A

Model : RX18/24A



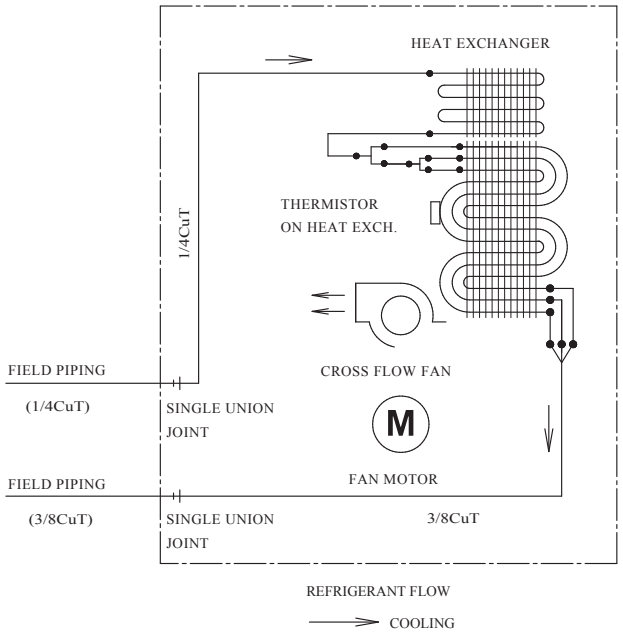
3P599144A

Piping Diagrams

Indoor Unit

Cooling Only

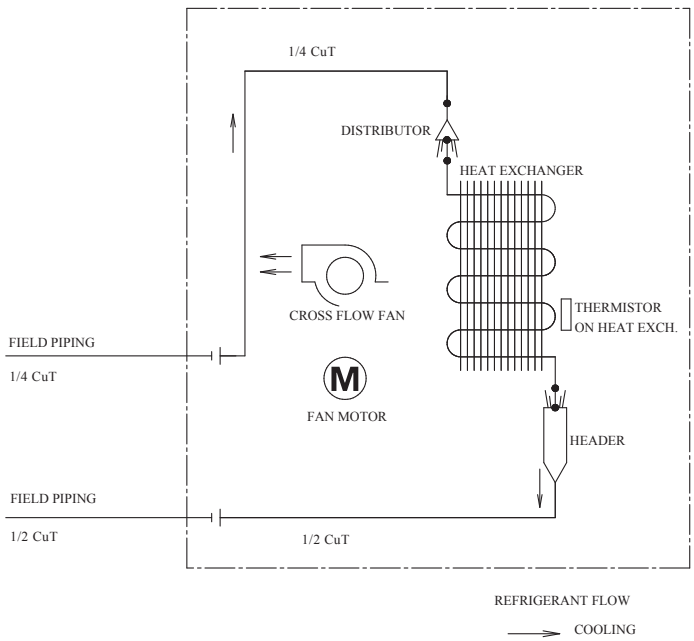
Model : FTK09/12A



3D128356

Note: Dimension in inch

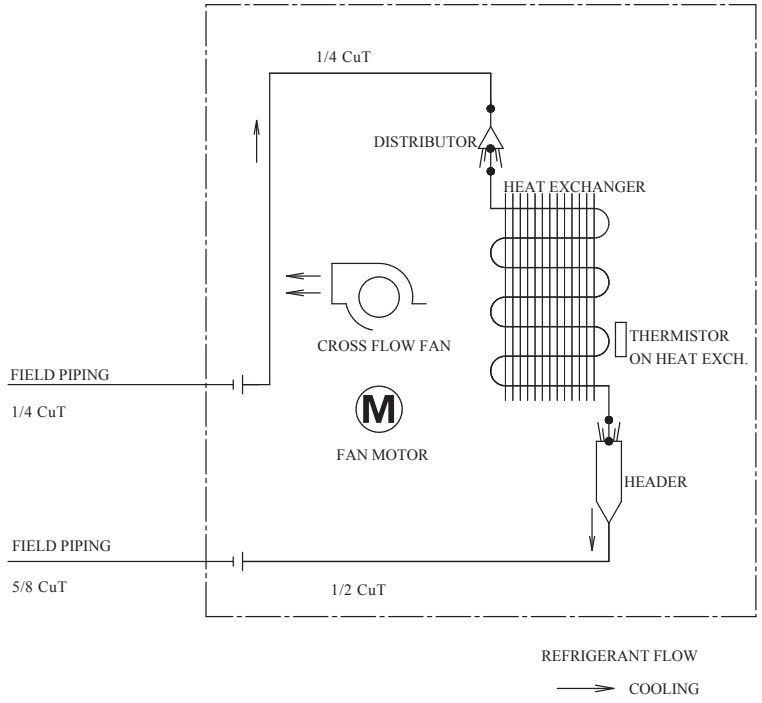
Model : FTK18A



3D128355

Note: Dimension in inch

Model : FTK24A

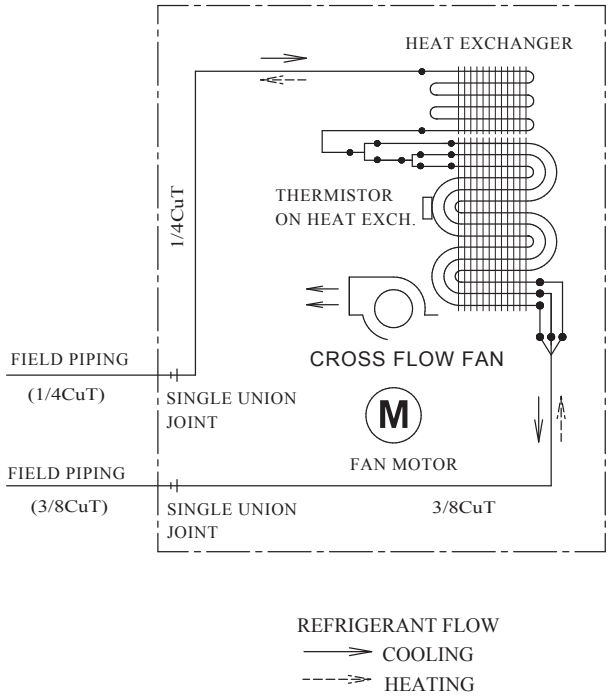


3D128357

Note: Dimension in inch

Heatpump

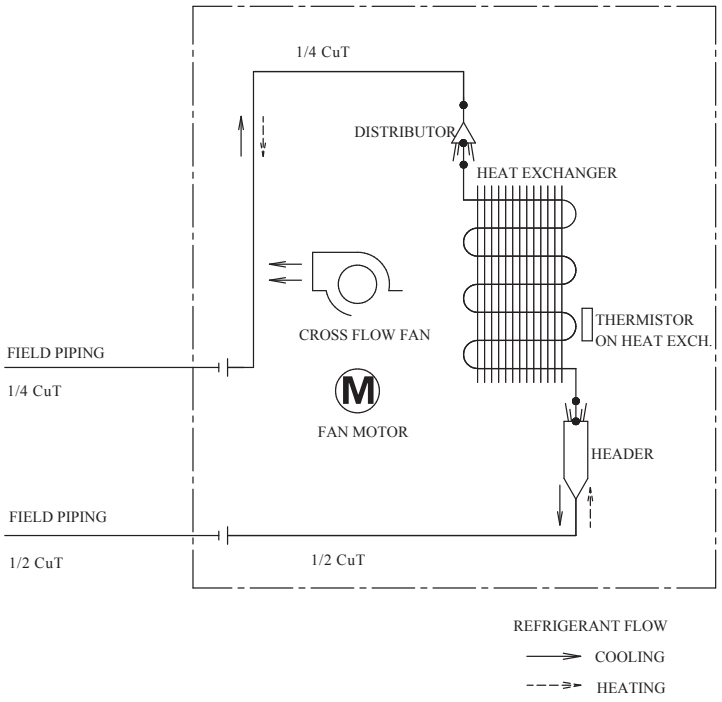
Model : FTX09/12A



3D128345

Note: Dimension in inch

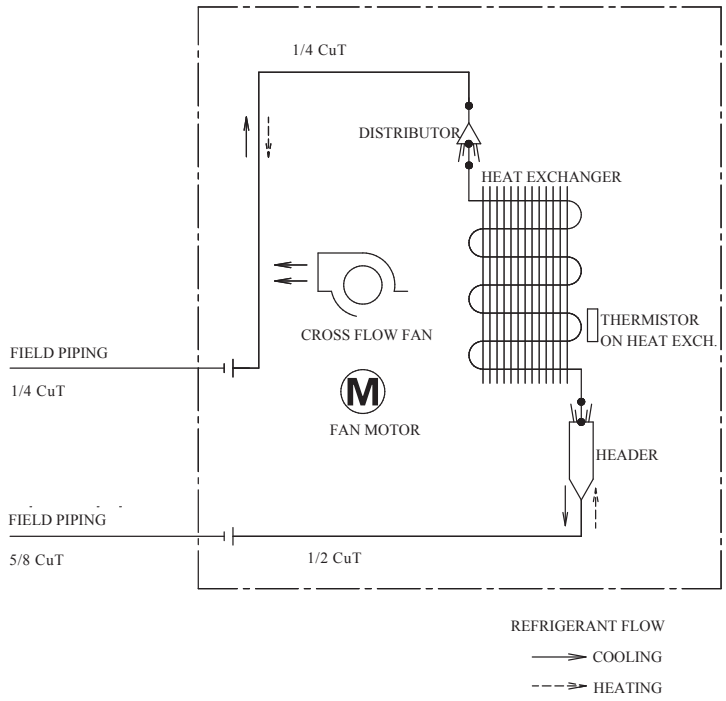
Model : FTX18A



3D128349

Note: Dimension in inch

Model : FTX24A



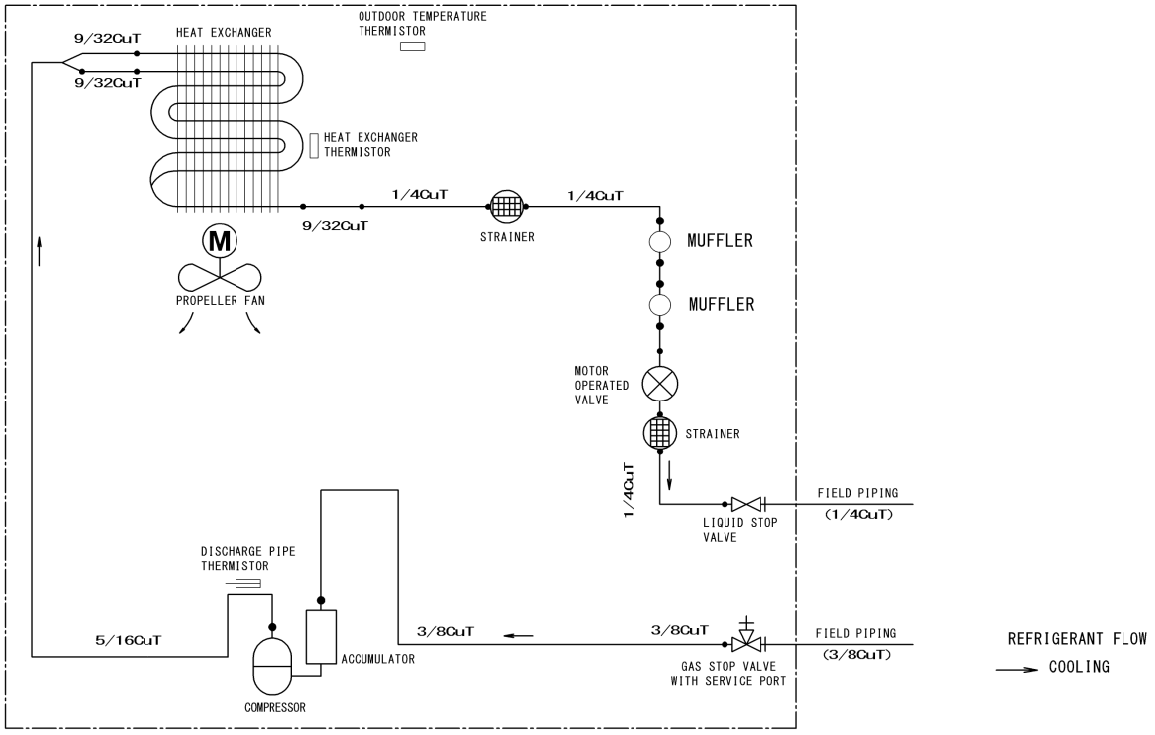
3D128352

Note: Dimension in inch

Outdoor Unit

Cooling Only

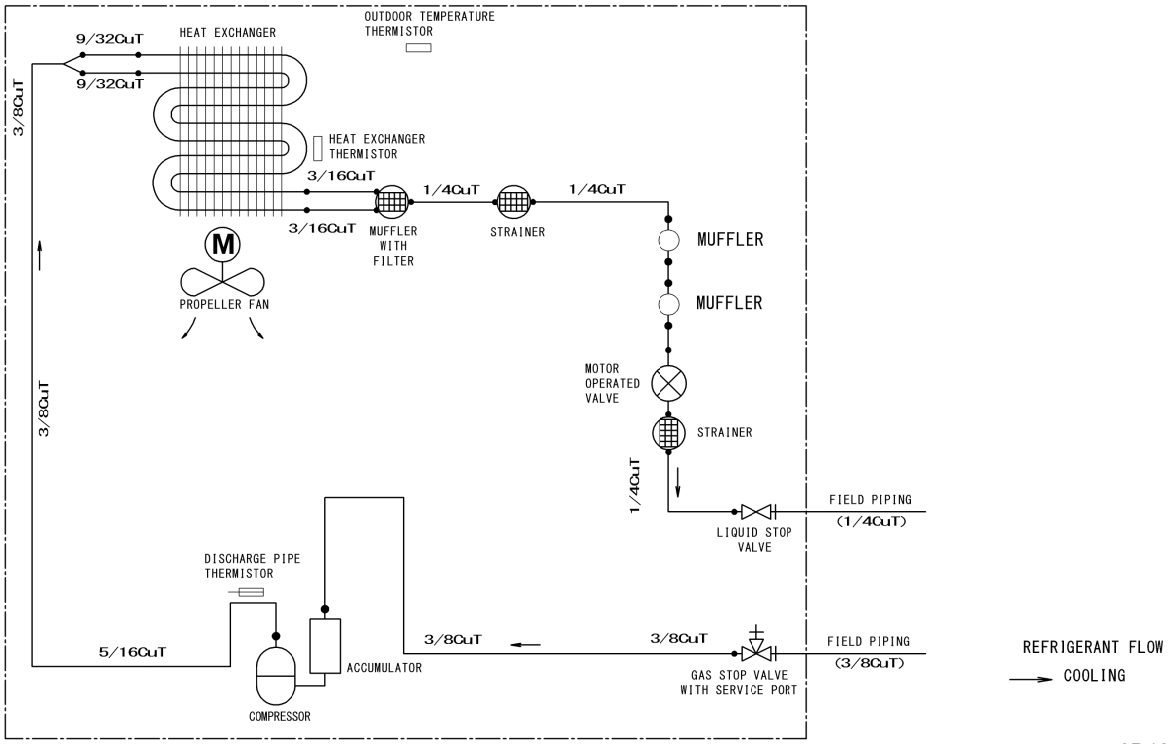
Model : RK09A



3D128348

Note: Dimension in inch

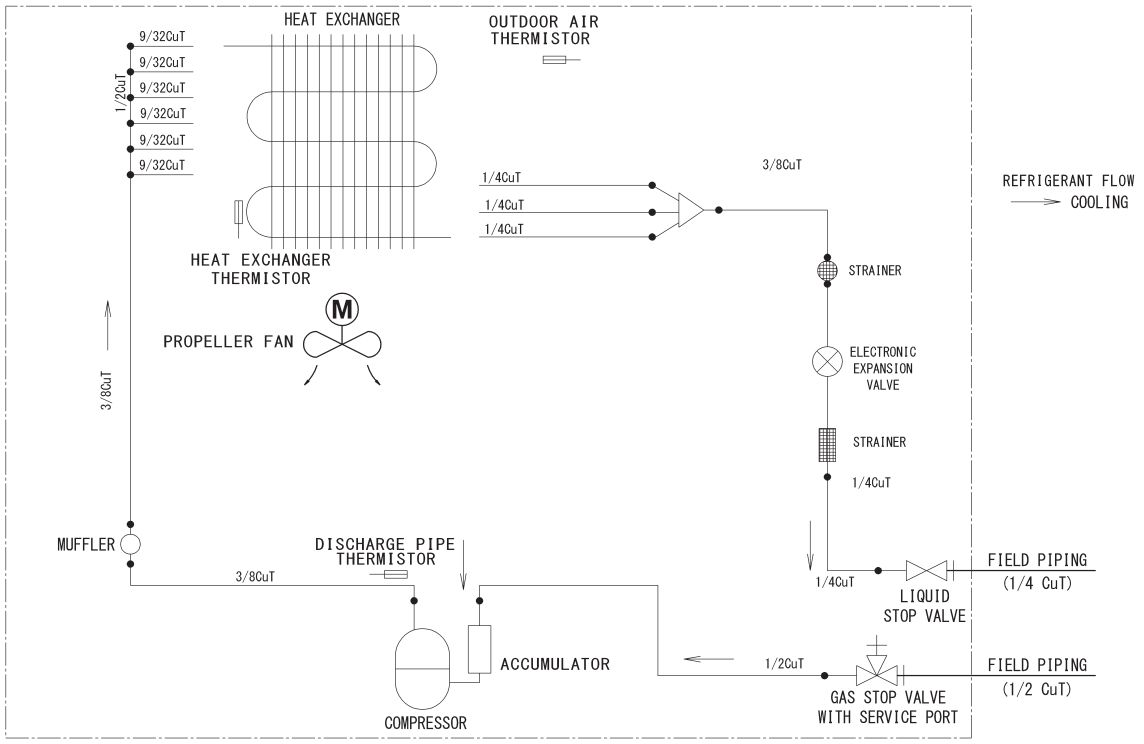
Model : RK12A



3D128350

Note: Dimension in inch

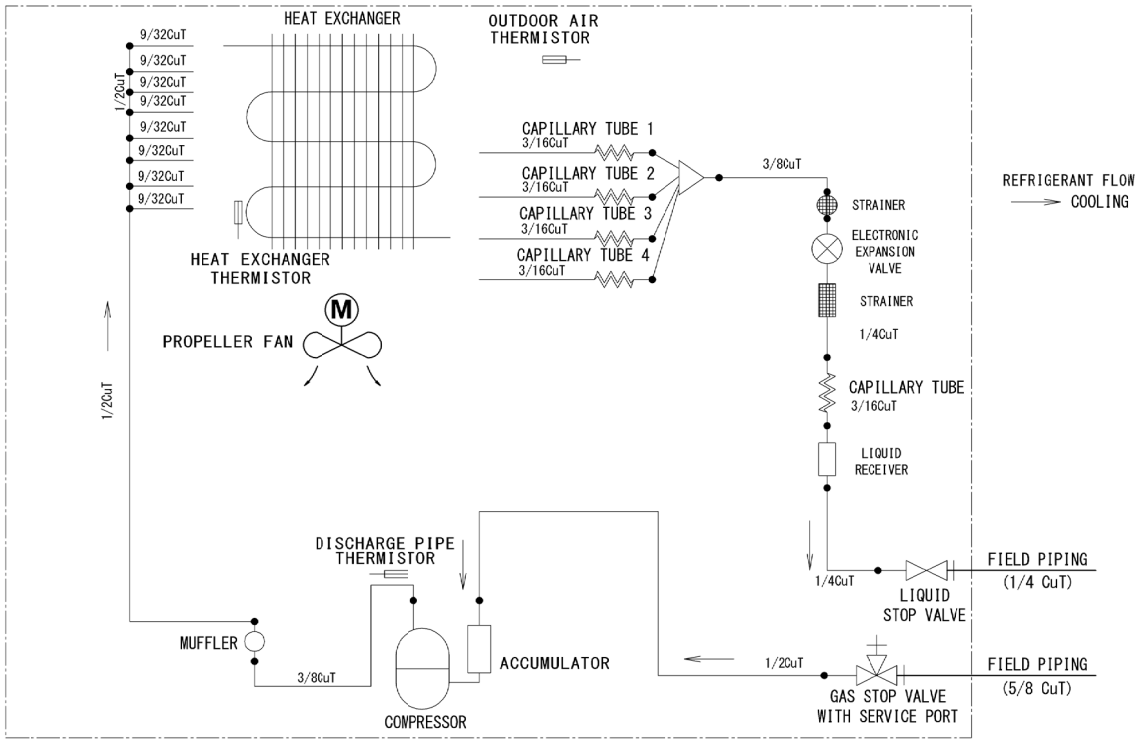
Model : RK18A



3D128351

Note: Dimension in inch

Model : RK24A

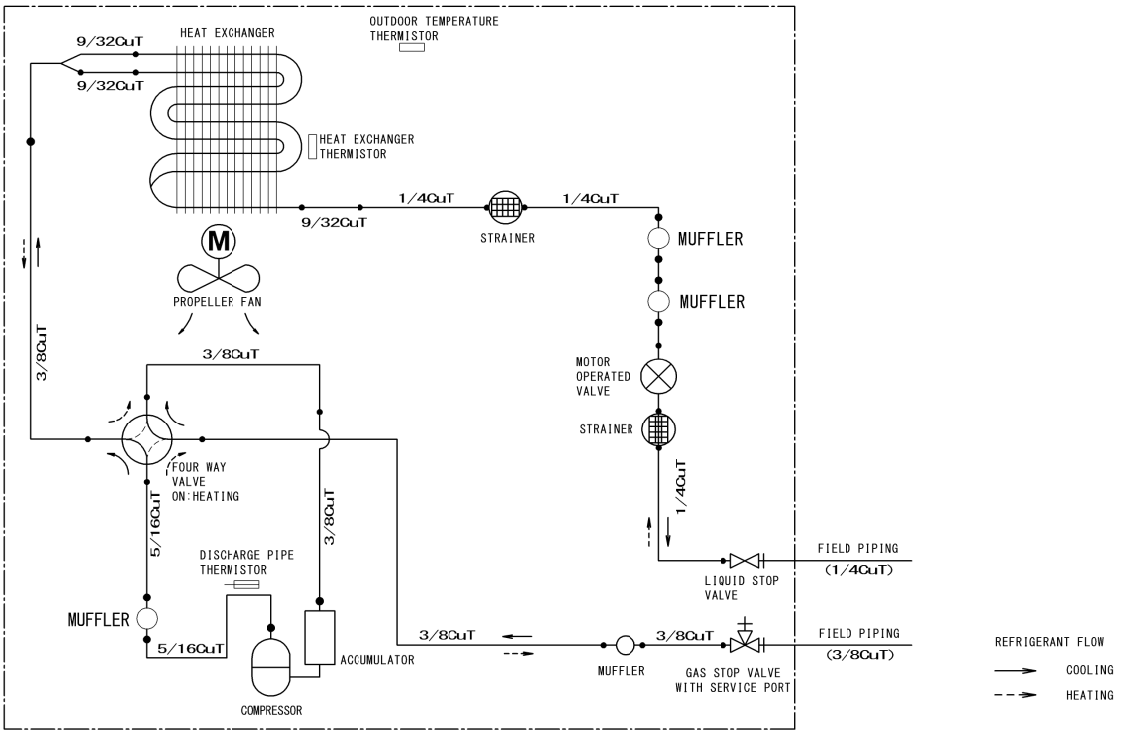


3D128354

Note: Dimension in inch

Heatpump

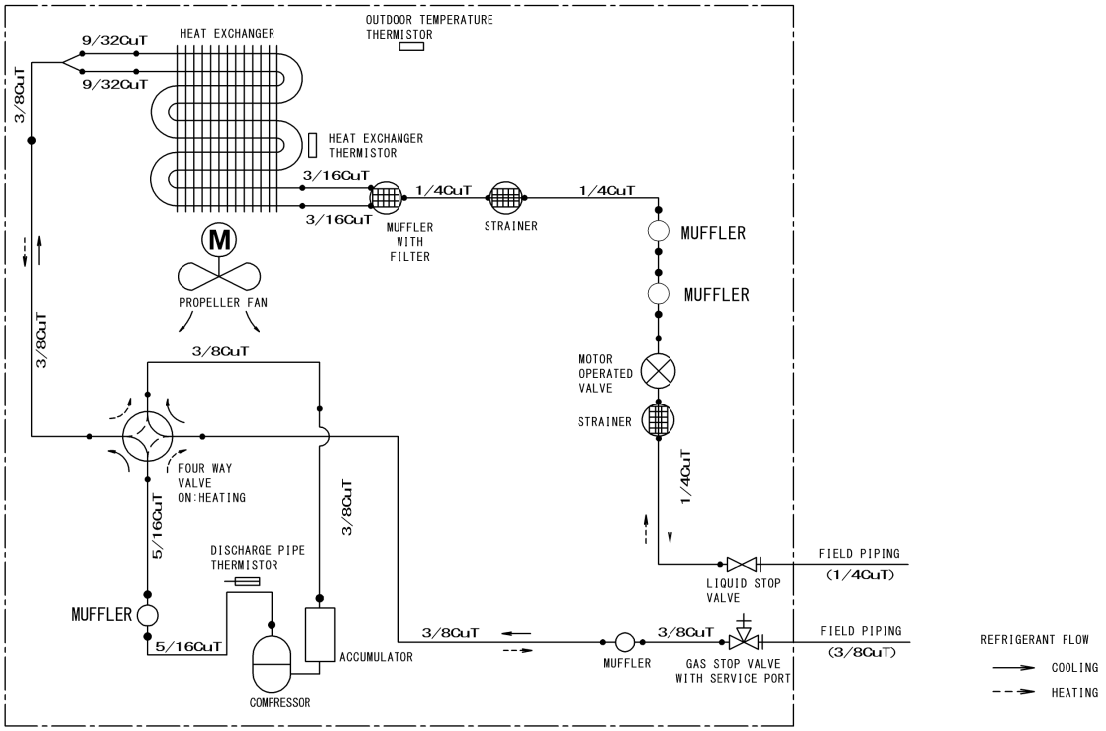
Model : RX09A



3D128321

Note: Dimension in inch

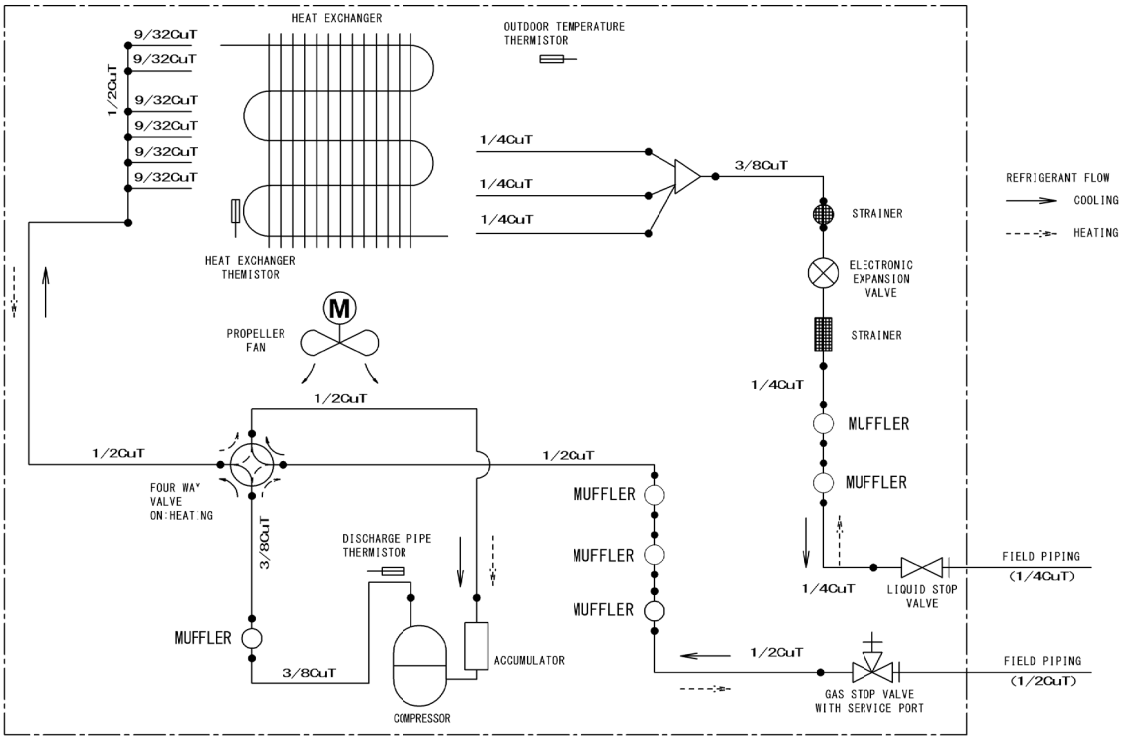
Model : RX12A



3D128343

Note: Dimension in inch

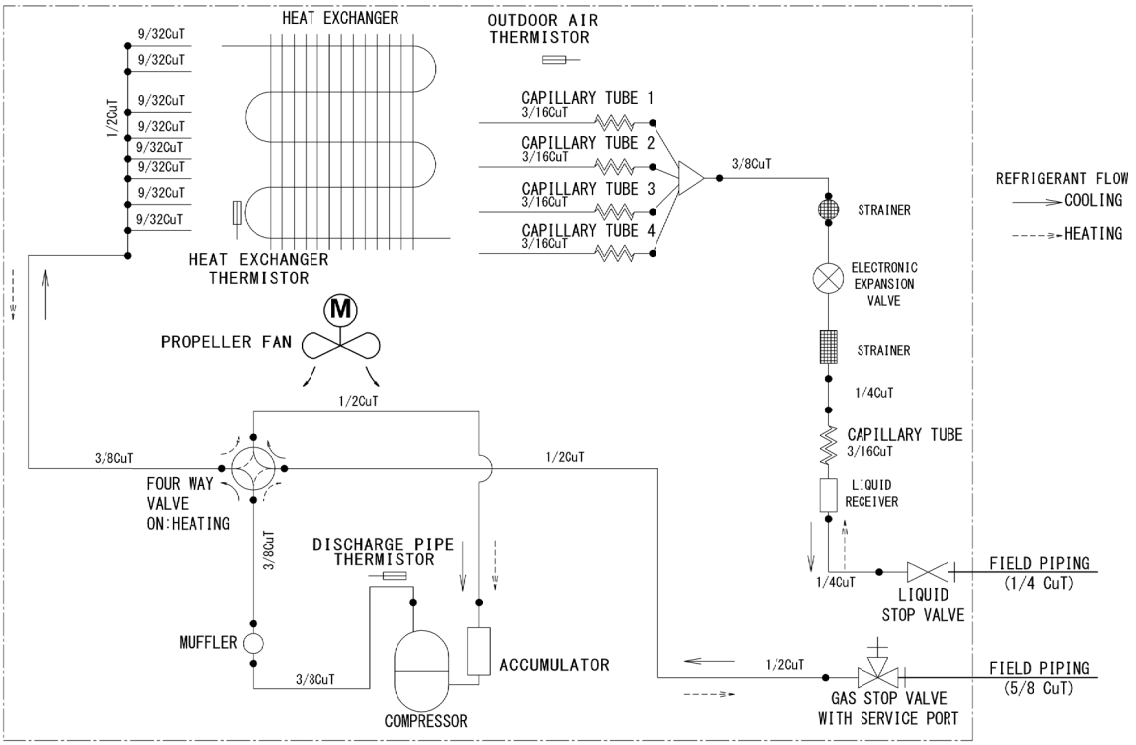
Model : RX18A



3D128344

Note: Dimension in inch

Model : RX24A



3D128347

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]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	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	2.25	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	2.98	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: kBtu/h / PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	8.37	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
60Hz 208 - 230V

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

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

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

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

3D127773A

AFR	12.3
BF	0.16

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	4.01	3.12	0.87	3.28	2.67	0.67	3.12	2.58	0.73	2.97	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	2.97	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	2.59	0.80	3.21	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	2.58	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]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	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	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	6.05	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	6.36	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	0.95	6.69	6.67	0.68

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

Indoor Temperature		Outdoor temperature [°C DB]		
EWB	EDB	-15		
°C	°C	TC	SHC	PI
14.0	20.0	3.56	2.73	0.52

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

Indoor Temperature		Outdoor temperature [°F DB]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	12.13	9.33	0.52

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

AFR	20.3
BF	0.13

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	5.54	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	2.12	2.12	0.79
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	2.34	2.34	0.82
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	2.56	2.56	0.84
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	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	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	3.21	3.21	0.91

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

Indoor Temperature		Outdoor temperature [°F DB]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	7.97	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]		
EWB	EDB	-15		
°C	°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]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	20.50	15.83	0.71

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

3D127775A

AFR	20.3
BF	0.13

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	4.53	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	4.89	4.05	1.91
18.0	25.0	6.87	4.94	1.28	6.94	4.72	1.35	6.66	4.60	1.48	6.36	4.47	1.60	6.25	4.41	1.66	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	4.96	1.35	6.79	4.84	1.48	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: kBtu/h / PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	20.68	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

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

Indoor Temperature		Outdoor temperature [°C DB]		
EWB	EDB	-15		
°C	°C	TC	SHC	PI
14.0	20.0	6.56	5.07	0.96

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

Indoor Temperature		Outdoor temperature [°F DB]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	22.38	17.29	0.96

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

AFR	12.2
BF	0.22

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	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	2.25	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	2.98	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: kBtu/h / PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	8.37	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

Heating: 208 - 230V 60Hz

AFR	11.4

Temp: Celsius / TC,PI: kW

Indoor Temperature	Outdoor temperature [°C WB]													
EDB	-15		-10		-5		0		6		10		18	
°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: kBtu/h / PI: kW

Indoor Temperature	Outdoor temperature [°F WB]													
EDB	5		14		23		32		43		50		64	
°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	14.06	1.17

Cooling capacity at -15°C / 5°F

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

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

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

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

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

AFR	12.3
BF	0.16

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	4.01	3.12	0.87	3.28	2.67	0.67	3.12	2.58	0.73	2.97	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	2.97	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	2.59	0.80	3.21	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	2.58	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]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	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	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	6.05	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	6.36	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	0.95	6.69	6.67	0.68

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

AFR	11.7

Indoor Temperature	Outdoor temperature [°C WB]													
EDB	-15		-10		-5		0		6		10		18	
°C	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]													
EDB	5		14		23		32		43		50		64	
°F	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
60Hz 208 - 230V

Indoor Temperature		Outdoor temperature [°C DB]		
EWB	EDB	-15		
°C	°C	TC	SHC	PI
14.0	20.0	3.56	2.73	0.52

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

Indoor Temperature		Outdoor temperature [°F DB]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	12.13	9.33	0.52

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

3D127782A

AFR	20.3
BF	0.13

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

Indoor Temperature		Outdoor temperature [°C DB]																							
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	5.54	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	2.12	2.12	0.79
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	2.34	2.34	0.82
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	2.56	2.56	0.84
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	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	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	3.21	3.21	0.91

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

Indoor Temperature		Outdoor temperature [°F DB]																							
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	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	7.97	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

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

AFR	20.3

Indoor Temperature	Outdoor temperature [°C WB]													
EDB	-15		-10		-5		0		6		10		18	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	3.01	1.13	3.62	1.19	4.23	1.25	4.85	1.63	6.55	1.72	7.12	1.78	7.45	1.63
21.1	2.84	1.16	3.44	1.22	4.05	1.27	4.66	1.68	6.33	1.76	6.90	1.82	7.23	1.68
22.0	2.75	1.18	3.36	1.23	3.97	1.29	4.58	1.68	6.24	1.77	6.82	1.84	7.00	1.73
24.0	2.68	1.18	3.29	1.25	3.89	1.31	4.50	1.70	6.15	1.78	6.73	1.85	6.77	1.77
25.0	2.64	1.19	3.24	1.25	3.87	1.31	4.48	1.72	6.11	1.80	6.68	1.86	6.54	1.82
27.0	2.57	1.20	3.18	1.27	3.78	1.33	4.39	1.72	6.02	1.82	6.60	1.87	6.31	1.87

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

Indoor Temperature	Outdoor temperature [°F WB]													
EDB	5		14		23		32		43		50		64	
°F	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
59.0	10.26	1.13	12.36	1.19	14.44	1.25	16.54	1.63	22.34	1.72	24.30	1.78	25.43	1.63
70.0	9.68	1.16	11.72	1.22	13.81	1.27	15.90	1.68	21.60	1.76	23.56	1.82	24.65	1.68
71.6	9.39	1.18	11.48	1.23	13.56	1.29	15.63	1.68	21.29	1.77	23.26	1.84	23.88	1.73
75.2	9.14	1.18	11.23	1.25	13.28	1.31	15.36	1.70	21.00	1.78	22.96	1.85	23.10	1.77
77.0	9.01	1.19	11.07	1.25	13.19	1.31	15.28	1.72	20.86	1.80	22.79	1.86	22.32	1.82
80.6	8.77	1.20	10.84	1.27	12.90	1.33	14.99	1.72	20.55	1.82	22.51	1.87	21.54	1.87

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

Indoor Temperature		Outdoor temperature [°C DB]		
EWB	EDB	-15		
°C	°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]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	20.50	15.83	0.71

Symbols

AFR	: Air flow 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)
PI	: Power input	(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

3D127783A

AFR	20.3
BF	0.13

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

Indoor Temperature		Outdoor temperature [°C DB]																					
EWB	EDB	10			20			25			30			32			35			40			46		
°C	°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	4.53	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	4.89	4.05	1.91
18.0	25.0	6.87	4.94	1.28	6.94	4.72	1.35	6.66	4.60	1.48	6.36	4.47	1.60	6.25	4.41	1.66	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	4.96	1.35	6.79	4.84	1.48	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: kBtu/h / PI: kW

Indoor Temperature		Outdoor temperature [°F DB]																					
EWB	EDB	50			68			77			86			90			95			104			115		
°F	°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	20.68	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

AFR	20.3

Temp: Celsius / TC,PI: kW

Indoor Temperature	Outdoor temperature [°C WB]													
EDB	-15		-10		-5		0		6		10		18	
°C	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	2.93	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: kBtu/h / PI: kW

Indoor Temperature	Outdoor temperature [°F WB]													
EDB	5		14		23		32		43		50		64	
°F	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
60Hz 208 - 230V

Indoor Temperature		Outdoor temperature [°C DB]		
EWB	EDB	-15		
°C	°C	TC	SHC	PI
14.0	20.0	6.56	5.07	0.96

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

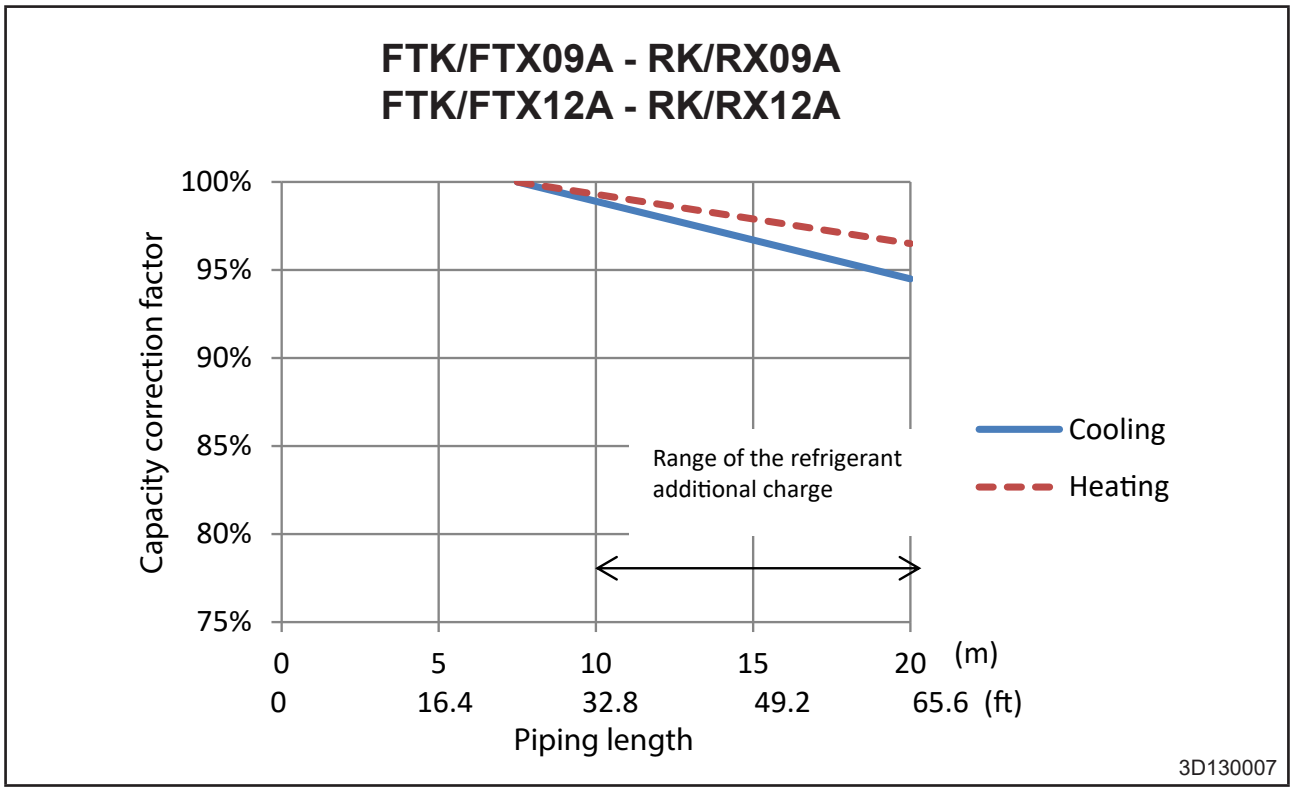
Indoor Temperature		Outdoor temperature [°F DB]		
EWB	EDB	5		
°F	°F	TC	SHC	PI
57.2	68.0	22.38	17.29	0.96

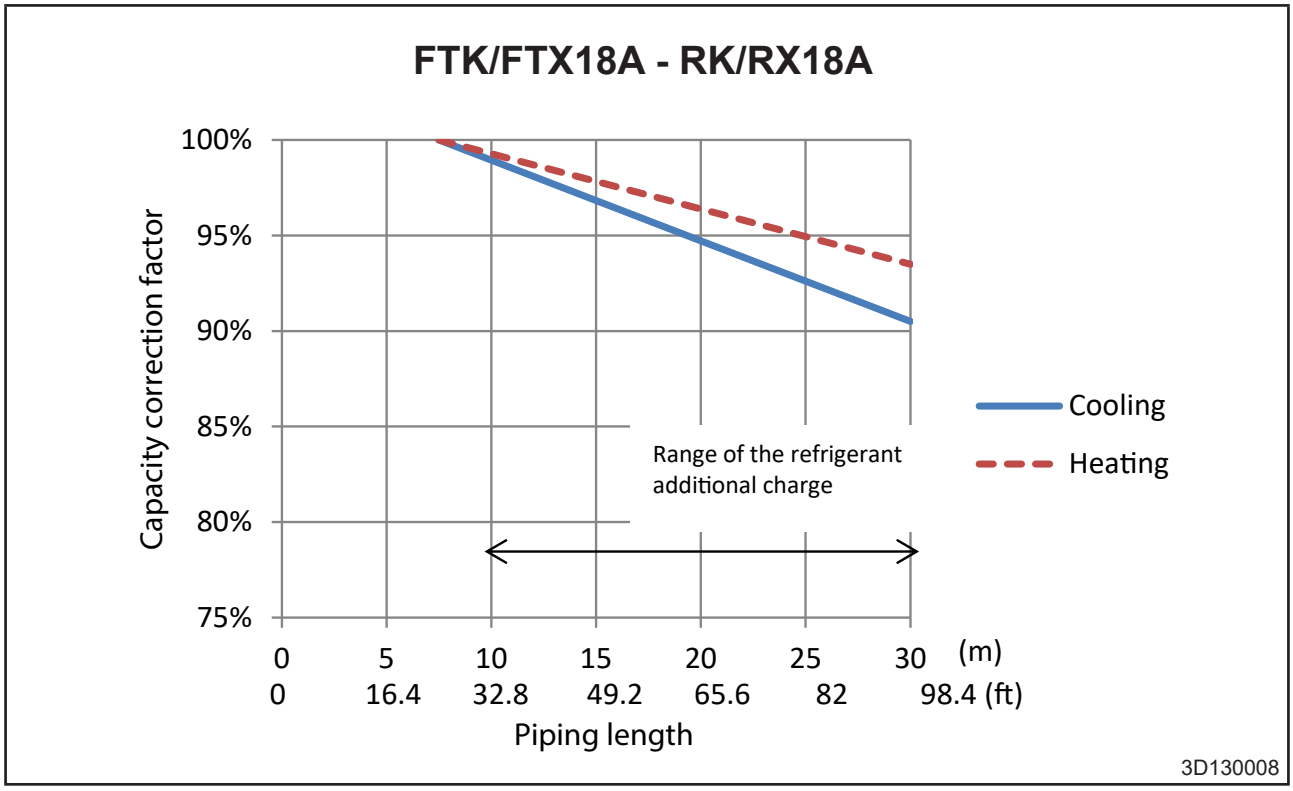
Symbols

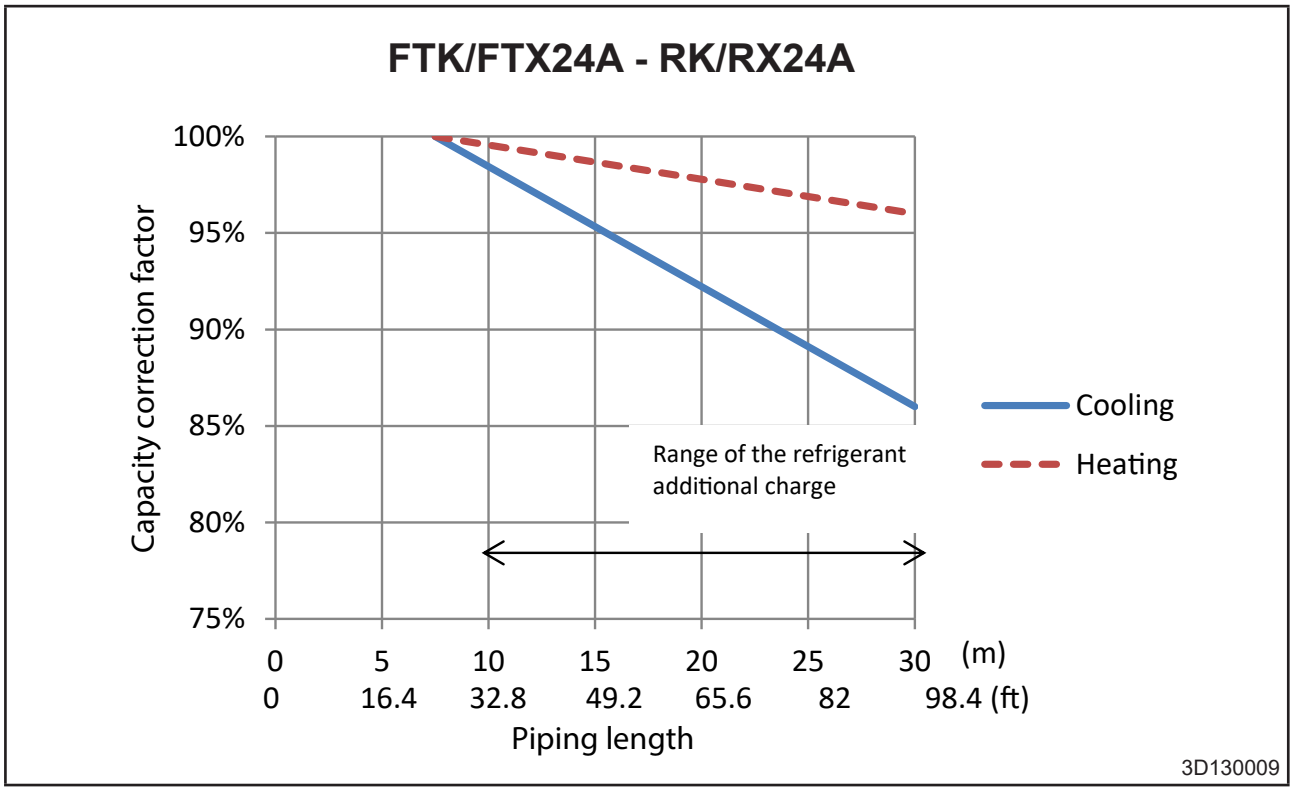
AFR	: Air flow rate	(m³ /min.)
BF	: Bypass factor	
EWB	: Entering wet bulb temp.	(°C)/(°F)
EDB	: Entering dry bulb temp.	(°C)/(°F)
TC	: Total capacity	(kW)/(kBtu/h)
SHC	: Sensible heat capacity	(kW)/(kBtu/h)
PI	: Power input	(kW)

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

Capacity correction factor by the length of refrigerant piping







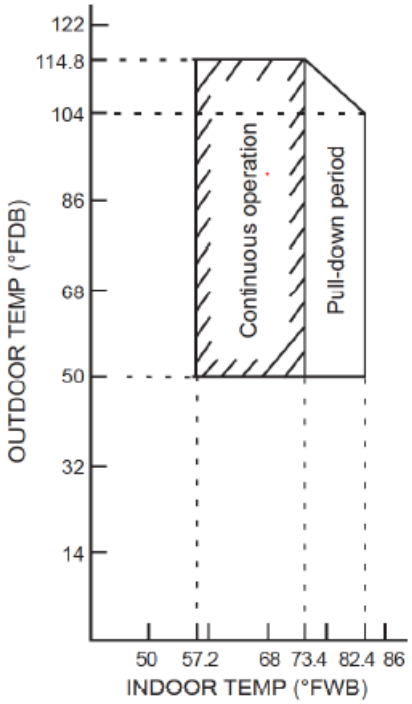
Notes:

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



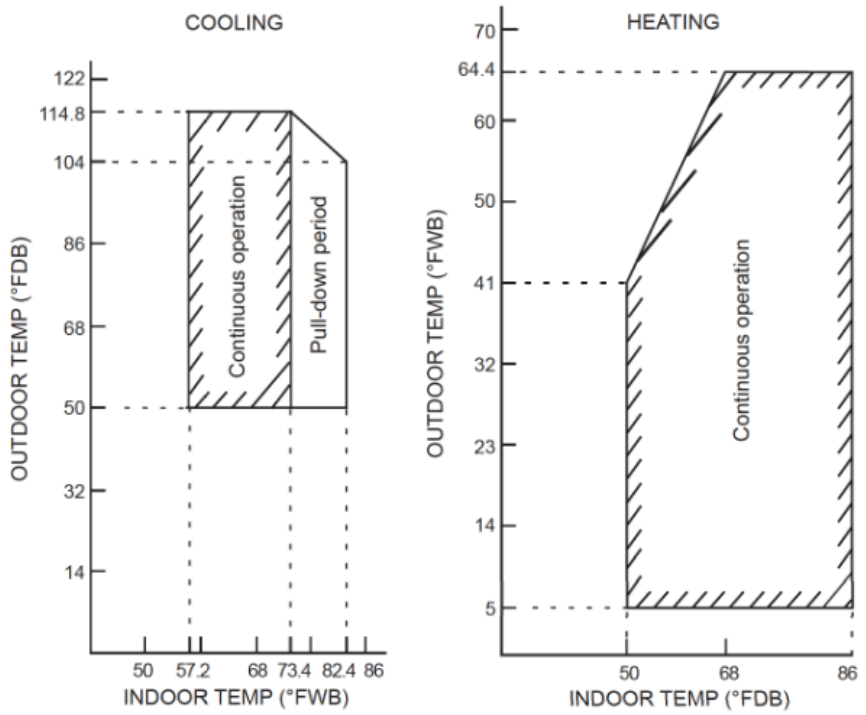
⚠ Caution :

The use of your air conditioner outside the range of working temperature and humidity can result in serious failure.

3P601788-1A

Heatpump

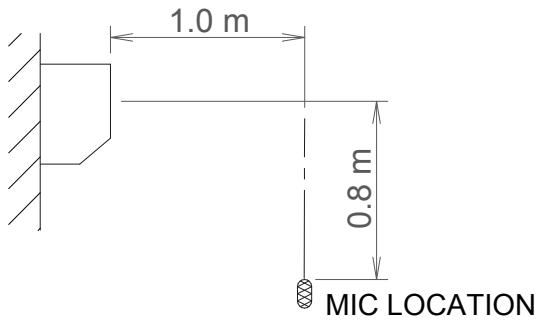
Model : RX-A



3P601788-1A

Sound Level

Measuring Location

Model	Measuring Location
FTK/FTX09A **FTK/FTX12A** **FTK/FTX18A** **FTK/FTX24A**	

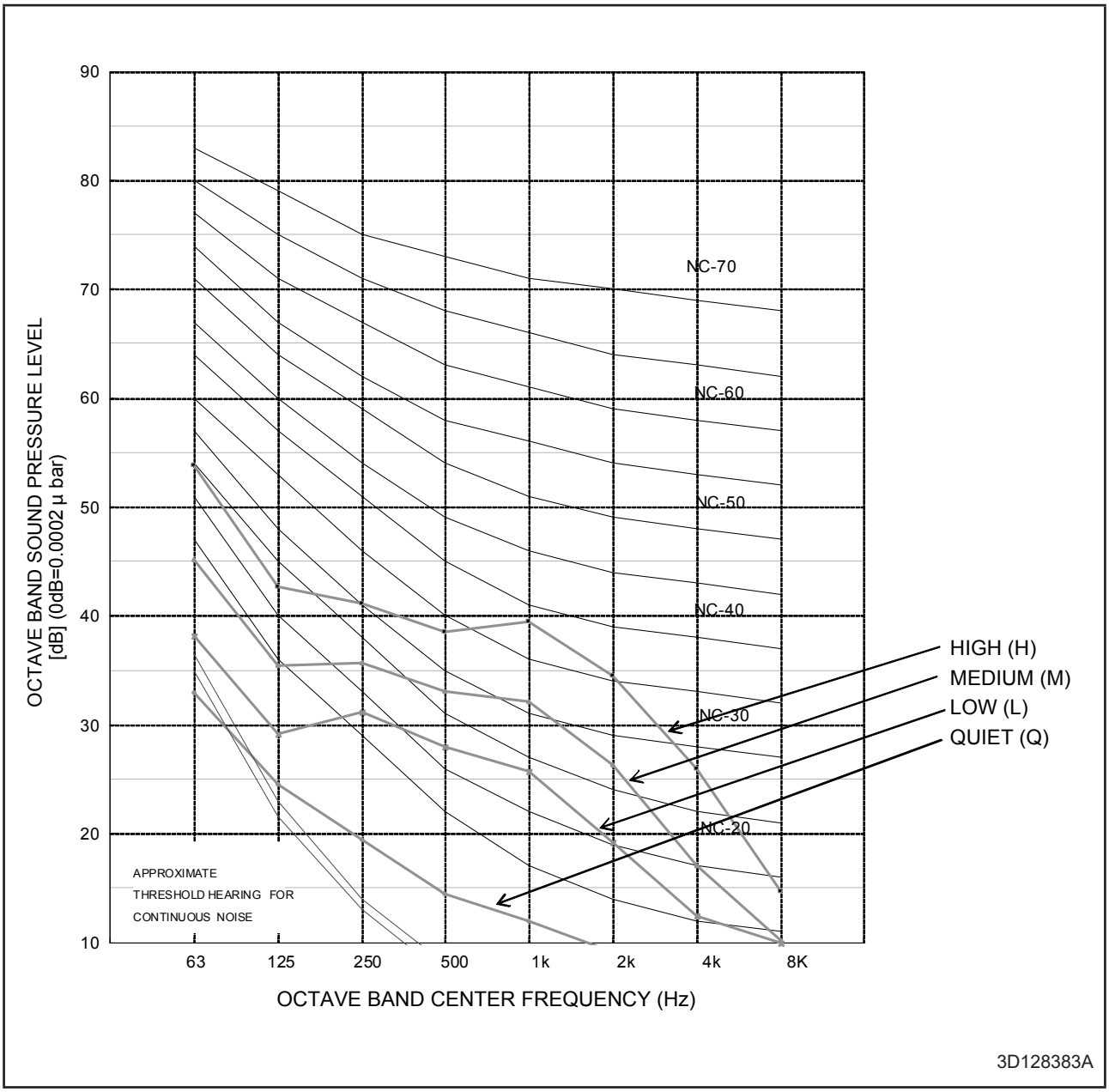
Notes:
1. Operation sound is measured in an anechoic chamber.
2. The operation noise measuring method is in accordance with **JISC9612.**

Cooling Only

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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

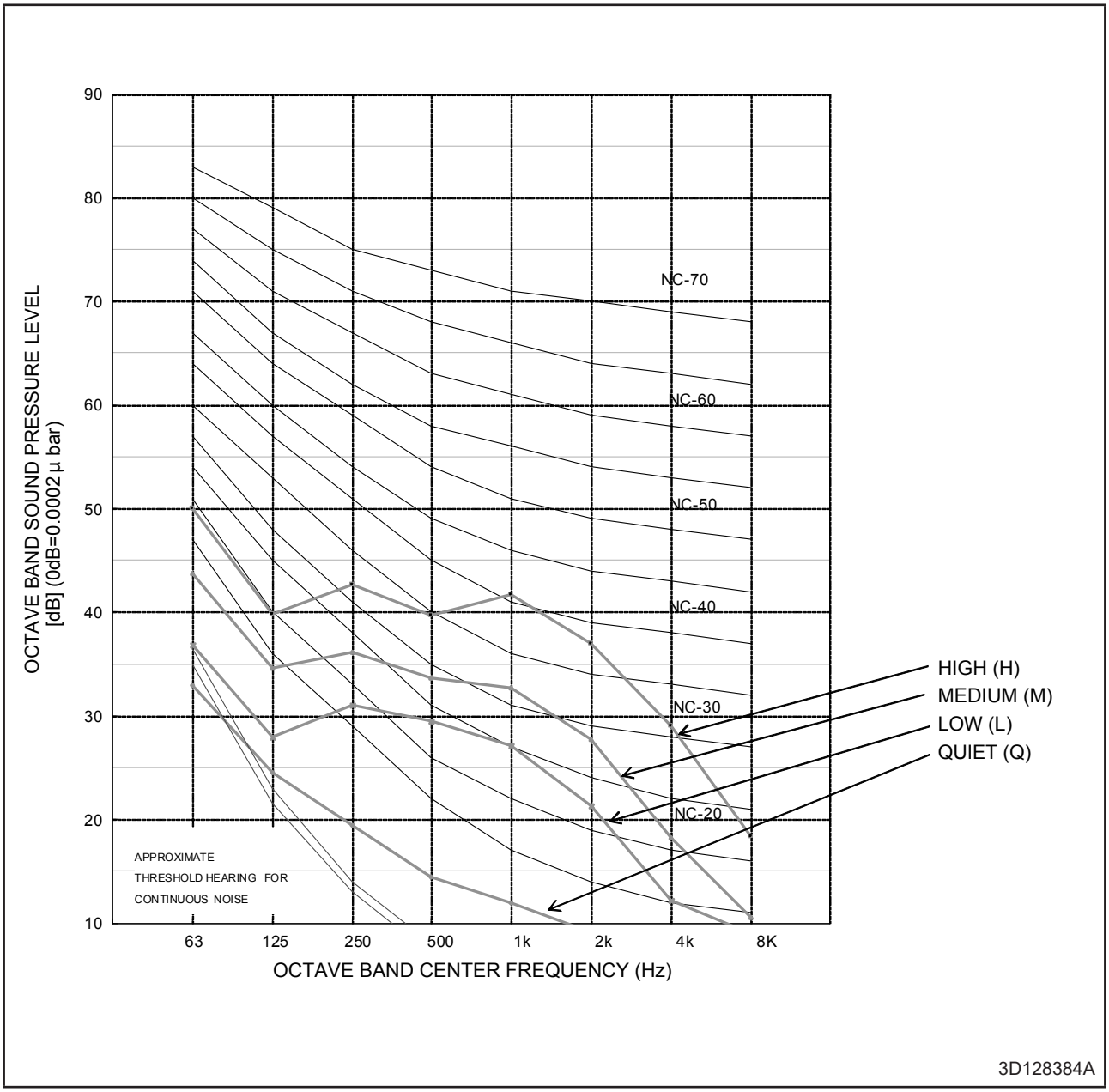
NC Curve



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

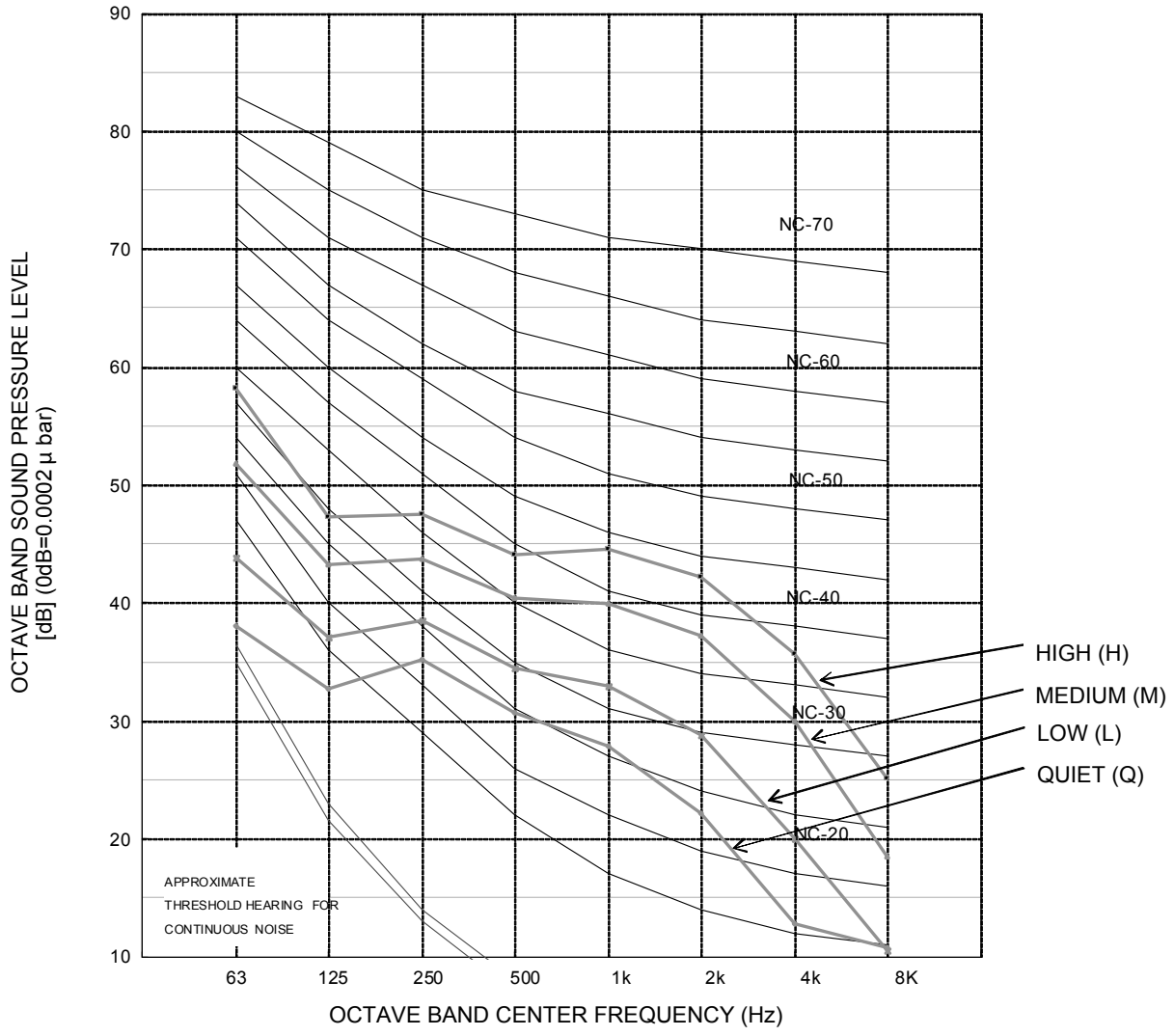
NC Curve



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

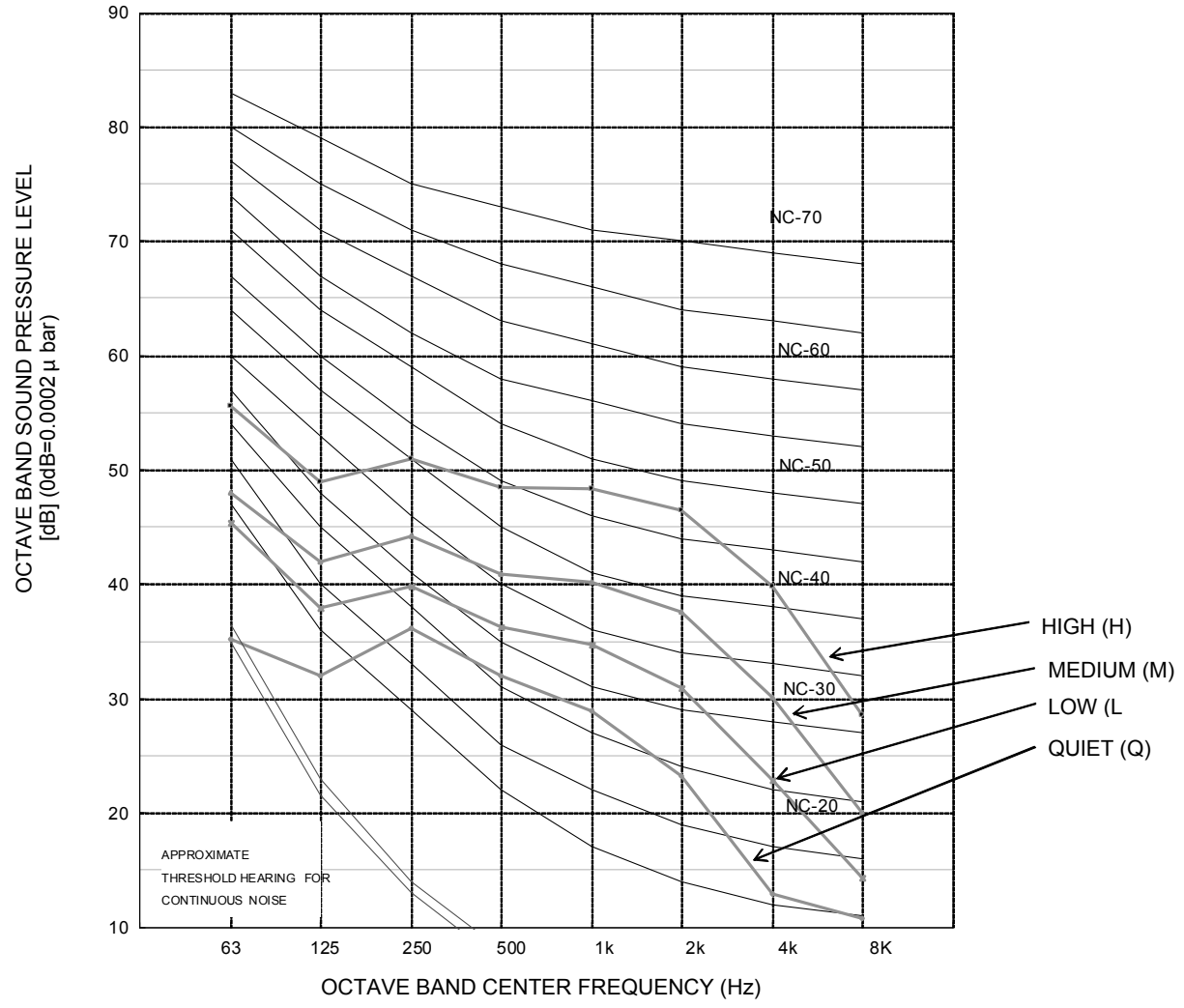


3D128385

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



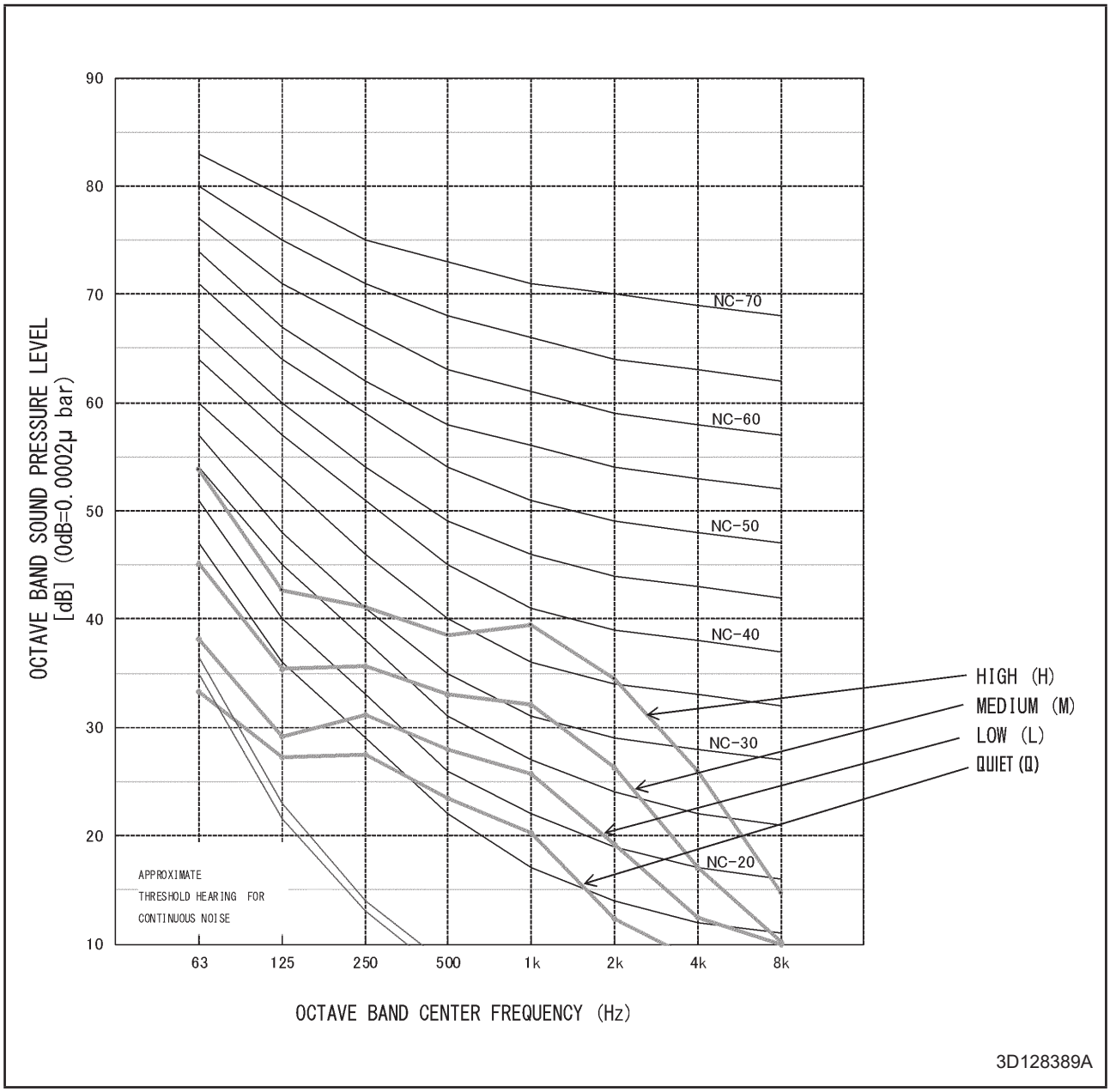
3D128387

Heatpump

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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

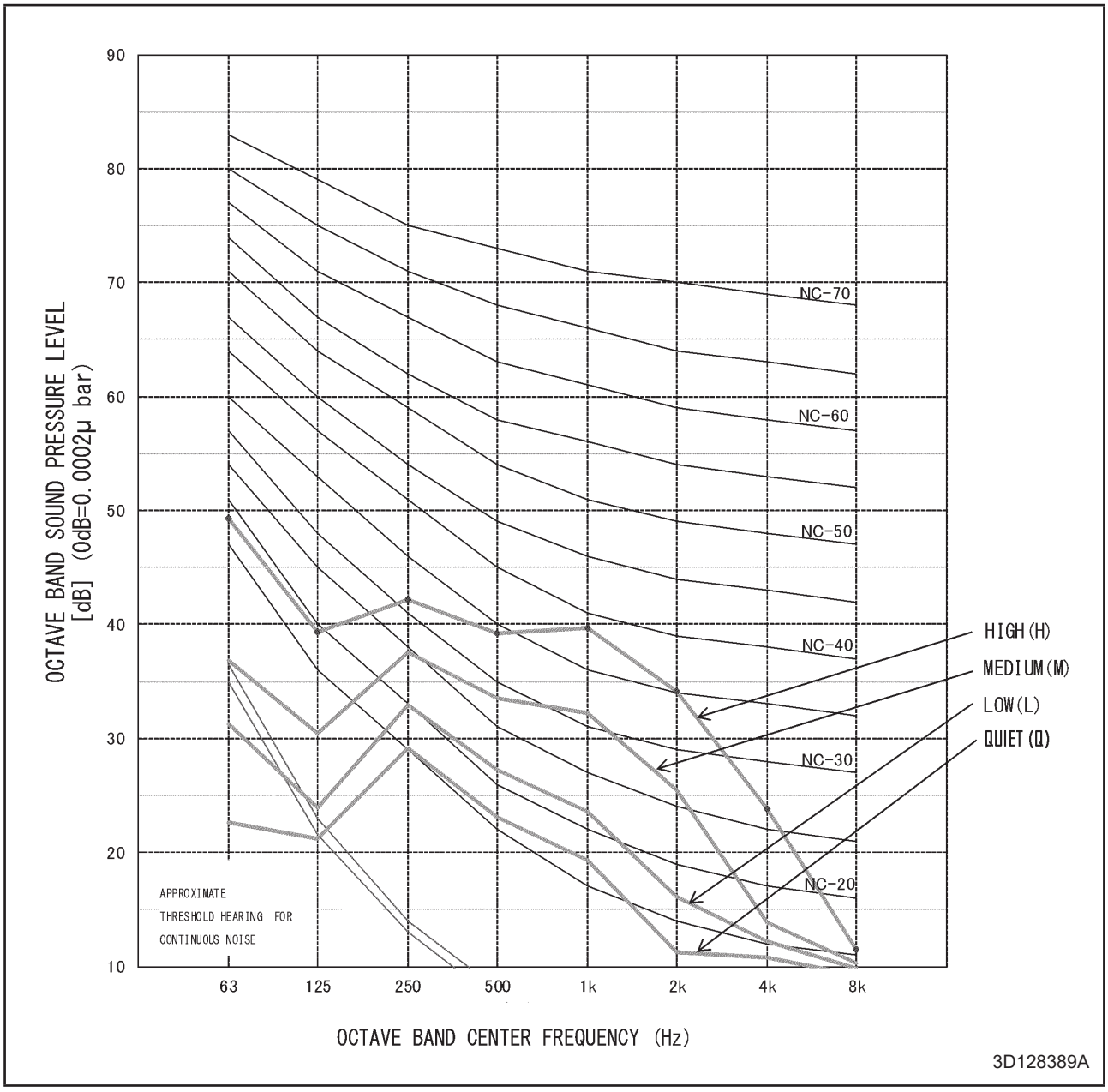


Heatpump

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

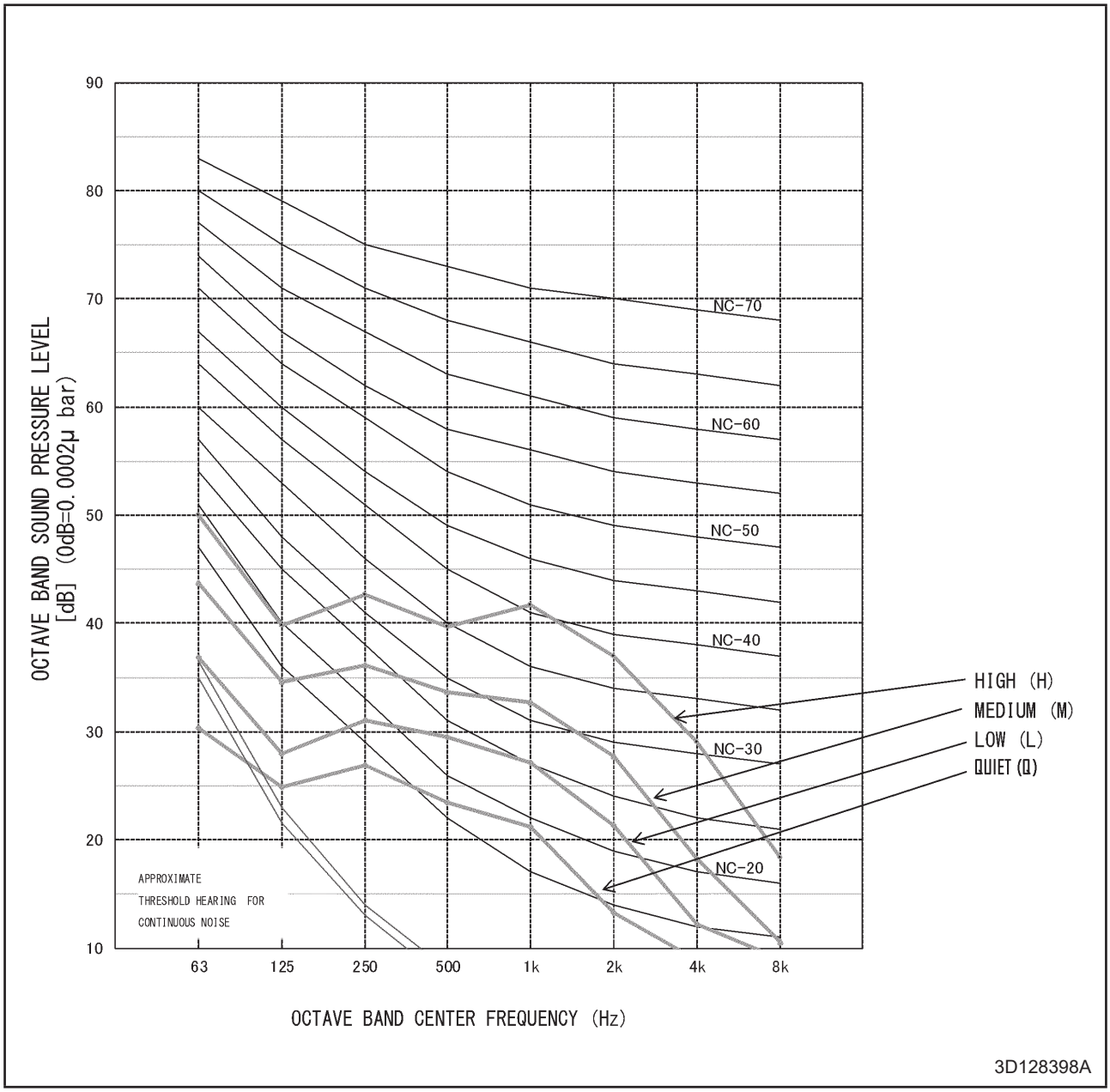
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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

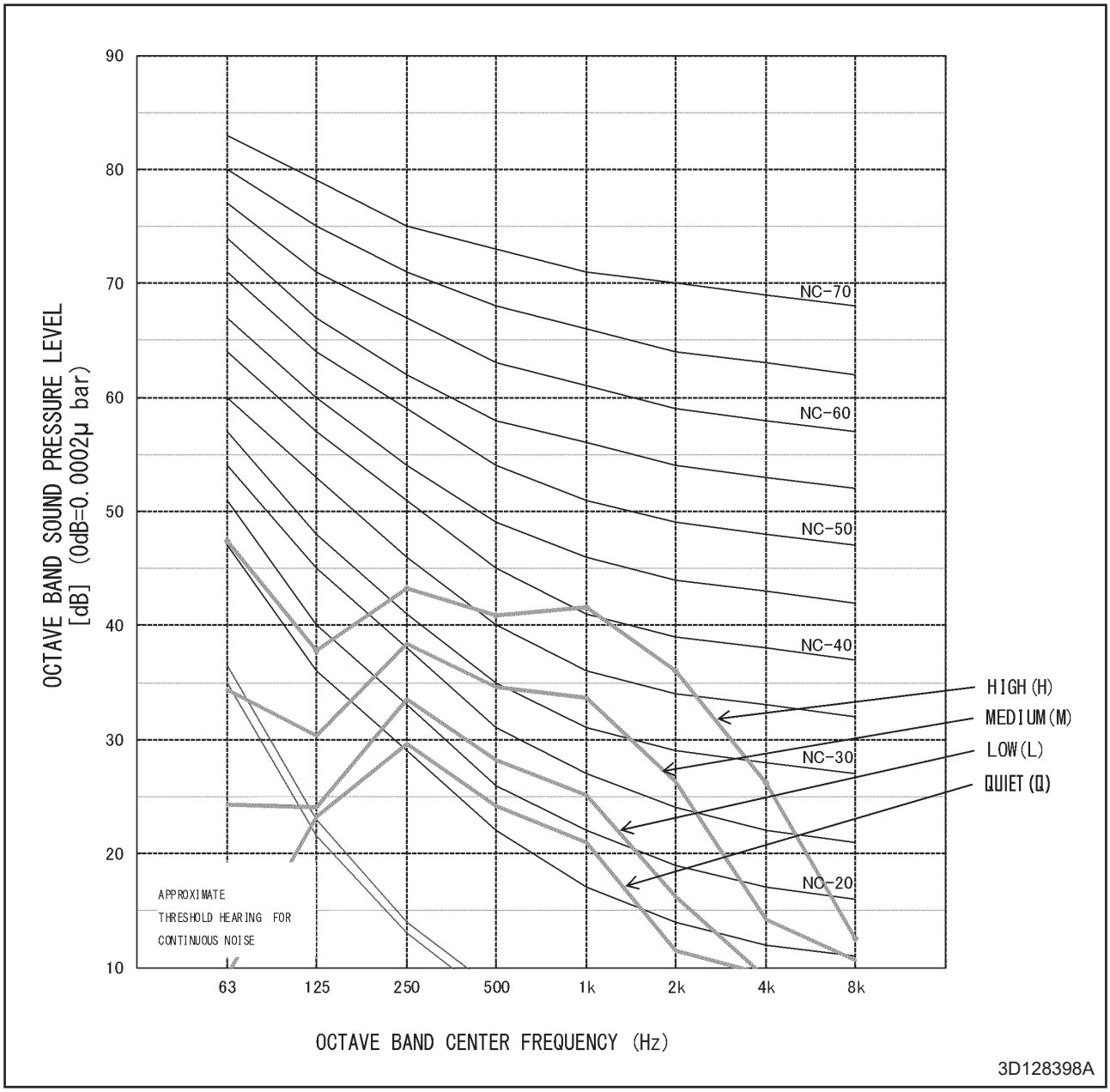
NC Curve



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

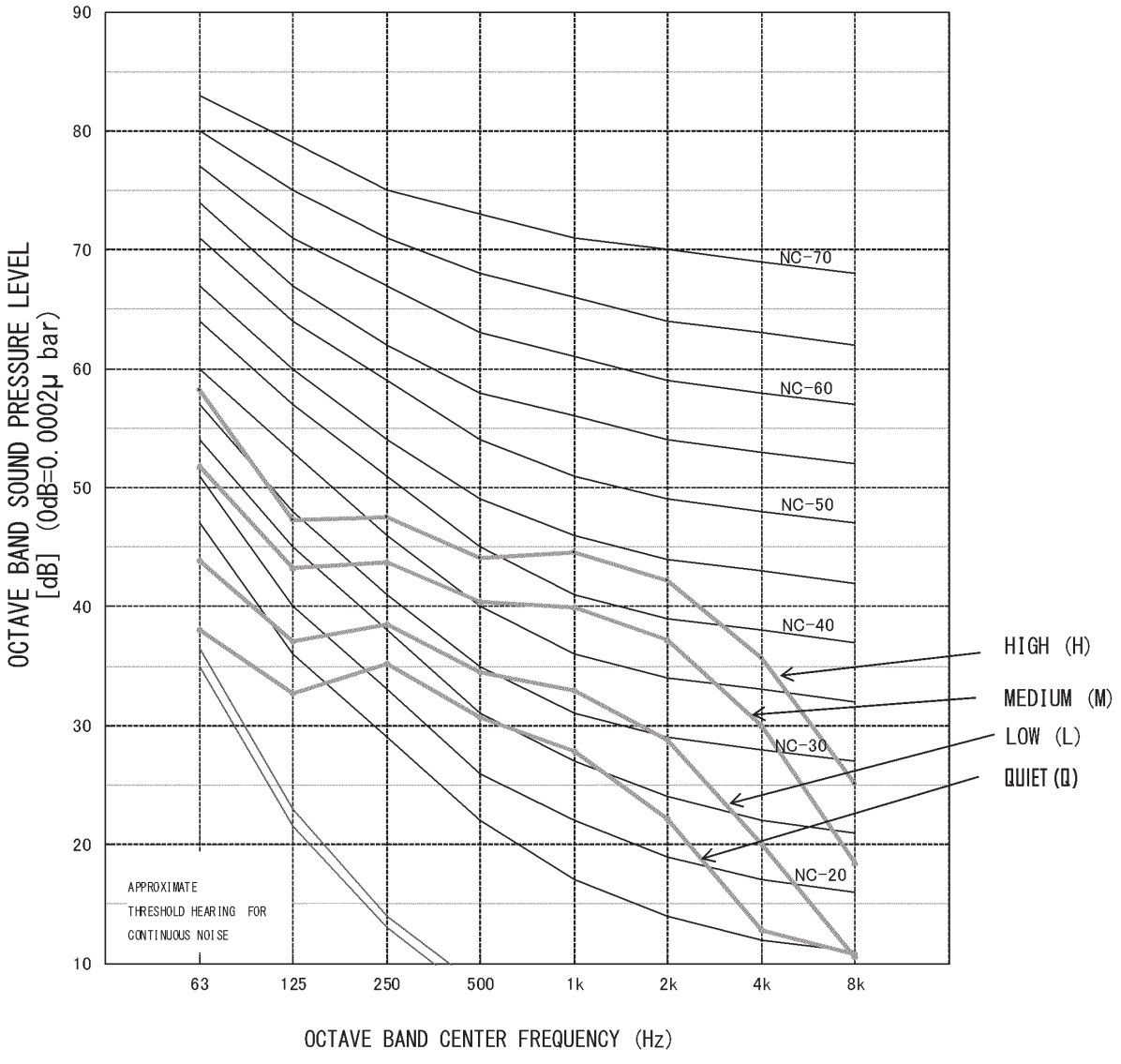
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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

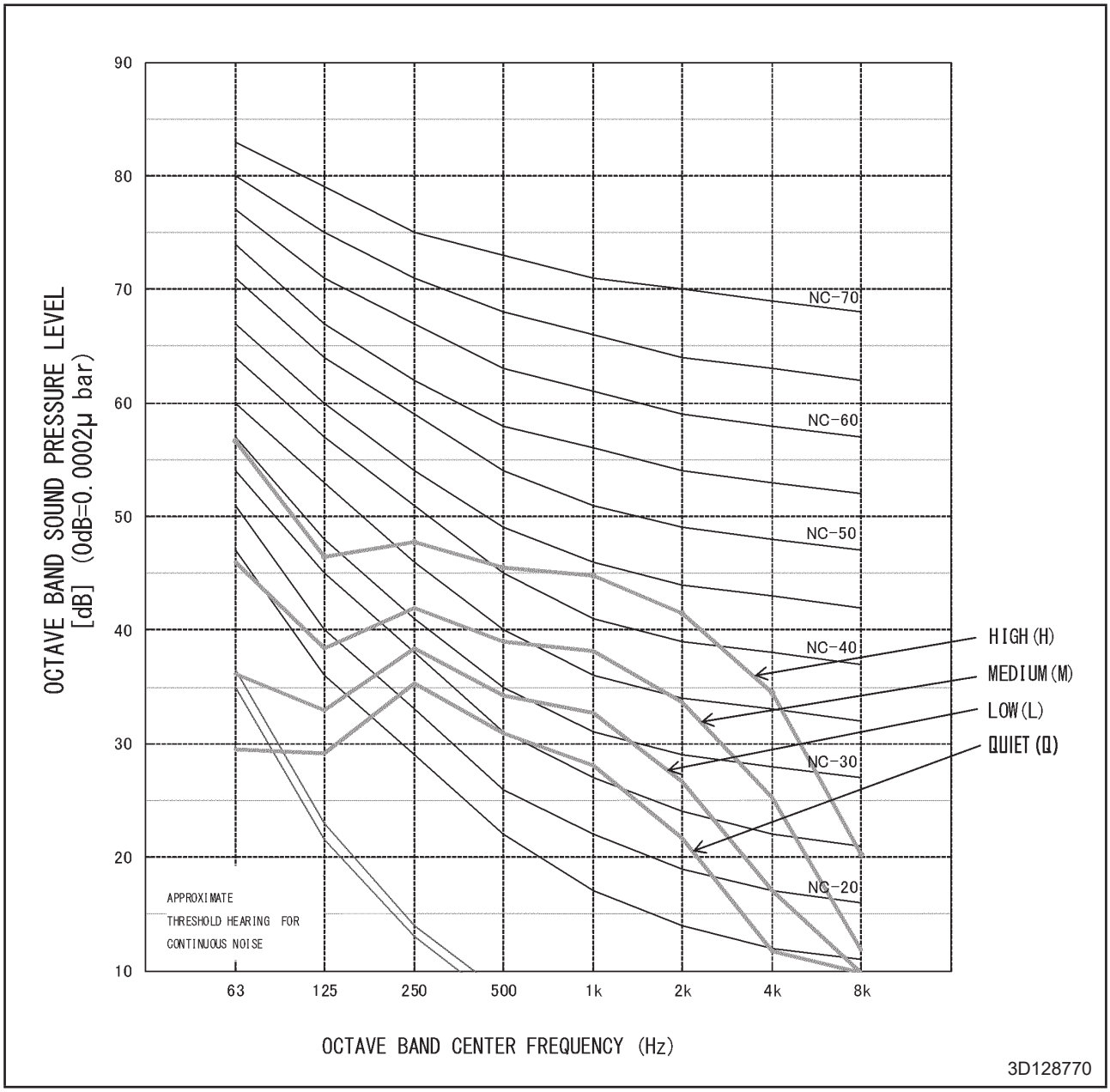
NC Curve



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

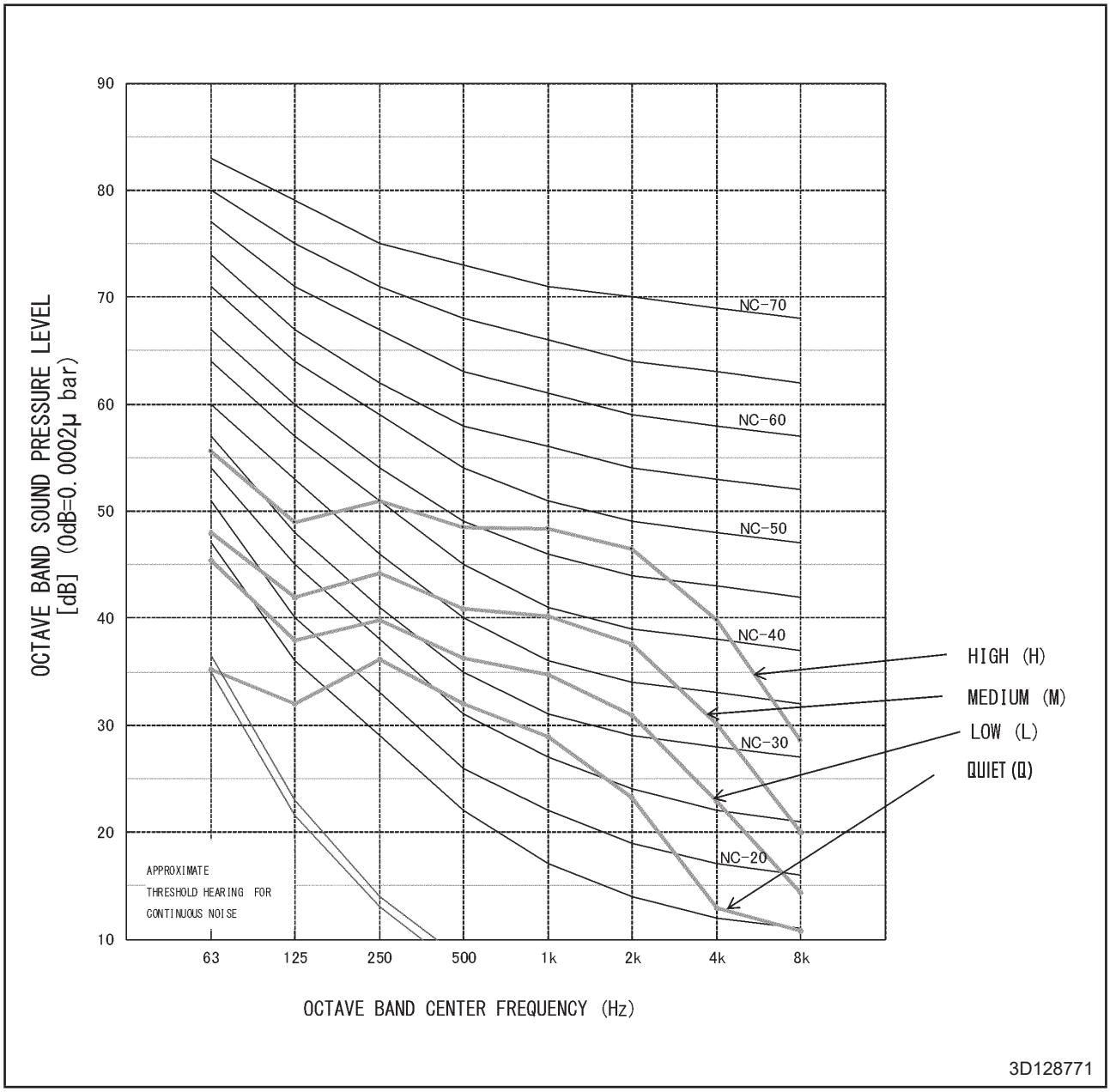
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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

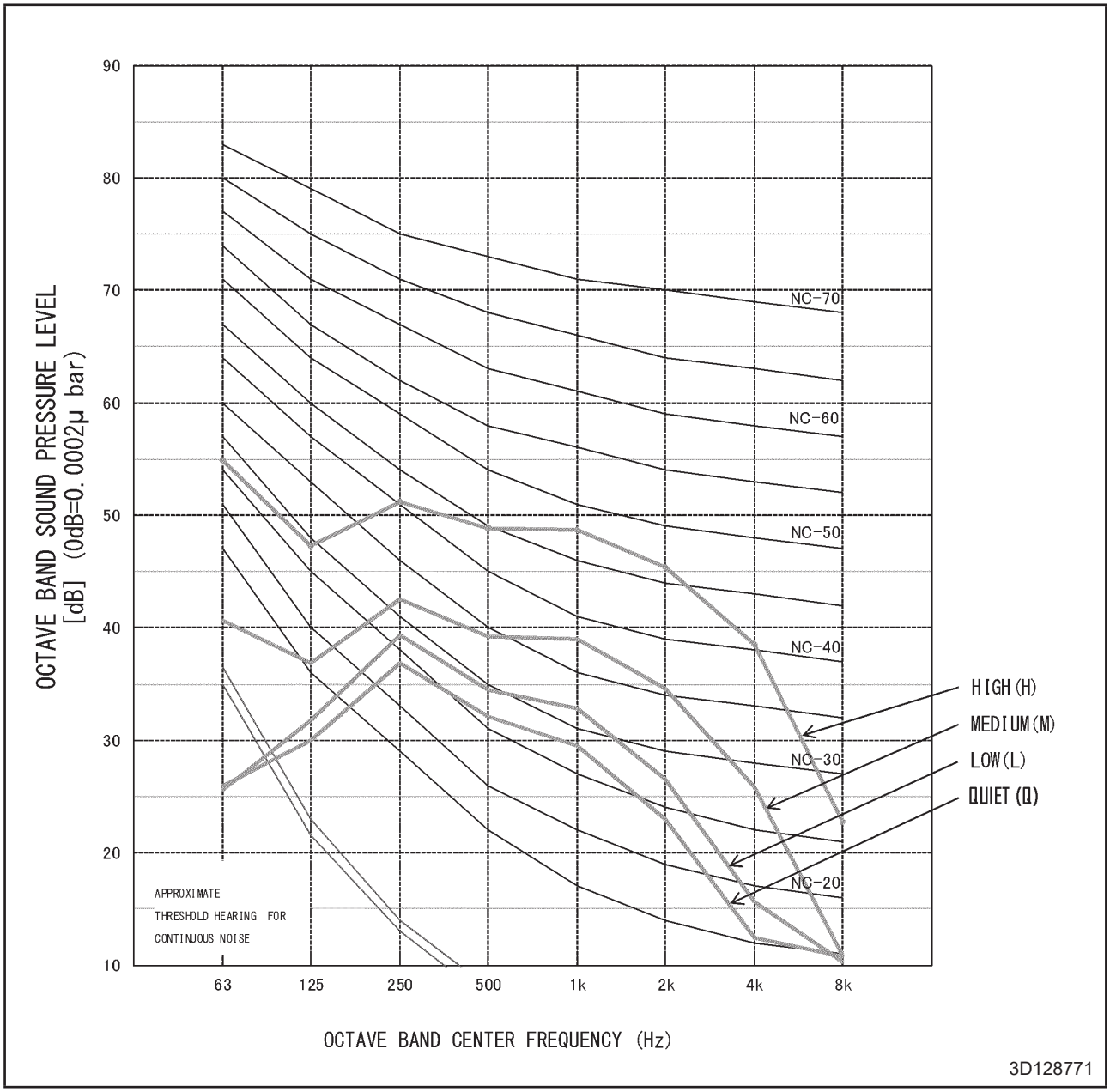
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)								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 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	7.00	15.0	50.0	6.75	0.041	0.36	0.038	0.30
FTK12A	RK12A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	7.80	15.0	63.0	7.50	0.041	0.47	0.038	0.36
FTK18A	RK18A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	13.40	20.0	66.0	13.00	0.128	0.99	0.035	0.50
FTK24A	RK24A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	13.40	20.0	78.0	13.00	0.128	1.00	0.035	0.50
FTX09A	RX09A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	8.70	15.0	62.0	8.50	0.041	0.36	0.038	0.30
FTX12A	RX12A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	8.70	15.0	74.0	8.50	0.041	0.47	0.038	0.36
FTX18A	RX18A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	16.40	20.0	78.0	16.00	0.128	0.99	0.035	0.50
FTX24A	RX24A	60Hz-208V 60Hz-230V	MAX. 60Hz 253V MIN. 60Hz 187V	16.40	20.0	83.0	16.00	0.128	1.00	0.035	0.50

Symbols:

MCA : Min. circuit amps (A)
MFA : Max. fuse amps (A)
COMP : Compressor
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)

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 operatio 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)	-