

ENGINEERING DATA

**Split Unit Air Conditioner
Ceiling Concealed
Cooling Only [50Hz]**

FDMRN-A Series



R410A

ED5CC3-ME23V2
Supersede : ED5CC3-ME23V1

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Introduction

Model Name and Power Supply

Indoor Unit	Outdoor Unit	Power Supply
FDMRN20AV1K9	RR20AV1K	1Phase, 220-240V, 50Hz
FDMRN25AV1K	RR25AV1K	
FDMRN30AV1K	RR30AV1K	
FDMRN36AV1K	RR36AV1K	
FDMRN50AV1K9	RR50AY1K9	3Phase, 380-415V, 50Hz
FDMRN60AV1K	RR60AY1K	
FDMRN20AV1KU9	RR20AV1KU	1Phase, 220-240V, 50Hz
	RR20AV1KRE	
FDMRN25AV1KU	RR25AV1KU	
	RR25AV1KRE	
FDMRN30AV1KU	RR30AV1KU	
	RR30AV1KRE	
FDMRN36AV1KU	RR36AV1KU	
FDMRN50AV1KU	RR50AY1KU	3Phase, 380-415V, 50Hz
FDMRN60AV1KU	RR60AY1KU	

Nomenclature

Indoor Unit

Definition	Description
Unit Category	F : Air-Cooled Split Indoor Unit
Product Type	D : Ceiling Concealed Ducted
Static Pressure	M : Mid ESP
Refrigerant & Mode	RN : R410A, Non-Inverter, Cooling Only
Capacity Indication*	20 : 20,000 Btu/h
Major Design Category	A : A Series
Power Supply	V1 : 1Phase / 50Hz / 220-240V
Application	K : High Ambient
Country	U : UAE
Revision	9 : Revision

Outdoor Unit

Definition	Description
Unit Category	R : Air-Cooled Split Outdoor Unit
Refrigerant & Mode	R : R410A, Non-Inverter, Cooling Only
Capacity Indication*	20 : 20,000 Btu/h
Major Design Category	A : A Series
Power Supply	V1 : 1Phase / 50Hz / 220-240V Y1 : 3Phase / 50Hz / 380-415V
Application	K : High Ambient
Country	U : UAE
Project Specification	RE : With High & Low Pressure Switch
Revision	9 : Revision

Remark:

*Capacity value under Nomenclature is an indication.
Please refer to Specifications for exact capacity value.

Functions

Category	Functions	FDMRN20/25/30A RR20/25/30A	FDMRN36A RR36A	FDMRN50A RR50A	FDMRN60A RR60A
Basic Function	Inverter	-	-	-	-
	Operation Limit for Cooling (°CDB)(O/D)	19~54	19~54	19~52	19~52
	Operation Limit for Cooling (°FDB)(O/D)	66.2~129.2	66.2~129.2	66.2~125.6	66.2~125.6
	Operation Limit for Heating (°CWB)(O/D)	-	-	-	-
	Operation Limit for Heating (°FWB)(O/D)	-	-	-	-
Compressor	Scroll Compressor	-	●	●	●
	Rotary Compressor	●	-	-	-
	Swing Compressor	-	-	-	-
Comfortable Airflow	4-Way Airflow Operation	-	-	-	-
	8-Way Airflow Operation	-	-	-	-
	Surround Airflow Operation	-	-	-	-
Comfort Control	Auto Fan Speed	●	●	●	●
	Switchable Fan Speed	●	●	●	●
	Auto Swing	-	-	-	-
	Indoor Unit Quiet Operation	-	-	-	-
Operation	Programme Dry Function	●	●	●	●
	ECO +	-	-	-	-
	Turbo Mode	-	-	-	-
	Sleep	-	-	-	-
	Fan Only	●	●	●	●
Lifestyle Convenience	Indoor Unit ON/OFF Button	-	-	-	-
	Signal Receiving Sign *1	●*	●*	●*	●*
	R/C with Backlight	●	●	●	●
	LED Display ON/OFF Button	●	●	●	●
	Room Temperature Display	●	●	●	●
	Streamer ON/OFF Button	-	-	-	-
Health & Clean	Saranet Filter	●	●	●	●
	GIN-ION Filter	-	-	-	-
	PM 2.5	-	-	-	-
	Titanium Apatite	-	-	-	-
	Streamer	-	-	-	-
	Ionizer	-	-	-	-
	Fresh Air Intake Kit	-	-	-	-
	Washable Grille	-	-	-	-
Timer	Weekly Timer Operation	●	●	●	●
	24-hour ON/OFF Timer (R/C) *1	●*	●*	●*	●*
	24-Hour RTC	●	●	●	●
Worry Free (Reliability & Durability)	Auto Restart (After Power Failure)	●	●	●	●
	Self-diagnosis	●	●	●	●
	Wiring Error Check Function	-	-	●	●
	Anti-corrosion Treatment of Outdoor Heat Exchanger	Gold Fin	Gold Fin	Gold Fin	MCHE (Epoxy)
	Low/High Voltage Shield	-	-	-	-
	R32 Refrigerant Gas Sensor	-	-	-	-
Flexibility	ESP Selection	-	-	-	●
	Water Pump (Water Drainage Pipe Flexibility)	-	-	-	-
	°F/°C Changeover R/C Temperature Display (Factory setting: °C)	●	●	●	●
	Pre-charged Piping Length	7.5m	7.5m	7.5m	7.5m
Remote Control	Wireless LAN Connectivity	-	-	-	-
	BAG Connectivity	●*	●*	●*	●*
	iTM Connectivity	-	-	-	-
Remote Controller	Wired	BRC51D66	BRC51D66	BRC51D66	BRC51D66
	Wireless (Optional)	BRC52A62	BRC52A62	BRC52A62	BRC52A62

Note: ● : Available

- : Not Available

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

*1: Applicable when wireless (BRC52A62) remote controller is used for selected models.

Specification Guide

General

Units shall be factory assembled, fully charged with R-410A refrigerant, tested and rated in accordance to ISO13253 standard.

Compressor

Compressor model used in condenser range from Class 20 to Class 30 shall be rotary compressor and Class 36 to Class 60 shall be scroll compressor. All compressors shall be hermetically sealed and include internal current overload protection.

Condenser & Evaporator Coil

Condenser & evaporator coils shall be manufactured from seamless inner grooved copper tubes mechanically bonded to Aluminum fins to ensure optimum heat transfer. All coils shall be tested against by Nitrogen holding at 609psi and highly precise Helium leak test at 235psi. Gold fin shall be standard for condenser coil for better corrosion resistant. Black Epoxy coating shall be standard for microchannel heat exchanger only.

Condenser Fan & Motor

Condenser fan shall be of propeller type, direct driven by a single phase induction motor. The fan motors shall be permanently lubricated type with internal thermal protection. Permanent split capacitor type shall be used to ensure higher efficiency operation.

Evaporator Fan & Motor

Evaporator fan shall be double width double inlet (DWDI), forward curved and centrifugal type. It shall be mechanically and dynamically balanced and direct driven by fan motor as standard. Fan motor shall be permanently lubricated type with internal thermal protection. Permanent split capacitor type shall be used to ensure higher efficiency operation.

Refrigerant Circuit

Each refrigerant circuit shall be equipped with expansion device in the form of capillary tube in the evaporator or condenser.

Condenser & Evaporator Casing

Condenser casing shall be constructed of galvanized mild steel with polyester powder coating, while evaporator casing shall be constructed of galvanized mild steel with zinc coating.

Filters

Filters shall be fabricated from polypropylene and washable type. It shall be easily accessible from the rear of the unit. A 10mm filter rail shall be provided as standard in instance where field supplied filter casement need to be installed.

Insulation

All possible area of condensation shall be insulated with Polyethylene. The insulation thickness varies from 5-10mm depending on the condensation area.

Double Protection Drainage System

The primary drain pan shall be designed with high thermal insulation material and molded in gradient for better condensate water drainage. The extra secondary drain pan shall be "built-in" and made of galvanized mild steel with insulation to standard unit to offer extra protection against possible water leaking problems.

Control

Standard unit shall be microprocessor controlled and supplied with a simple and user friendly wired handset with LCD Display, fan speed control, 7 days programmable timer and error code display as standard.

Field Wiring Installation

Condenser shall be fitted with factory assembled contactors, relays and terminal block for field wiring installation. Direct on-line (DOL) starter shall be available as standard for three phase model.

Auto Random Restart with Last-State-Memory

In the event of a sudden power failure during operation, unit shall be automatically restarted in 180s – 224s different recovery timing patterns and the unit will operate base on the previous setting (operating mode, temperature setting and fan speed). This ensures that air conditioners in the same building resume control randomly instead of turning on at the same time, preventing power surge after a blackout.

Specifications

MODEL	INDOOR UNIT		FDMRN20A	FDMRN25A	FDMRN30A
	OUTDOOR UNIT		RR20A	RR25A	RR30A
Rated Capacity [1]	kW		5.28	6.89	8.79
	Btu/h		18000	23500	30000
Rated Capacity [2]	kW		5.22	6.77	8.35
	Btu/h		17800	23100	28500
Rated Capacity [3]	kW		4.62	6.01	7.91
	Btu/h		15750	20500	27000
Rated Capacity [4]	kW		4.15	5.82	7.56
	Btu/h		14150	19850	25800
Rated Running Current [1]	A		6.70	9.35	11.70
Rated Running Current [2]	A		6.65	9.21	12.20
Rated Running Current [3]	A		7.99	10.80	13.80
Rated Running Current [4]	A		7.95	11.20	14.26
Rated Power Consumption [1]	W		1510	2000	2520
Rated Power Consumption [2]	W		1500	1970	2480
Rated Power Consumption [3]	W		1800	2350	3050
Rated Power Consumption [4]	W		1850	2468	3150
EER [1]	W/W		3.49	3.44	3.49
EER [2]	W/W		3.48	3.44	3.37
EER [3]	W/W		2.56	2.56	2.59
EER [4]	W/W		2.24	2.36	2.40
Power Factor [1]			0.97	0.92	0.94
Piping Connections	Liquid	mm	6.35	6.35	9.52
	Gas	mm	12.70	15.88	15.88
Refrigerant	Type		R410A		
	Charge	kg	1.75	2.00	2.60
Max. Interunit Piping Length	m		50		
Max. Interunit Height Difference	m		30		
INDOOR UNIT			FDMRN20A	FDMRN25A	FDMRN30A
Airflow Rate	High	CFM	721	800	1000
	Medium	CFM	540	641	793
	Low	CFM	432	516	593
Sound Pressure Level (H/M/L)		dBA	41/39/36	38/35/32	38/35/32
External Static Pressure	Standard (H/M/L)	Pa	40/40/40		
Fan	Type		CENTRIFUGAL		
	Drive		DIRECT		
Fan Motor	Type		AC MOTOR	DC BRUSHLESS	
	Motor Output	W	90	375	375
	Running Current (Rated)	A	0.92	0.86	1.28
	Power Consumption (Rated)	W	206	83	135
Air Direction Control			DUCTED		
Air Filter			SARANET		
Dimensions (H x W x D)	mm		261 x 1200 x 448	378 x 1115 x 541	378 x 1115 x 541
Packaged Dimensions (H x W x D)	mm		335 x 1332 x 536	415 x 1237 x 623	415 x 1237 x 623
Weight	kg		26	44	44
Condensate Drain Size	mm		19.05		
OUTDOOR UNIT			RR20A	RR25A	RR30A
Casing Colour			IVORY WHITE		
Airflow Rate	High	CFM	1756	1603	2788
Sound Pressure Level		dBA	51	51	57
Fan	Type		PROPELLER		
	Drive		DIRECT		
Fan Motor	Type		PERMANENT SPLIT CAPACITOR		
	Index of protection (IP)		24	24	54
	Insulation Grade		F	F	F
	Running Current (Rated)	A	0.54	0.56	1.20
	Power Consumption (Rated)	W	124	128	257
	Motor Output	W	66	66	145
Compressor	Poles		6	6	8
	Type		ROTARY	ROTARY	ROTARY
	Oil type		HAF68D1	A68HES-H	FV50S
	Oil amount	cm ³	480	480	750
	Running Current (Rated)	A	5.24	7.93	9.22
	Power Consumption (Rated)	W	1180	1789	2128
Heat Exchanger Type			FIN TUBE		
Dimensions (H x W x D)	mm		753 x 855 x 328	753 x 855 x 328	852 x 1030 x 400
Packaged Dimensions (H x W x D)	mm		817 x 998 x 423	817 x 998 x 423	995 x 1136 x 516
Weight	kg		47	51	75

Remarks:

[1] NOMINAL DATA BASED ON 27/19°C ID DB/WB & 35°C OD DB (HIGH FAN)

[2] NOMINAL DATA BASED ON 27/19°C ID DB/WB & 35°C OD DB (MEDIUM FAN)

[3] NOMINAL DATA BASED ON 29/19°C ID DB/WB & 46°C OD DB (HIGH FAN)

[4] NOMINAL DATA BASED ON 26.6/19.4°C ID DB/WB & 48°C OD DB (HIGH FAN)

[5] ALL UNITS ARE BEING TESTED AND COMPLY WITH ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT) AND ANSI/ASHRAE 37-2009 (DUCTED UNIT AT 48°C HIGH FAN).

[6] ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

Specifications

MODEL	INDOOR UNIT		FDMRN36A	FDMRN50A	FDMRN60A
	OUTDOOR UNIT		RR36A	RR50A	RR60A
Rated Capacity [1]		kW	10.55	14.07	16.71
		Btu/h	36000	48000	57000
Rated Capacity [2]		kW	10.14	13.34	16.27
		Btu/h	34600	45500	55500
Rated Capacity [3]		kW	9.38	12.78	15.24
		Btu/h	32000	43600	52000
Rated Capacity [4]		kW	8.47	N/A	14.95
		Btu/h	28900	N/A	51000
Rated Running Current [1]		A	13.20	6.46	7.26
Rated Running Current [2]		A	13.10	6.03	7.05
Rated Running Current [3]		A	15.80	7.60	8.45
Rated Running Current [4]		A	16.00	N/A	8.55
Rated Power Consumption [1]		W	2960	4120	4750
Rated Power Consumption [2]		W	2930	3950	4625
Rated Power Consumption [3]		W	3550	4950	5620
Rated Power Consumption [4]		W	3730	N/A	5780
EER [1]		W/W	3.56	3.41	3.52
EER [2]		W/W	3.46	3.38	3.52
EER [3]		W/W	2.64	2.58	2.71
EER [4]		W/W	2.27	N/A	2.59
Power Factor [1]			0.97	0.92	0.94
Piping Connections	Liquid	mm	9.52	9.52	9.52
	Gas	mm	15.88	19.05	19.05
Refrigerant	Type		R410A		
	Charge	kg	2.80	2.90	2.60
Max. Interunit Piping Length		m	50		
Max. Interunit Height Difference		m	30		
INDOOR UNIT			FDMRN36A	FDMRN50A	FDMRN60A
Airflow Rate	High	CFM	1496	1726	1990
	Medium	CFM	1378	1454	1750
	Low	CFM	1269	1300	1400
Sound Pressure Level (H/M/L)		dBA	44/42/41	47/45/40	47/45/41
External Static Pressure	Standard (H/M/L)	Pa	50/50/50	50/50/50	
Fan	Type		CENTRIFUGAL	SIROCCO	SIROCCO
	Drive		DIRECT		
Fan Motor	Type		DC BRUSHLESS		
	Motor Output	W	560	560	560
	Running Current (Rated)	A	2.17	2.74	2.70
	Power Consumption (Rated)	W	251	340	350
Air Direction Control			DUCTED		
Air Filter			SARANET		
Dimensions (H x W x D)		mm	378 x 1369 x 541	378 x 1569 x 541	430 x 1432 x 784
Packaged Dimensions (H x W x D)		mm	415 x 1489 x 623	415 x 1693 x 623	642 x 1536 x 930
Weight		kg	50	56	71
Condensate Drain Size		mm	19.05	19.00	34.00
OUTDOOR UNIT			RR36A	RR50A	RR60A
Casing Colour			IVORY WHITE		
Airflow Rate	High	CFM	3840	3400	6495
Sound Pressure Level		dBA	65	60	65
Fan	Type		PROPELLER		
	Drive		DIRECT		
Fan Motor	Type		1-PHASE FIXED SPEED	INDUCTION	INDUCTION
	Index of protection (IP)		44	44	55
	Insulation Grade		F		
	Running Current (Rated)	A	2.37	1.52	3.28
	Power Consumption (Rated)	W	546	350	750
	Motor Output	W	370	240	580
	Poles		6		
Compressor	Type		SCROLL		
	Oil type		COPELAND ULTRA 32-3MAF	POE	POE
	Oil amount	cm ³	1242		
	Running Current (Rated)	A	8.66	5.04	5.27
	Power Consumption (Rated)	W	2163	3430	3650
Heat Exchanger Type			FIN TUBE	FIN TUBE	MICROCHANNEL
Dimensions (H x W x D)		mm	852 x 1030 x 400	852 x 1030 x 400	1067 x 930 x 880
Packaged Dimensions (H x W x D)		mm	995 x 1136 x 516	995 x 1136 x 516	1262 x 1087 x 1078
Weight		kg	92	87	120

Remarks:

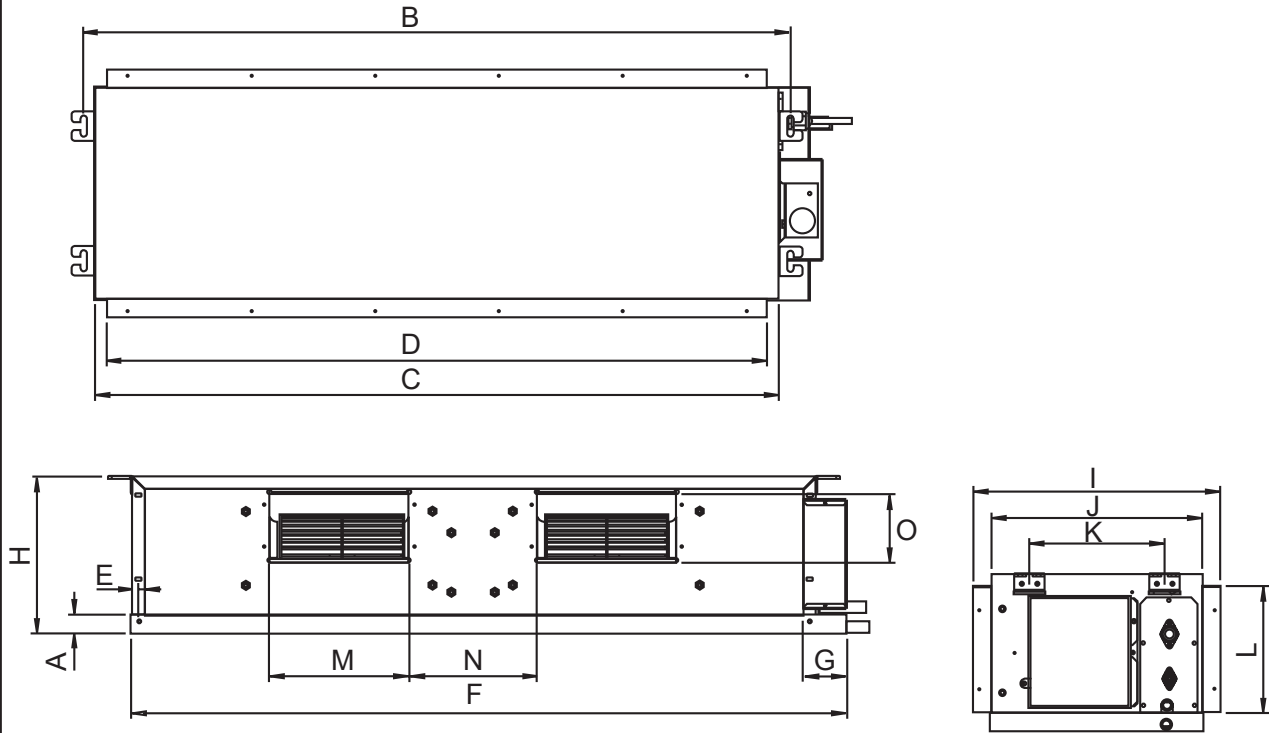
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- [2] NOMINAL DATA BASED ON 27/19°C ID DB/WB & 35°C OD DB (MEDIUM FAN)
- [3] NOMINAL DATA BASED ON 29/19°C ID DB/WB & 46°C OD DB (HIGH FAN)
- [4] NOMINAL DATA BASED ON 26.6/19.4°C ID DB/WB & 48°C OD DB (HIGH FAN)
- [5] ALL UNITS ARE BEING TESTED AND COMPLY WITH ISO 5151 (NON-DUCTED UNIT) OR ISO 13253 (DUCTED UNIT) AND ANSI/ASHRAE 37-2009 (DUCTED UNIT AT 48°C HIGH FAN).
- [6] ALL SPECIFICATIONS ARE SUBJECTED TO CHANGE BY THE MANUFACTURER WITHOUT PRIOR NOTICE.

Dimensions

Indoor Unit

Model : FDMRN20A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension Model	A	B	C	D	E	F	G	H	I	J	K
20	31	1176	1137	1097	10	1200	72	261	448	388	214

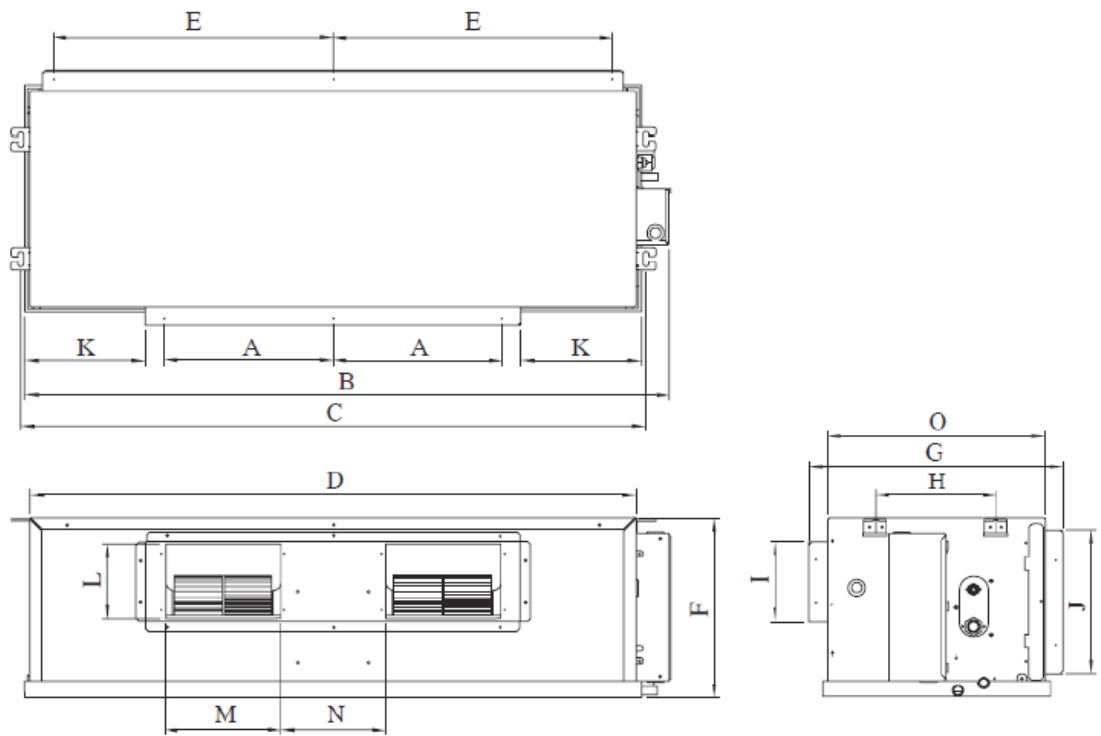
Dimension Model	L	M	N	O
20	211	232	203	114

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Note: Dimension in mm

Model : FDMRN25/30/36/50A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension Model	A	B	C	D	E	F	G	H	I	J	K
25/30	359	1115	1076	1030	467	378	541	256	180	306	119
36	359	1369	1326	1287	594	378	541	256	180	306	256
50	359	1569	1526	1487	694	378	541	256	180	306	356

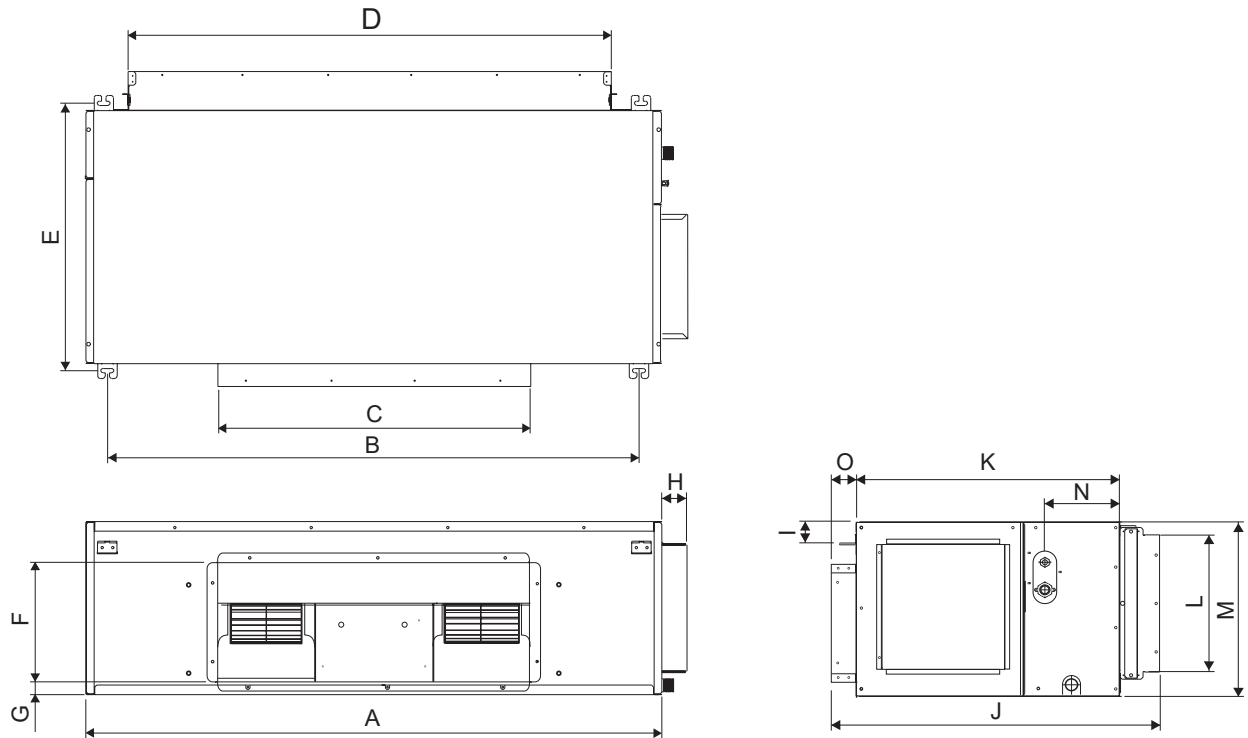
Dimension Model	A	M	N	O
25/30	170	234	234	462
36	170	234	234	462
50	170	234	234	462

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Note: Dimension in mm

Model : FDMRN60A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension Model	A	B	C	D	E	F	G	H	I	J	K
60	1372	1264	741	1148	665	292	33	60	53	784	626

Dimension Model	L	M	N	O
60	338	430	180	60

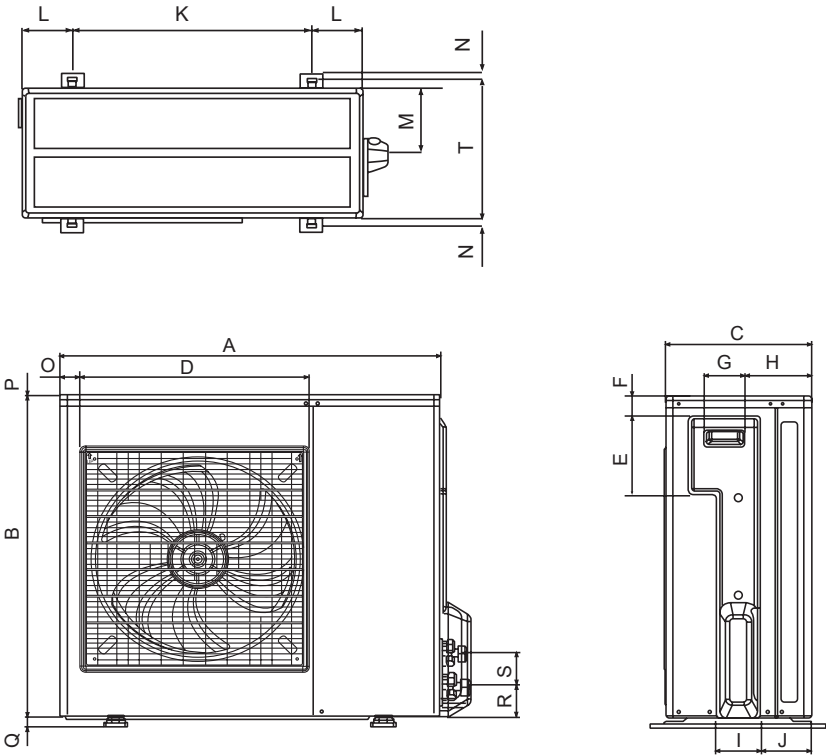
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Note: Dimension in mm

Outdoor Unit

Model : RR20/25A

FOR ILLUSTRATIVE PURPOSES ONLY



Dimension Model	A	B	C	D	E	F	G	H	I	J	K
20/25	855	730	328	520	182	44	93	149	101	113	603

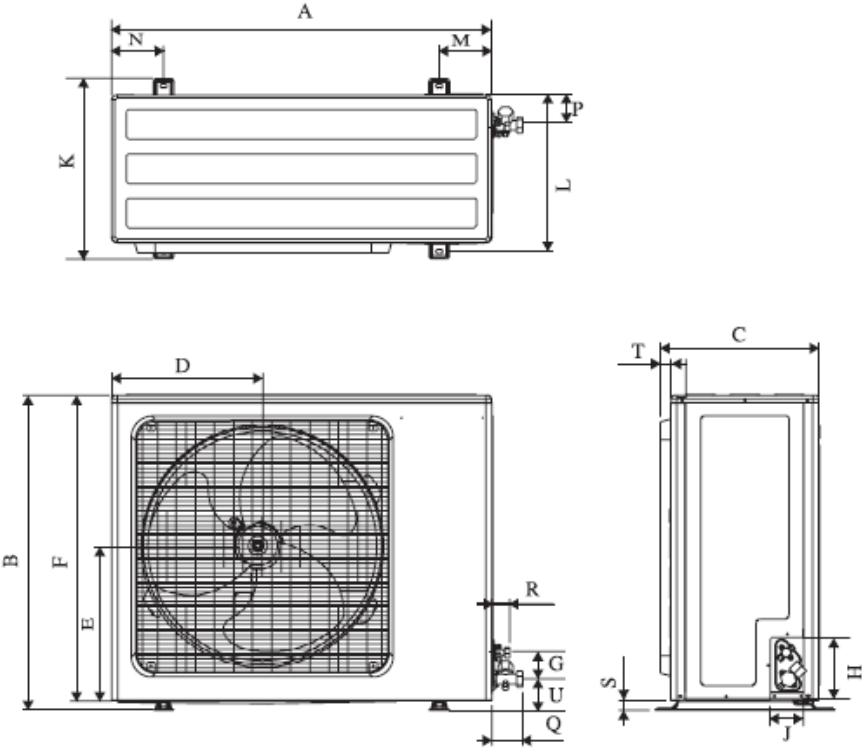
Dimension Model	L	M	N	O	P	Q	R	S	T
20/25	126	164	17	34	3	23	73	75	362

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Note: Dimension in mm

Model : RR30/36A

FOR ILLUSTRATIVE PURPOSES ONLY



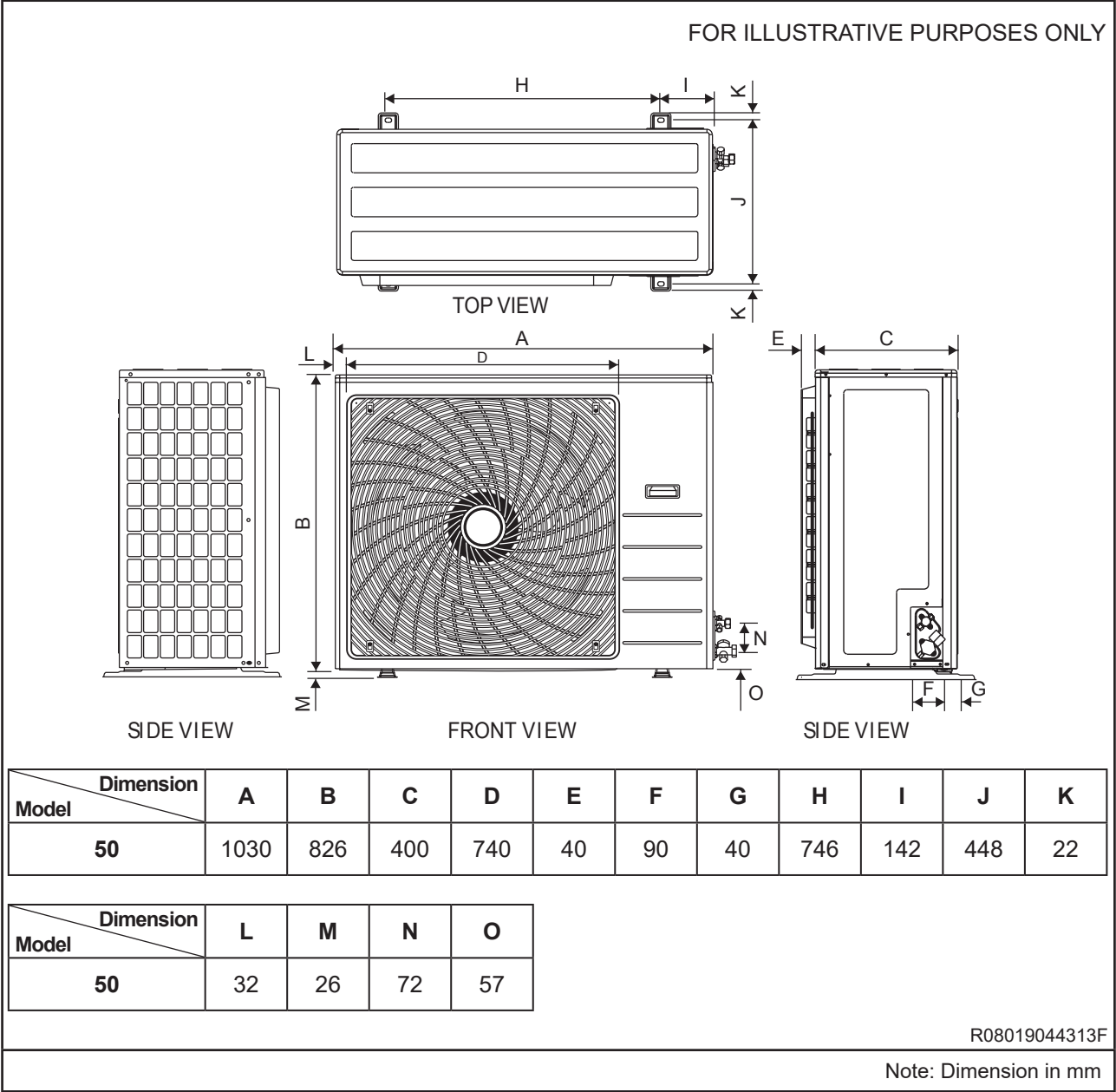
Dimension Model	A	B	C	D	E	F	G	H	J	K	L
30/36	1030	852	428	410	412	827	72	196	91	488	448

Dimension Model	M	N	P	Q	R	S	T	U
30/36	142	141	83	23	49	26	28	80

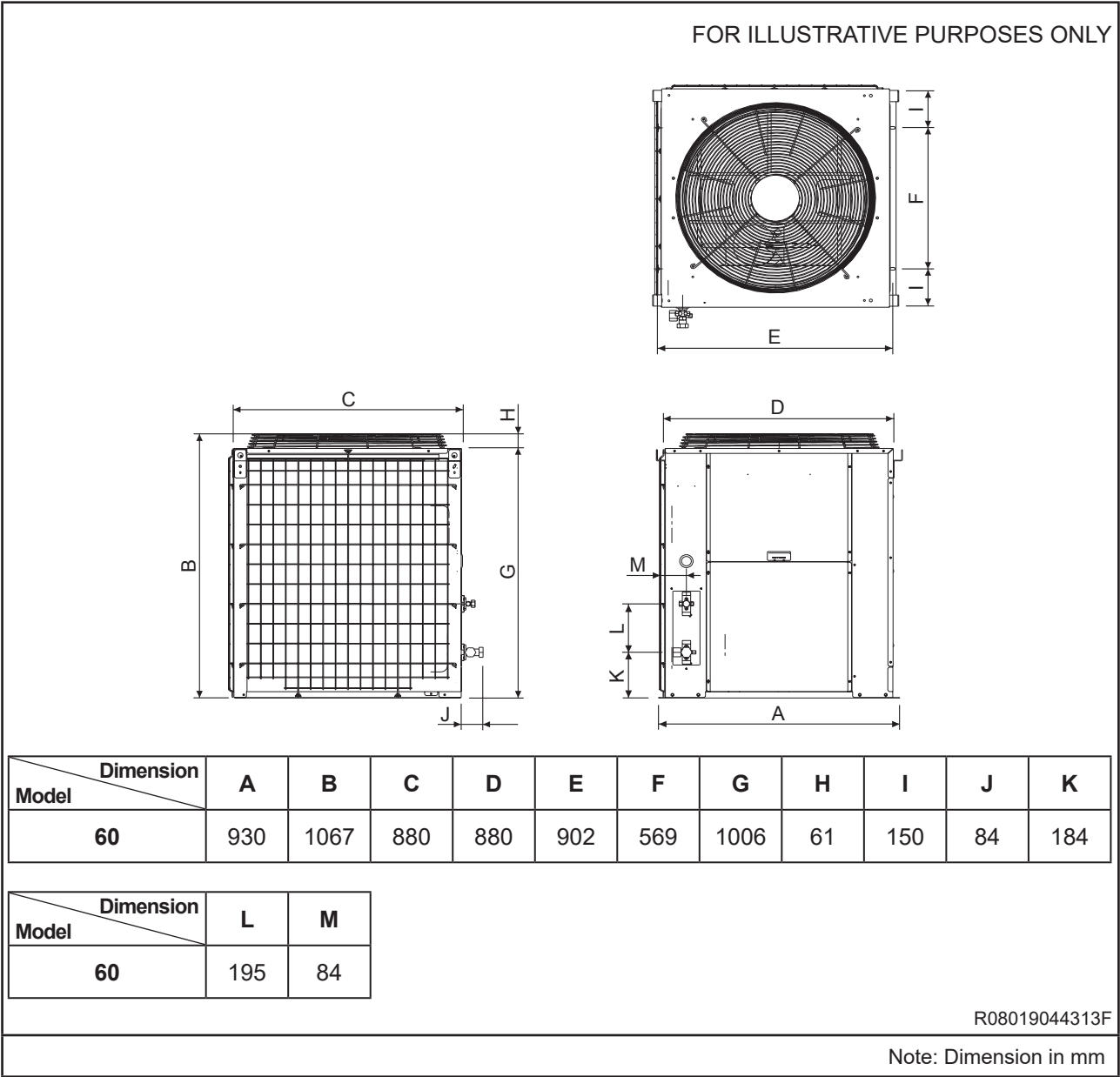
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Note: Dimension in mm

Model : RR50A



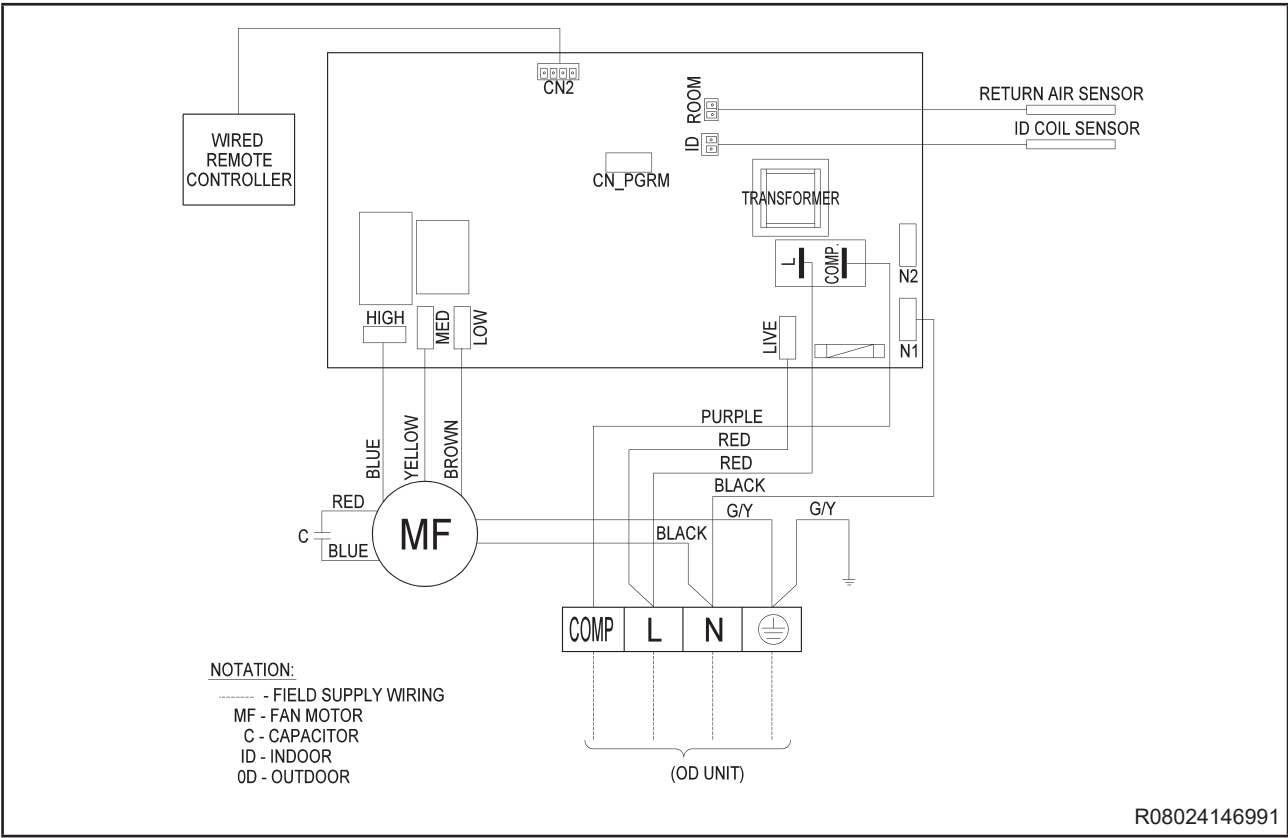
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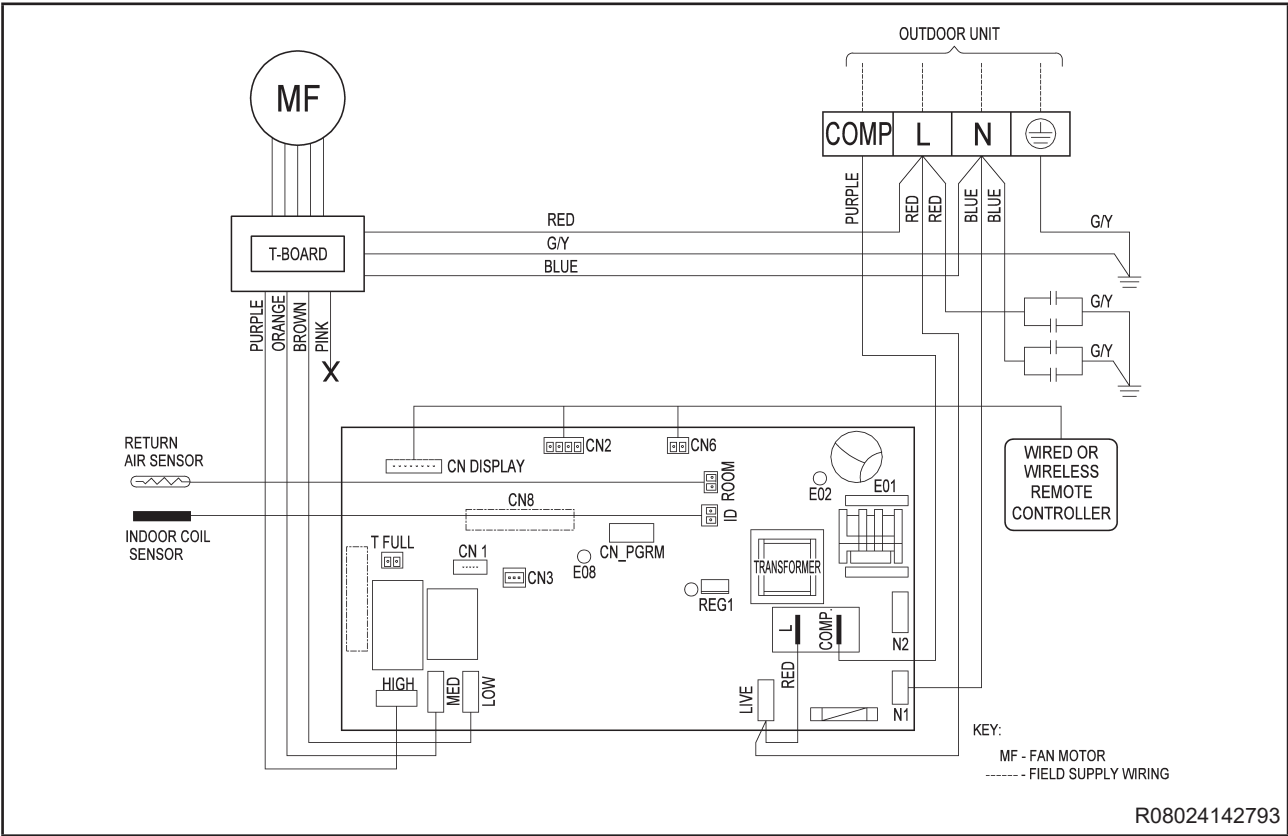
Wiring Diagrams

Indoor Unit

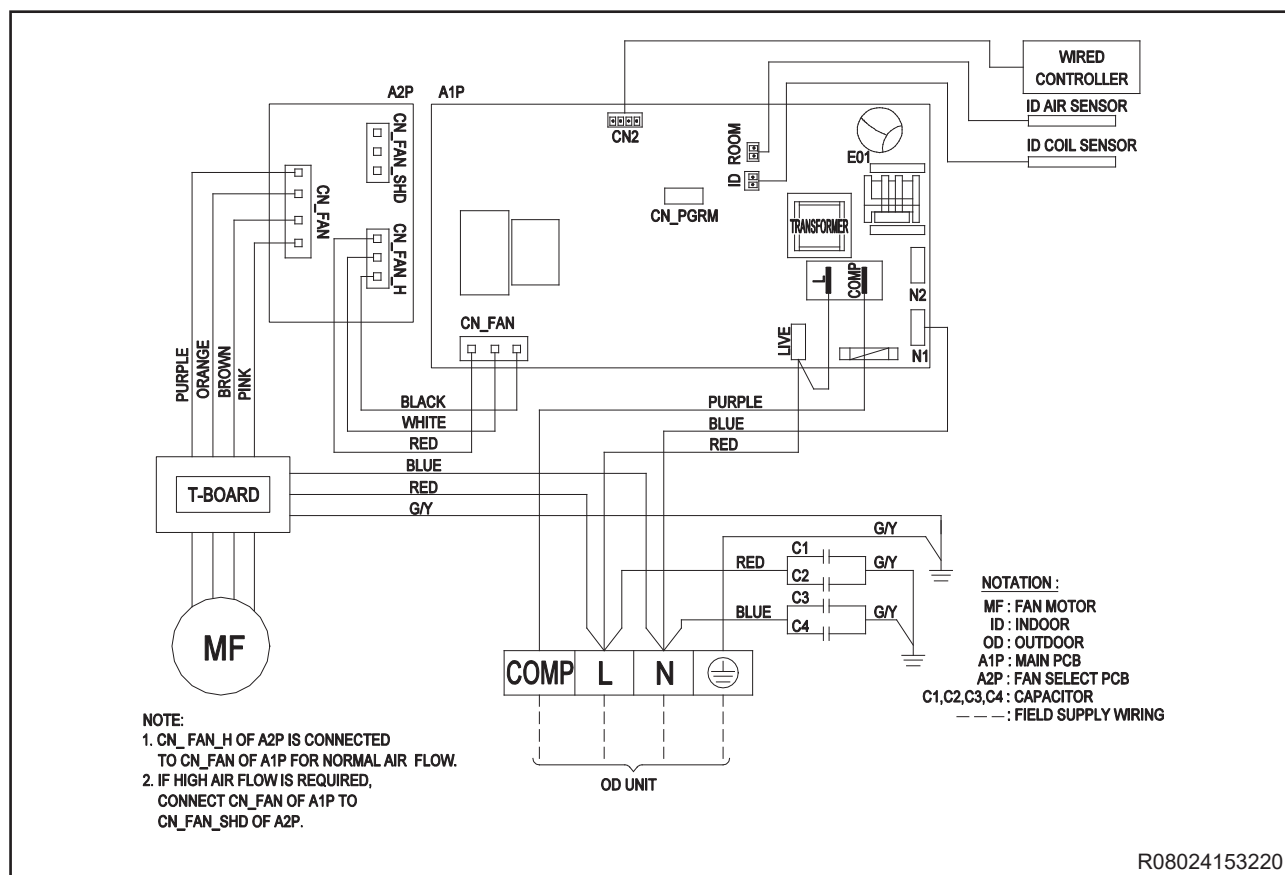
Model : FDMRN20A



Model : FDMRN25/30/36A

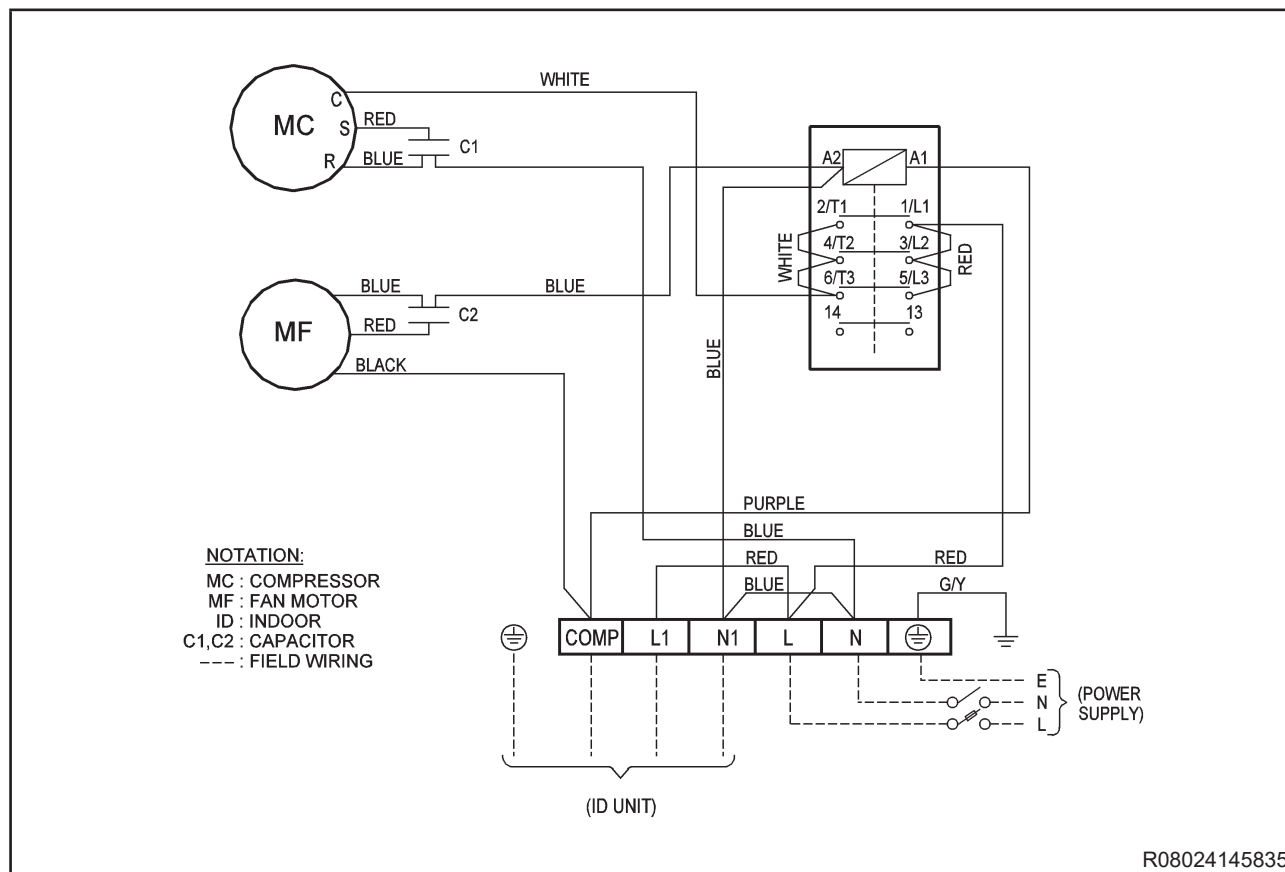


Model : FDMRN50/60A

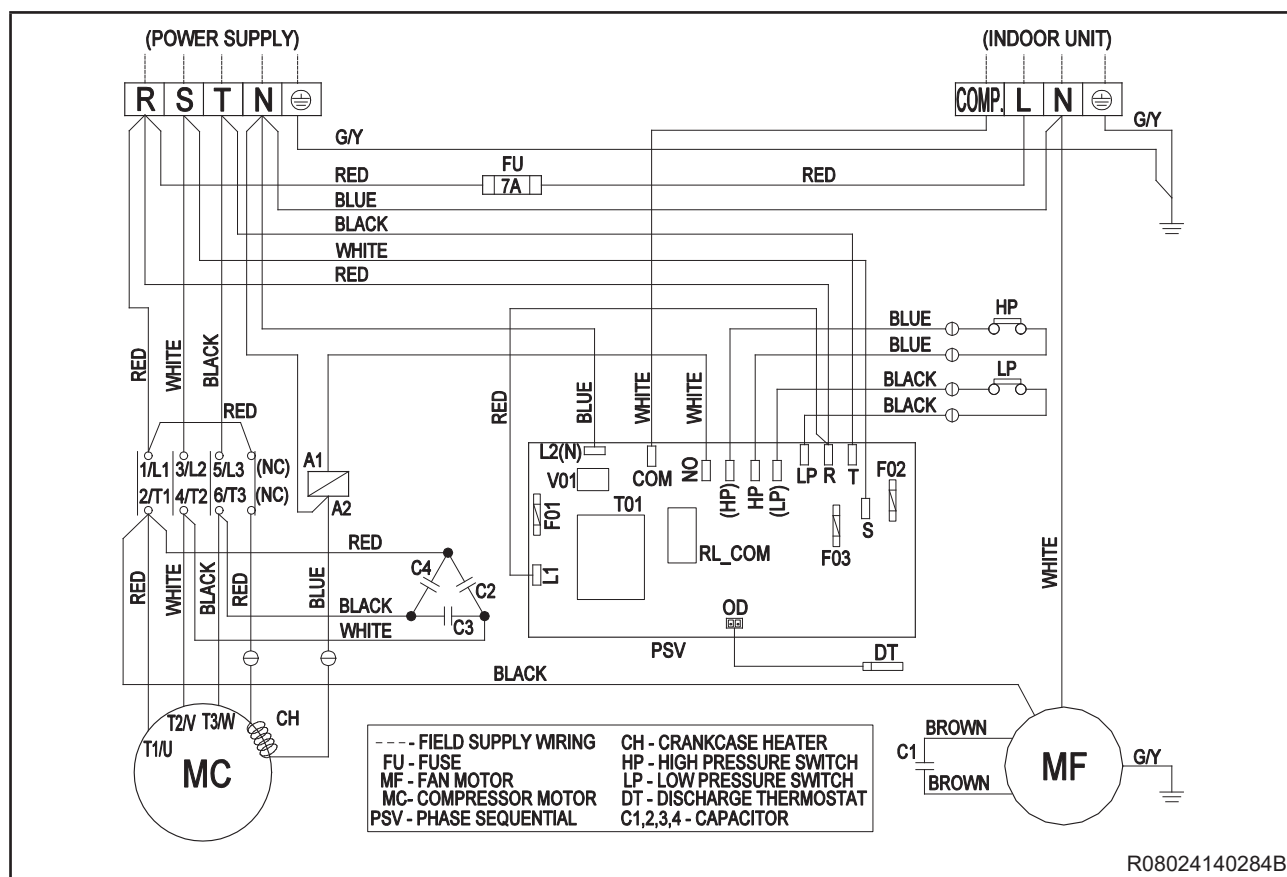


Outdoor Unit

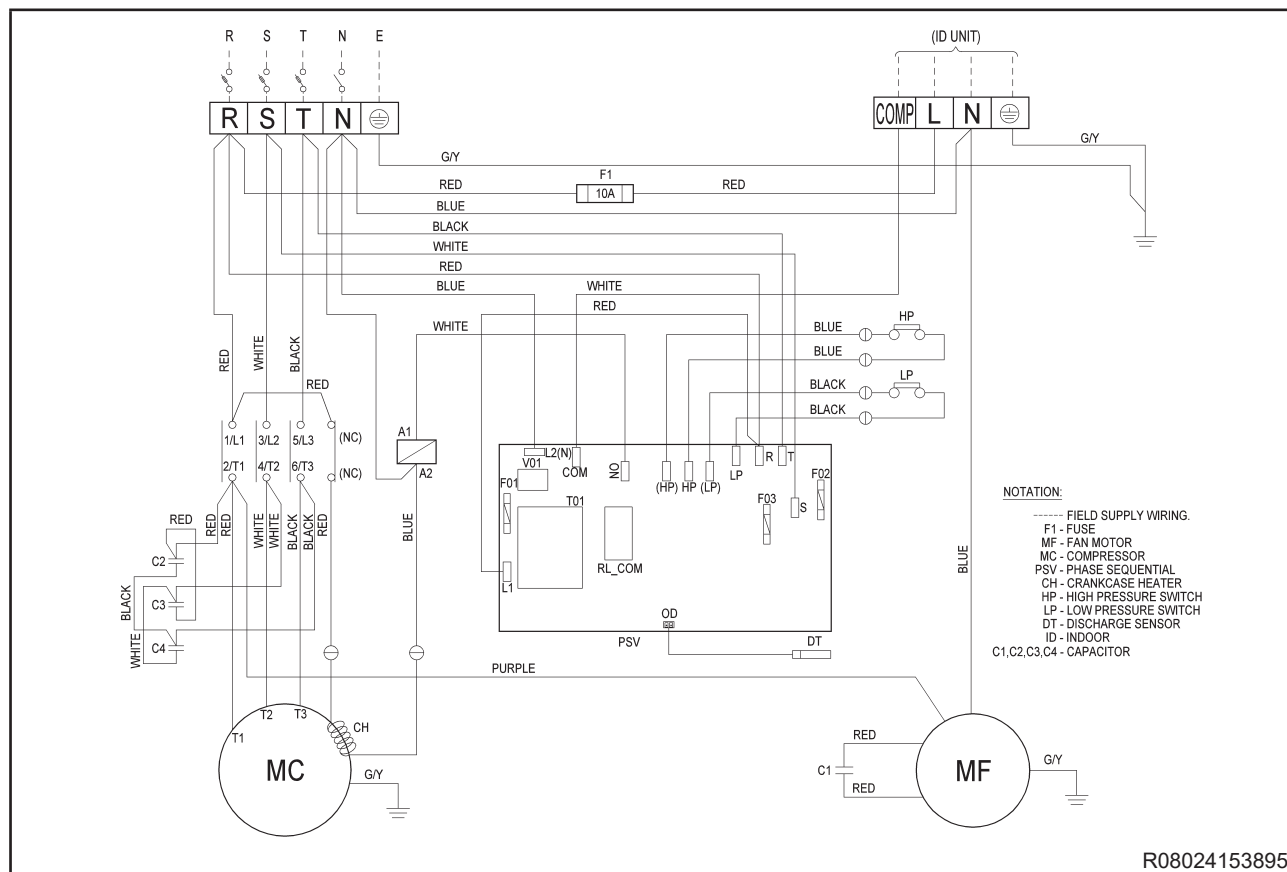
Model : RR20/25A



Model : RR50A

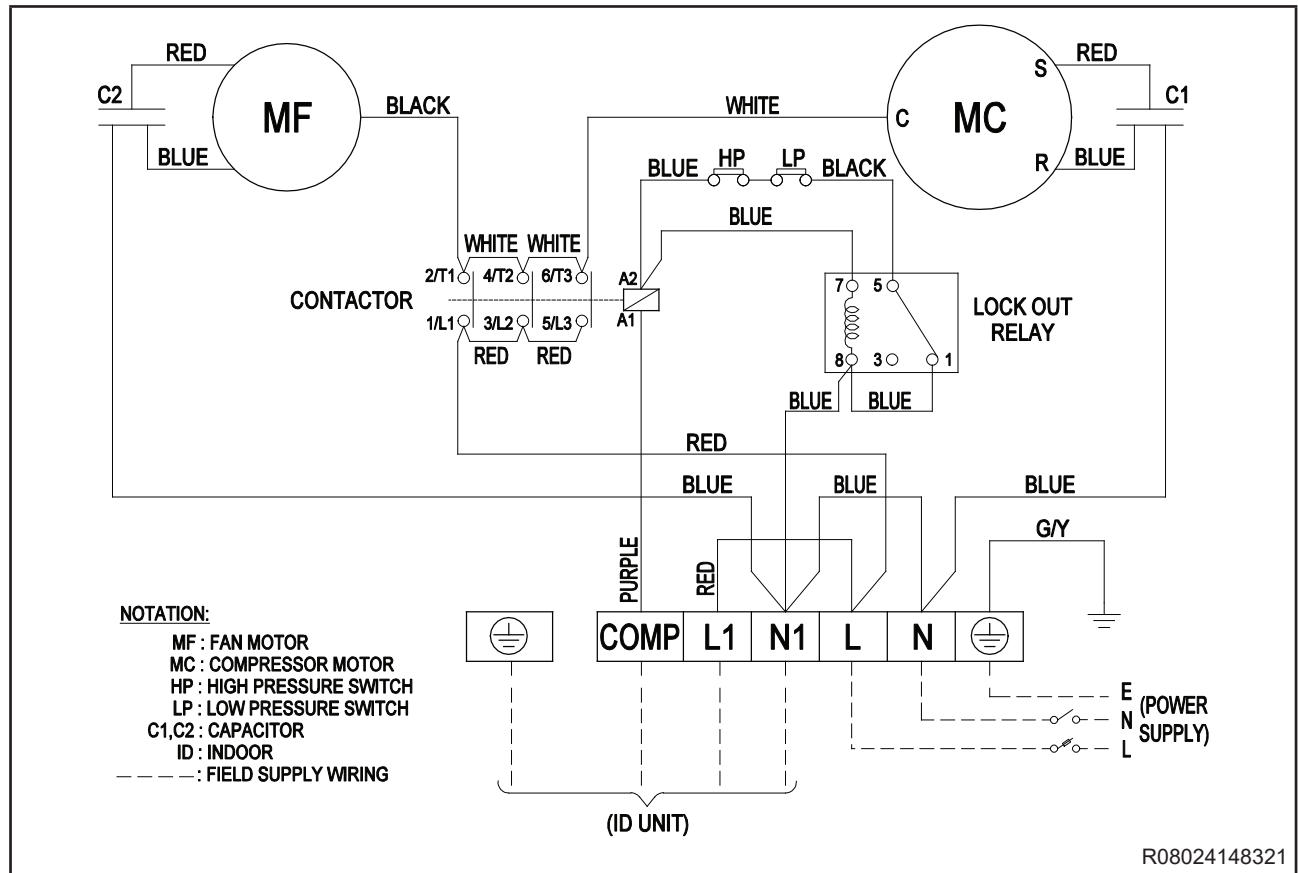


Model : RR60A

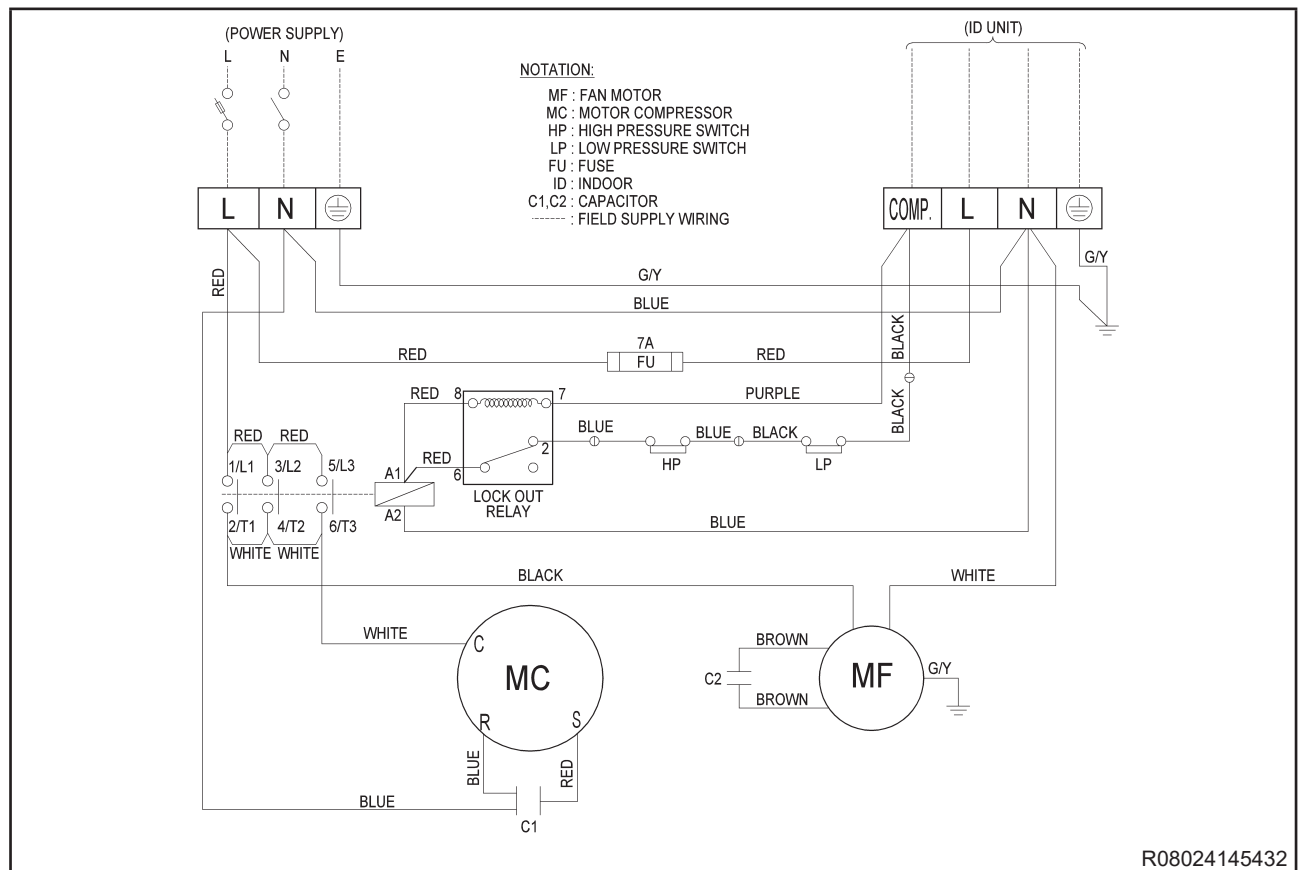


With High & Low Pressure Switch Applicable to (RE)

Model : RR20/25AV1KRE



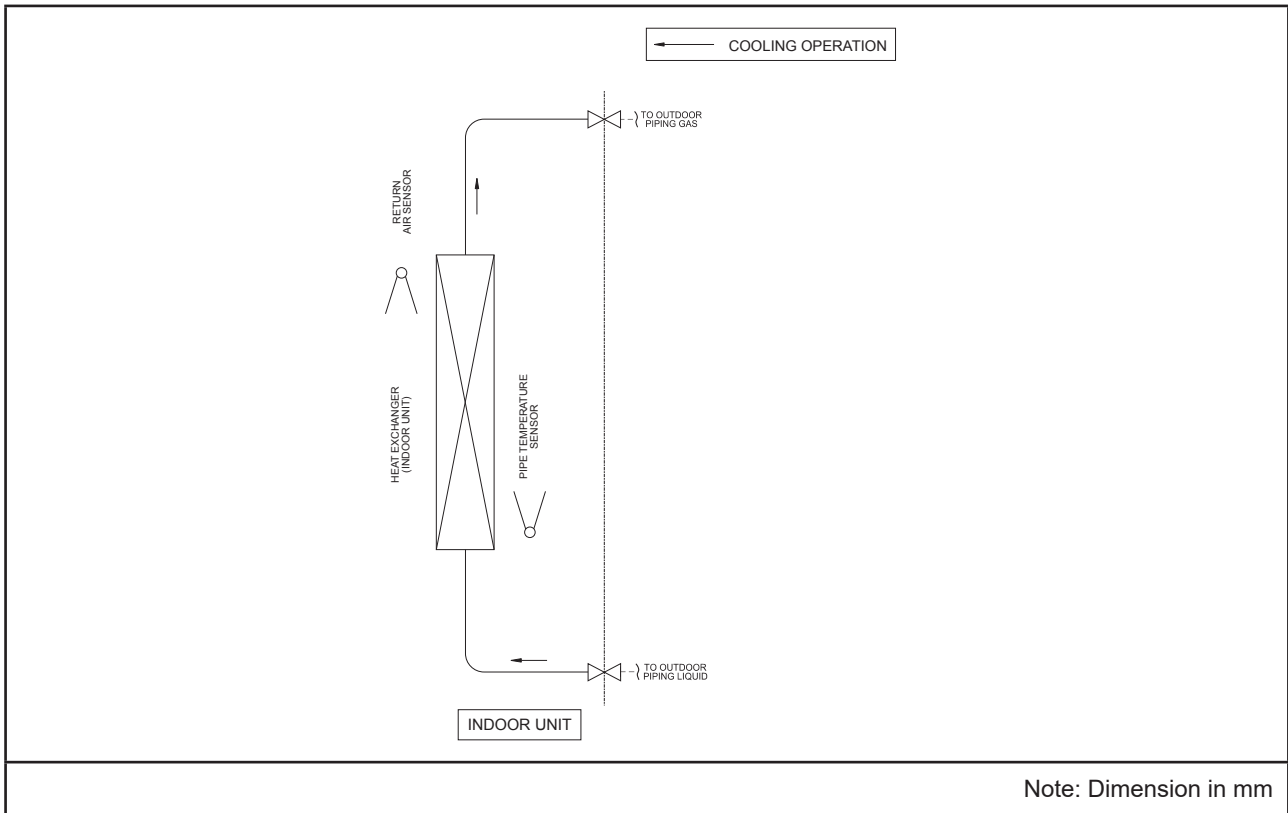
Model : RR30AV1KRE



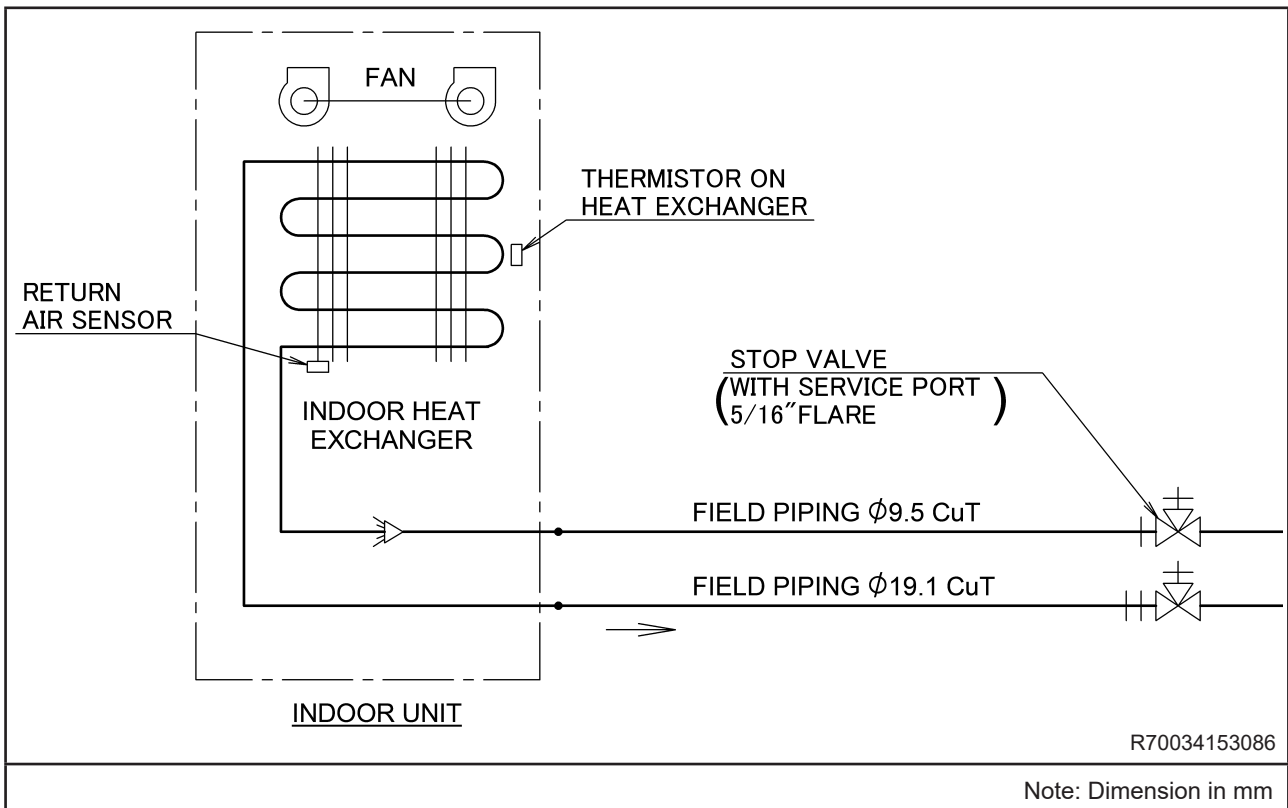
Piping Diagrams

Indoor Unit

Model : FDMRN20/25/30/36/50A

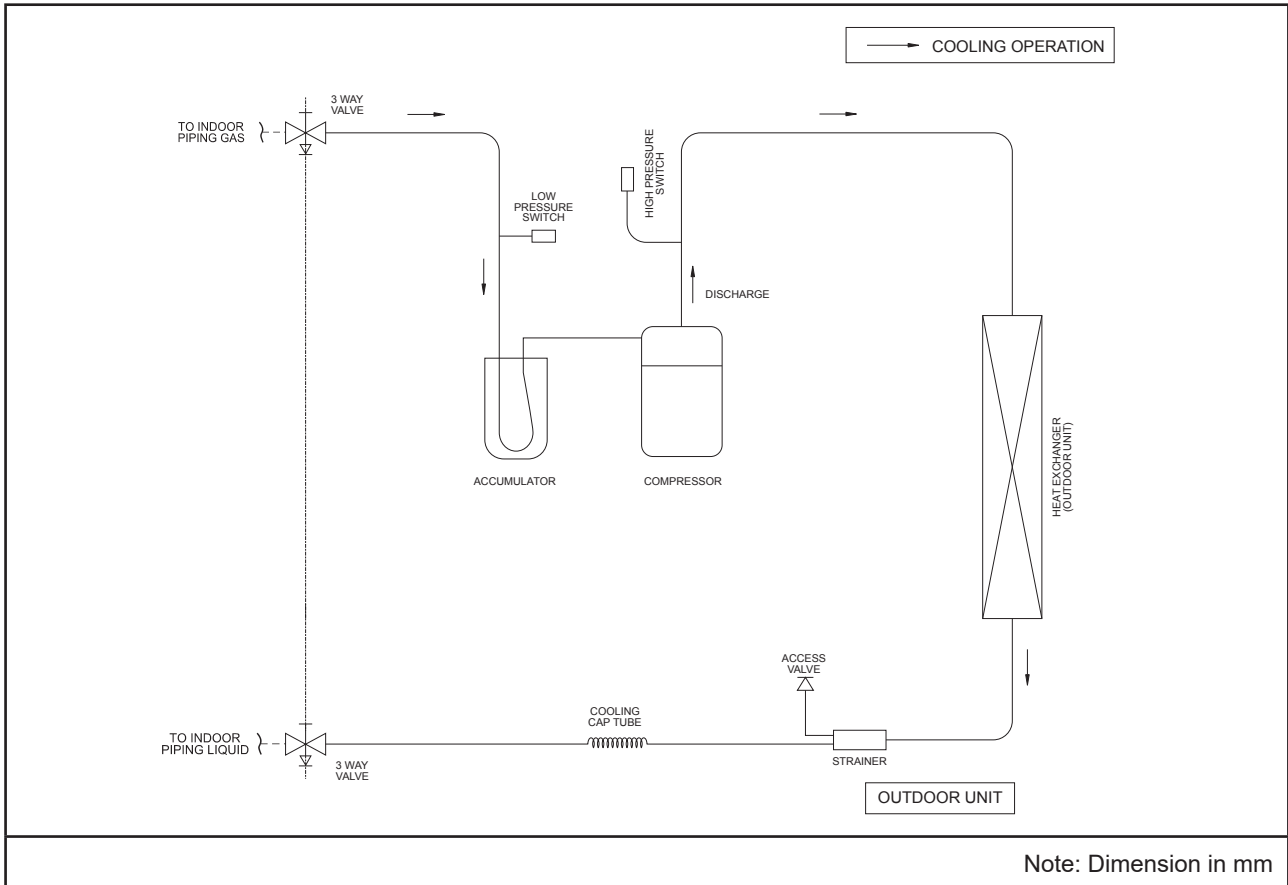


Model : FDMRN60A

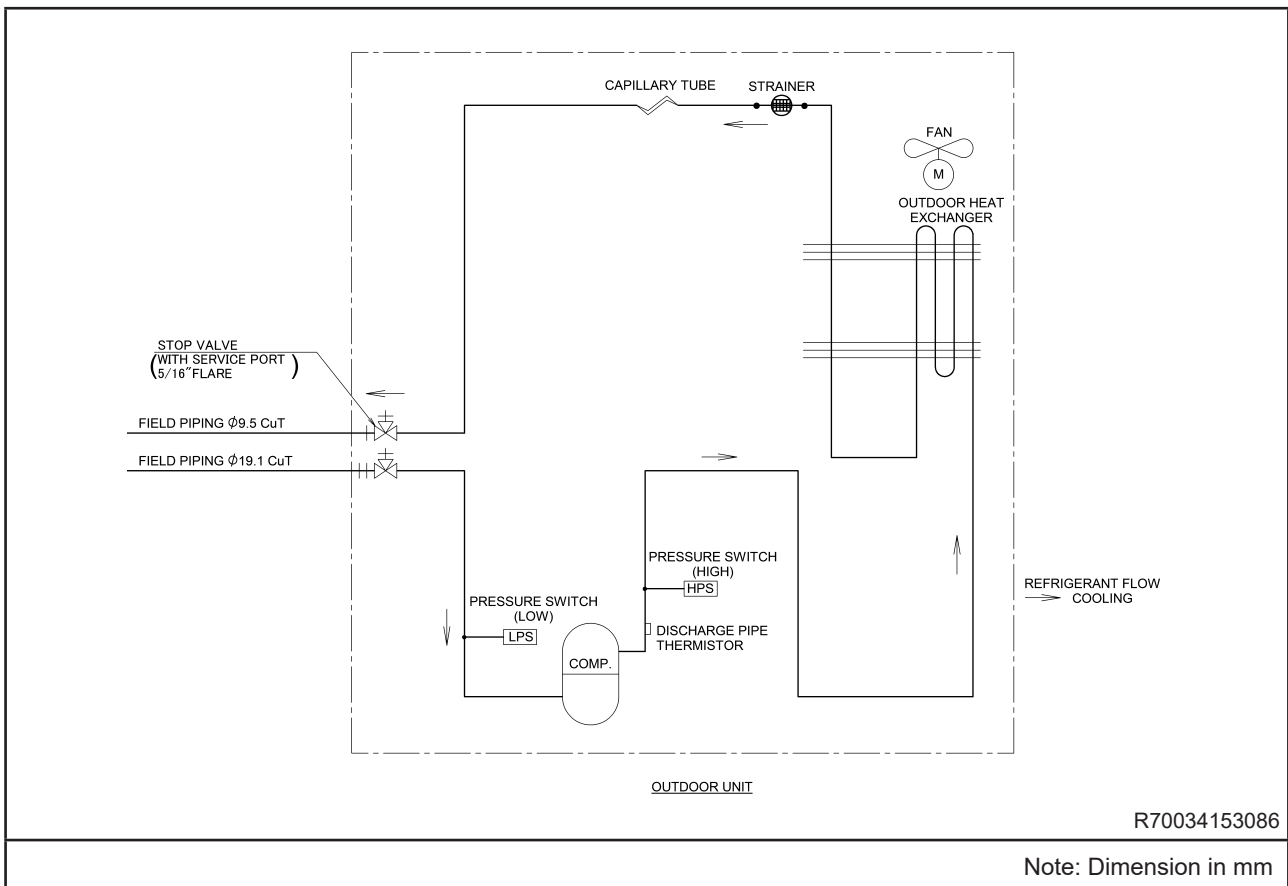


20

Model : RR36/50A



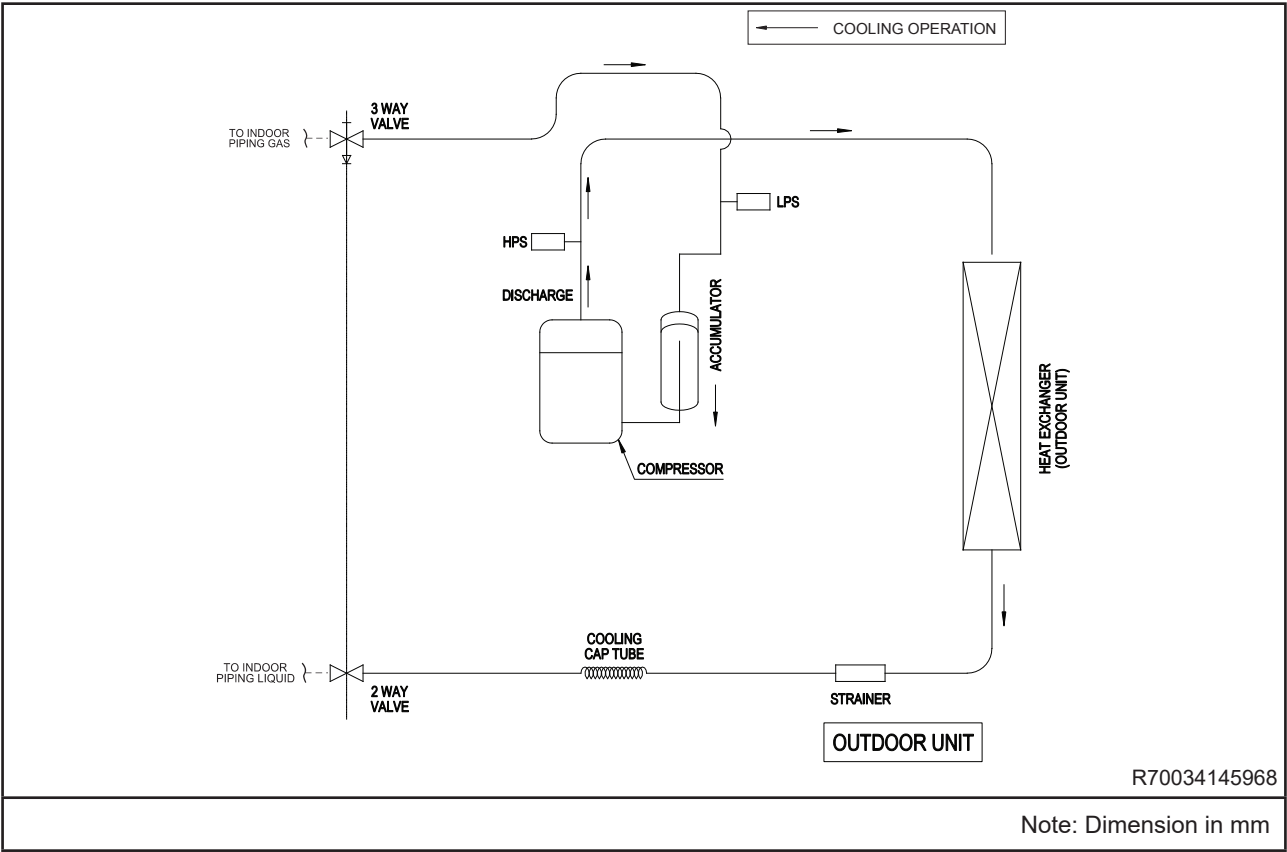
Model : RR60A



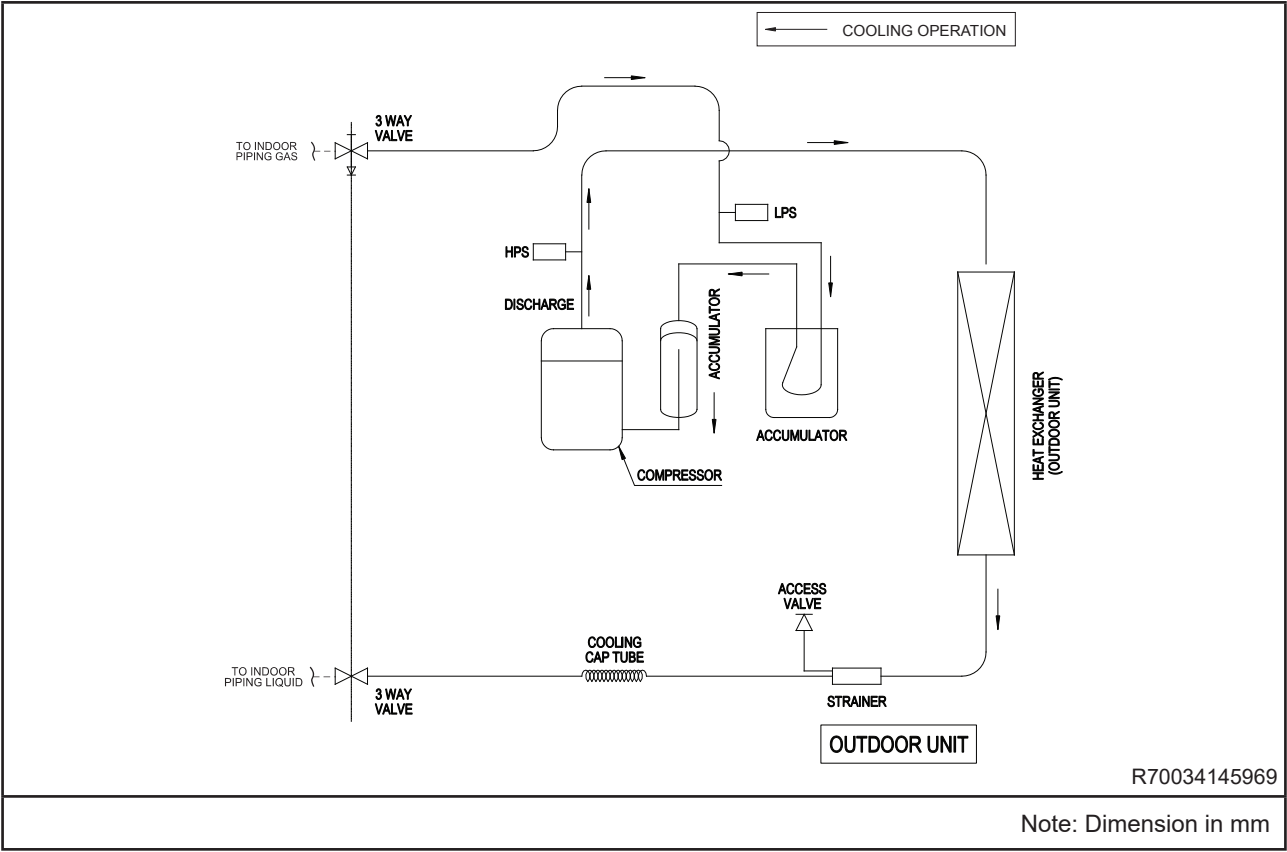
R70034153086

With High and Low Pressure Switch Applicable to (RE)

Model : RR20/25AV1KRE



Model : RR30AV1KRE



Capacity Tables

Cooling Only

Model : FDMRN20A - RR20A

		AFR		20.42													
		BPF		0.21													
Cooling 220 - 240V 50Hz High Fan																	
Indoor Temperature		Outdoor temperature [°C DB]															
EWB	EDB	30			32			35			40			46			
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
14	20	4.91	4.07	1.38	4.82	4.02	1.42	4.67	3.95	1.50	4.42	3.84	1.61	4.05	3.67	1.77	
16	22	5.15	4.00	1.39	5.06	3.97	1.44	4.91	3.90	1.50	4.67	3.79	1.61	4.28	3.63	1.78	
16	24	5.15	4.65	1.39	5.06	4.61	1.44	4.91	4.54	1.50	4.67	4.43	1.61	4.28	4.27	1.78	
18	25	5.41	4.26	1.39	5.31	4.22	1.44	5.15	4.15	1.51	4.91	4.05	1.62	4.50	3.89	1.79	
19	27	5.52	4.53	1.39	5.43	4.49	1.44	5.28	4.44	1.51	5.04	4.34	1.63	4.62	4.18	1.80	
19	29	5.52	5.16	1.39	5.43	5.12	1.44	5.28	5.06	1.51	5.04	4.97	1.63	4.62	4.62	1.80	
24	32	6.14	4.31	1.42	6.04	4.27	1.46	5.89	4.23	1.53	5.64	4.15	1.64	5.18	4.00	1.81	
Cooling 220 - 240V 50Hz Medium Fan																	
		AFR		15.29													
		BPF		0.05													
Indoor Temperature		Outdoor temperature [°C DB]															
EWB	EDB	30			32			35			40			46			
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
14	20	4.86	3.94	1.37	4.76	3.90	1.41	4.62	3.83	1.49	4.37	3.71	1.60	4.01	3.55	1.76	
16	22	5.09	3.88	1.38	5.01	3.84	1.43	4.86	3.77	1.49	4.62	3.67	1.60	4.24	3.50	1.77	
16	24	5.09	4.49	1.38	5.01	4.45	1.43	4.86	4.38	1.49	4.62	4.28	1.60	4.24	4.11	1.77	
18	25	5.35	4.11	1.38	5.25	4.08	1.43	5.09	4.01	1.50	4.85	3.91	1.61	4.45	3.75	1.78	
19	27	5.46	4.37	1.38	5.36	4.33	1.43	5.22	4.28	1.50	4.98	4.18	1.62	4.57	4.02	1.79	
19	29	5.46	4.97	1.38	5.36	4.93	1.43	5.22	4.87	1.50	4.98	4.78	1.62	4.57	4.57	1.79	
24	32	6.07	4.15	1.41	5.97	4.12	1.46	5.82	4.07	1.52	5.58	3.99	1.63	5.12	3.85	1.80	
Cooling 220 - 240V 50Hz Low Fan																	
		AFR		12.23													
		BPF		0.05													
Indoor Temperature		Outdoor temperature [°C DB]															
EWB	EDB	30			32			35			40			46			
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	
14	20	4.19	3.25	1.34	4.11	3.21	1.38	3.98	3.14	1.46	3.77	3.04	1.56	3.46	2.89	1.73	
16	22	4.39	3.19	1.35	4.32	3.16	1.40	4.19	3.10	1.46	3.98	3.01	1.57	3.65	2.86	1.74	
16	24	4.39	3.66	1.35	4.32	3.62	1.40	4.19	3.56	1.46	3.98	3.47	1.57	3.65	3.32	1.74	
18	25	4.61	3.37	1.36	4.53	3.33	1.40	4.39	3.27	1.47	4.18	3.19	1.58	3.84	3.04	1.74	
19	27	4.71	3.56	1.36	4.62	3.52	1.40	4.50	3.47	1.47	4.29	3.39	1.59	3.94	3.25	1.75	
19	29	4.71	4.01	1.36	4.62	3.98	1.40	4.50	3.93	1.47	4.29	3.84	1.59	3.94	3.70	1.75	
24	32	5.23	3.37	1.38	5.14	3.34	1.43	5.02	3.30	1.49	4.81	3.23	1.60	4.41	3.10	1.77	
Symbols																	
AFR	Air Flow rate		(m3/min)		NOTES:												
BPF	Bypass factor				1)  Shows nominal(rated) capacities and power input at T1 & T3 conditions.												
EWB	Entering Wet Bulb		(°C)		2) TC, SHC and PI must be calculated by interpolation using the figures in the above table.												
EDB	Entering Dry Bulb		(°C)		3) Capacities are based on the following condition.												
TC	Total Capacity		(kW)		Corresponding refrigerant piping length :7.5m												
SHC	Sensible Heat Capacity		(kW)		Level difference :0.0m												
PI	Power Input		(kW)														
3D145726A																	

Model : FDMRN25A - RR25A

Cooling 220 - 240V 50Hz High Fan

AFR	22.65
BPF	0.10

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	6.41	5.26	1.82	6.29	5.20	1.88	6.10	5.11	1.98	5.77	4.96	2.13	5.27	4.73	2.32
16	22	6.72	5.18	1.84	6.61	5.13	1.90	6.41	5.04	1.98	6.10	4.90	2.14	5.57	4.68	2.33
16	24	6.72	6.00	1.84	6.61	5.95	1.90	6.41	5.86	1.98	6.10	5.72	2.14	5.57	5.50	2.33
18	25	7.06	5.50	1.85	6.93	5.45	1.91	6.72	5.36	2.00	6.41	5.23	2.14	5.86	5.01	2.34
19	27	7.21	5.85	1.85	7.08	5.80	1.91	6.89	5.72	2.00	6.57	5.60	2.16	6.01	5.38	2.35
19	29	7.21	6.65	1.85	7.08	6.60	1.91	6.89	6.52	2.00	6.57	6.40	2.16	6.01	6.01	2.35
24	32	8.01	5.56	1.88	7.88	5.51	1.94	7.68	5.45	2.02	7.36	5.35	2.18	6.73	5.15	2.37

Cooling 220 - 240V 50Hz Medium Fan

AFR	18.15
BPF	0.02

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	6.30	4.92	1.80	6.18	4.86	1.86	5.99	4.77	1.95	5.67	4.62	2.10	5.18	4.39	2.28
16	22	6.61	4.84	1.81	6.49	4.79	1.87	6.30	4.70	1.95	5.99	4.56	2.10	5.48	4.34	2.29
16	24	6.61	5.56	1.81	6.49	5.50	1.87	6.30	5.42	1.95	5.99	5.28	2.10	5.48	5.05	2.29
18	25	6.93	5.11	1.82	6.81	5.06	1.88	6.61	4.97	1.97	6.30	4.84	2.11	5.76	4.62	2.30
19	27	7.08	5.41	1.82	6.96	5.36	1.88	6.77	5.28	1.97	6.46	5.16	2.13	5.91	4.94	2.31
19	29	7.08	6.11	1.82	6.96	6.06	1.88	6.77	5.98	1.97	6.46	5.86	2.13	5.91	5.64	2.31
24	32	7.87	5.12	1.85	7.74	5.08	1.91	7.55	5.02	1.99	7.23	4.91	2.14	6.61	4.71	2.33

Cooling 220 - 240V 50Hz Low Fan

AFR	14.61
BPF	0.01

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	5.29	4.08	1.78	5.18	4.03	1.84	5.02	3.95	1.93	4.76	3.82	2.07	4.35	3.63	2.26
16	22	5.54	4.02	1.80	5.45	3.97	1.85	5.29	3.90	1.93	5.02	3.78	2.08	4.59	3.59	2.27
16	24	5.54	4.60	1.80	5.45	4.55	1.85	5.29	4.48	1.93	5.02	4.36	2.08	4.59	4.16	2.27
18	25	5.82	4.23	1.80	5.71	4.19	1.86	5.54	4.12	1.95	5.28	4.01	2.09	4.83	3.82	2.28
19	27	5.94	4.47	1.80	5.84	4.43	1.86	5.68	4.37	1.95	5.42	4.26	2.10	4.95	4.07	2.29
19	29	5.94	5.04	1.80	5.84	5.00	1.86	5.68	4.93	1.95	5.42	4.83	2.10	4.95	4.64	2.29
24	32	6.60	4.23	1.83	6.49	4.20	1.89	6.34	4.14	1.97	6.07	4.06	2.12	5.55	3.89	2.31

Symbols

AFR	Air Flow rate	(m3/min)
BPF	Bypass factor	
EWB	Entering Wet Bulb	(°C)
EDB	Entering Dry Bulb	(°C)
TC	Total Capacity	(kW)
SHC	Sensible Heat Capacity	(kW)
PI	Power Input	(kW)

NOTES:

- Shows nominal(rated) capacities and power input at T1 & T3 conditions
- TC, SHC and PI must be calculated by interpolation using the figures in the above table
- Capacities are based on the following condition

Corresponding refrigerant piping length	:7.5m
Level difference	:0.0m

3D145727

Model : FDMRN30A - RR30A

Cooling 220 - 240V 50Hz High Fan

AFR	28.32
BPF	0.02

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	8.18	6.90	2.30	8.02	6.83	2.37	7.78	6.71	2.50	7.36	6.52	2.68	6.94	6.33	3.01
16	22	8.58	6.79	2.32	8.43	6.73	2.40	8.18	6.62	2.50	7.78	6.44	2.69	7.33	6.26	3.02
16	24	8.58	7.91	2.32	8.43	7.84	2.40	8.18	7.73	2.50	7.78	7.56	2.69	7.33	7.33	3.02
18	25	9.00	7.23	2.33	8.84	7.17	2.40	8.58	7.06	2.52	8.17	6.90	2.70	7.71	6.72	3.03
19	27	9.19	7.71	2.33	9.03	7.65	2.40	8.79	7.56	2.52	8.39	7.40	2.72	7.91	7.22	3.05
19	29	9.19	8.81	2.33	9.03	8.74	2.40	8.79	8.65	2.52	8.39	8.39	2.72	7.91	7.91	3.05
24	32	10.22	7.34	2.37	10.05	7.28	2.44	9.80	7.21	2.55	9.39	7.08	2.74	8.86	6.91	3.07

Cooling 220 - 240V 50Hz Medium Fan

AFR	22.46
BPF	0.03

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	7.77	6.07	2.26	7.62	5.99	2.34	7.39	5.88	2.46	6.99	5.69	2.64	6.51	5.46	2.87
16	22	8.15	5.97	2.28	8.01	5.90	2.36	7.77	5.79	2.46	7.39	5.62	2.65	6.93	5.42	2.87
16	24	8.15	6.84	2.28	8.01	6.78	2.36	7.77	6.67	2.46	7.39	6.50	2.65	6.93	6.30	2.87
18	25	8.55	6.30	2.29	8.40	6.23	2.36	8.15	6.13	2.48	7.77	5.97	2.66	7.30	5.77	2.88
19	27	8.73	6.66	2.29	8.58	6.60	2.36	8.35	6.51	2.48	7.97	6.35	2.68	7.49	6.16	2.90
19	29	8.73	7.52	2.29	8.58	7.46	2.36	8.35	7.37	2.48	7.97	7.21	2.68	7.49	7.02	2.90
24	32	9.71	6.31	2.33	9.54	6.26	2.41	9.31	6.18	2.51	8.92	6.05	2.70	8.46	5.90	2.91

Cooling 220 - 240V 50Hz Low Fan

AFR	16.79
BPF	0.03

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	7.17	5.22	2.14	7.03	5.15	2.21	6.81	5.04	2.33	6.45	4.85	2.50	6.00	4.63	2.71
16	22	7.51	5.13	2.16	7.39	5.07	2.23	7.17	4.96	2.33	6.81	4.79	2.51	6.39	4.60	2.71
16	24	7.51	5.79	2.16	7.39	5.73	2.23	7.17	5.62	2.33	6.81	5.45	2.51	6.39	5.25	2.71
18	25	7.89	5.36	2.17	7.75	5.30	2.24	7.51	5.20	2.35	7.16	5.04	2.52	6.73	4.85	2.73
19	27	8.05	5.63	2.17	7.91	5.56	2.24	7.70	5.47	2.35	7.35	5.32	2.54	6.91	5.14	2.74
19	29	8.05	6.27	2.17	7.91	6.21	2.24	7.70	6.11	2.35	7.35	5.96	2.54	6.91	5.78	2.74
24	32	8.95	5.30	2.21	8.80	5.25	2.28	8.59	5.17	2.37	8.23	5.04	2.56	7.80	4.90	2.76

Symbols

AFR	Air Flow rate	(m3/min)
BPF	Bypass factor	
EWB	Entering Wet Bulb	(°C)
EDB	Entering Dry Bulb	(°C)
TC	Total Capacity	(kW)
SHC	Sensible Heat Capacity	(kW)
PI	Power Input	(kW)

NOTES:

- Shows nominal(rated) capacities and power input at T1 & T3 conditions
- TC, SHC and PI must be calculated by interpolation using the figures in the above table
- Capacities are based on the following condition

Corresponding refrigerant piping length	:7.5m
Level difference	:0.0m

3D145728

Model : FDMRN36A - RR36A

Cooling 220 - 240V 50Hz High Fan

AFR	42.36
BPF	0.16

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	9.82	8.52	2.70	9.63	8.43	2.79	9.33	8.30	2.93	8.83	8.07	3.15	8.23	7.80	3.50
16	22	10.30	8.39	2.73	10.12	8.32	2.81	9.82	8.19	2.93	9.33	7.98	3.16	8.70	7.71	3.52
16	24	10.30	9.82	2.73	10.12	9.74	2.81	9.82	9.61	2.93	9.33	9.33	3.16	8.70	8.70	3.52
18	25	10.80	8.96	2.73	10.61	8.89	2.82	10.30	8.76	2.96	9.81	8.57	3.17	9.14	8.31	3.53
19	27	11.03	9.58	2.73	10.84	9.51	2.82	10.55	9.39	2.96	10.07	9.21	3.19	9.38	8.65	3.55
19	29	11.03	10.97	2.73	10.84	10.84	2.82	10.55	10.55	2.96	10.07	10.07	3.19	9.38	9.38	3.55
24	32	12.27	9.13	2.78	12.06	9.07	2.87	11.77	8.97	2.99	11.27	8.82	3.22	10.51	8.59	3.58

Cooling 220 - 240V 50Hz Medium Fan

AFR	39.02
BPF	0.18

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	9.44	7.96	2.67	9.25	7.87	2.76	8.97	7.74	2.90	8.49	7.52	3.12	7.90	7.25	3.39
16	22	9.90	7.84	2.70	9.73	7.76	2.79	9.44	7.64	2.90	8.97	7.44	3.13	8.42	7.20	3.39
16	24	9.90	9.12	2.70	9.73	9.05	2.79	9.44	8.92	2.90	8.97	8.72	3.13	8.42	8.18	3.39
18	25	10.38	8.35	2.70	10.20	8.27	2.79	9.90	8.15	2.93	9.43	7.96	3.14	8.86	7.74	3.40
19	27	10.61	8.90	2.70	10.42	8.83	2.79	10.14	8.72	2.93	9.67	8.54	3.16	9.10	8.10	3.42
19	29	10.61	10.16	2.70	10.42	10.08	2.79	10.14	9.97	2.93	9.67	9.67	3.16	9.10	9.10	3.42
24	32	11.79	8.47	2.75	11.59	8.41	2.84	11.31	8.32	2.96	10.84	8.17	3.19	10.28	7.99	3.44

Cooling 220 - 240V 50Hz Low Fan

AFR	35.93
BPF	0.19

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	9.12	7.48	2.65	8.94	7.40	2.73	8.67	7.27	2.87	8.20	7.05	3.08	7.64	6.79	3.35
16	22	9.56	7.36	2.67	9.40	7.29	2.76	9.12	7.16	2.87	8.67	6.97	3.10	8.13	6.74	3.35
16	24	9.56	8.52	2.67	9.40	8.45	2.76	9.12	8.33	2.87	8.67	8.13	3.10	8.13	7.90	3.35
18	25	10.04	7.82	2.68	9.86	7.74	2.76	9.56	7.62	2.90	9.11	7.44	3.11	8.56	7.22	3.37
19	27	10.25	8.31	2.68	10.07	8.24	2.76	9.80	8.13	2.90	9.35	7.96	3.13	8.79	7.74	3.39
19	29	10.25	9.45	2.68	10.07	9.38	2.76	9.80	9.27	2.90	9.35	9.09	3.13	8.79	8.79	3.39
24	32	11.40	7.90	2.73	11.20	7.84	2.81	10.93	7.75	2.93	10.47	7.60	3.15	9.93	7.43	3.41

Symbols

AFR	Air Flow rate	(m3/min)
BPF	Bypass factor	
EWB	Entering Wet Bulb	(°C)
EDB	Entering Dry Bulb	(°C)
TC	Total Capacity	(kW)
SHC	Sensible Heat Capacity	(kW)
PI	Power Input	(kW)

NOTES:

- 1)  Shows nominal (rated) capacities and power input at T1 & T3 conditions
- 2) TC, SHC and PI must be calculated by interpolation using the figures in the above table
- 3) Capacities are based on the following condition

Corresponding refrigerant piping length	:7.5m
Level difference	:0.0m

3D145730

Model : FDMRN50A - RR50A

Cooling 380 - 415V 50Hz High Fan

AFR	48.87
BPF	0.05

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	13.09	11.26	3.76	12.84	11.14	3.88	12.45	10.96	4.08	11.78	10.65	4.38	11.21	10.40	4.88
16	22	13.73	11.08	3.79	13.49	10.98	3.92	13.09	10.81	4.08	12.45	10.53	4.40	11.85	10.28	4.90
16	24	13.73	12.94	3.79	13.49	12.84	3.92	13.09	12.67	4.08	12.45	12.39	4.40	11.85	11.85	4.90
18	25	14.41	11.82	3.80	14.15	11.72	3.93	13.73	11.55	4.12	13.08	11.30	4.42	12.46	11.05	4.92
19	27	14.71	12.63	3.80	14.46	12.53	3.93	14.07	12.38	4.12	13.42	12.13	4.45	12.78	11.79	4.95
19	29	14.71	14.45	3.80	14.46	14.35	3.93	14.07	14.07	4.12	13.42	13.42	4.45	12.78	12.65	4.95
24	32	16.36	12.03	3.87	16.08	11.94	4.00	15.69	11.82	4.16	15.03	11.61	4.48	14.31	11.39	4.99

Cooling 380 - 415V 50Hz Medium Fan

AFR	41.17
BPF	0.06

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	12.41	10.08	3.60	12.17	9.96	3.72	11.80	9.78	3.92	11.16	9.59	4.20	10.75	9.47	4.70
16	22	13.01	9.91	3.64	12.79	9.81	3.76	12.41	9.64	3.92	11.80	9.38	4.22	11.46	9.25	4.70
16	24	13.01	11.46	3.64	12.79	11.36	3.76	12.41	11.19	3.92	11.80	10.92	4.22	11.46	9.96	4.70
18	25	13.66	10.51	3.65	13.41	10.41	3.76	13.01	10.25	3.95	12.40	10.10	4.24	11.82	9.98	4.75
19	27	13.95	11.17	3.65	13.70	11.07	3.76	13.34	10.93	3.95	12.72	10.79	4.26	12.09	9.81	4.75
19	29	13.95	12.68	3.65	13.70	12.59	3.76	13.34	12.44	3.95	12.72	12.20	4.26	12.09	11.60	4.75
24	32	15.51	10.61	3.71	15.24	10.52	3.83	14.87	10.40	3.99	14.25	10.30	4.30	13.56	10.20	4.80

Cooling 380 - 415V 50Hz Low Fan

AFR	36.81
BPF	0.06

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	12.01	9.47	3.46	11.77	9.35	3.57	11.41	9.18	3.76	10.80	8.89	4.03	10.05	8.54	4.38
16	22	12.59	9.31	3.49	12.37	9.22	3.60	12.01	9.05	3.76	11.41	8.78	4.05	10.71	8.47	4.38
16	24	12.59	10.71	3.49	12.37	10.61	3.60	12.01	10.44	3.76	11.41	10.18	4.05	10.71	9.16	4.38
18	25	13.21	9.84	3.50	12.98	9.74	3.61	12.59	9.58	3.79	12.00	9.34	4.06	11.27	9.04	4.40
19	27	13.49	10.43	3.50	13.26	10.33	3.61	12.90	10.19	3.79	12.31	9.95	4.09	11.58	9.06	4.43
19	29	13.49	11.79	3.50	13.26	11.69	3.61	12.90	11.55	3.79	12.31	11.31	4.09	11.58	11.02	4.43
24	32	15.00	9.88	3.56	14.75	9.80	3.68	14.39	9.68	3.83	13.79	9.48	4.12	13.08	9.26	4.45

Symbols

AFR	Air Flow rate	(m3/min)
BPF	Bypass factor	
EWB	Entering Wet Bulb	(°C)
EDB	Entering Dry Bulb	(°C)
TC	Total Capacity	(kW)
SHC	Sensible Heat Capacity	(kW)
PI	Power Input	(kW)

NOTES:

- Shows nominal(rated) capacities and power input at T1 & T3 conditions
- TC, SHC and PI must be calculated by interpolation using the figures in the above table
- Capacities are based on the following condition
Corresponding refrigerant piping length :7.5m
Level difference :0.0m

3D145731

Model : FDMRN60A - RR60A

Cooling 380 - 415V 50Hz High Fan

AFR	56.35
BPF	0.14

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	15.55	12.63	4.33	15.25	12.49	4.48	14.78	12.27	4.71	13.99	11.89	5.05	13.37	11.60	5.54
16	22	16.31	12.43	4.37	16.03	12.30	4.52	15.55	12.09	4.71	14.78	11.75	5.08	14.13	11.47	5.56
16	24	16.31	14.37	4.37	16.03	14.24	4.52	15.55	14.03	4.71	14.78	13.69	5.08	14.13	13.41	5.56
18	25	17.11	13.18	4.38	16.81	13.05	4.53	16.31	12.85	4.75	15.54	12.53	5.09	14.86	12.26	5.58
19	27	17.48	14.00	4.38	17.17	13.88	4.53	16.71	13.70	4.75	15.94	13.40	5.13	15.24	13.12	5.62
19	29	17.48	15.90	4.38	17.17	15.78	4.53	16.71	15.60	4.75	15.94	15.29	5.13	15.24	14.78	5.62
24	32	19.43	13.30	4.47	19.10	13.19	4.61	18.64	13.04	4.80	17.86	12.79	5.17	17.07	12.54	5.67

Cooling 380 - 415V 50Hz Medium Fan

AFR	49.55
BPF	0.14

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	15.14	11.83	4.22	14.84	11.68	4.36	14.39	11.46	4.58	13.62	11.09	4.92	12.68	10.64	5.34
16	22	15.88	11.64	4.26	15.61	11.51	4.40	15.14	11.30	4.58	14.39	10.96	4.94	13.50	10.57	5.34
16	24	15.88	13.35	4.26	15.61	13.22	4.40	15.14	13.01	4.58	14.39	12.67	4.94	13.50	12.28	5.34
18	25	16.66	12.28	4.27	16.37	12.16	4.41	15.88	11.95	4.63	15.13	11.64	4.96	14.22	11.26	5.37
19	27	17.02	13.00	4.27	16.72	12.87	4.41	16.27	12.69	4.63	15.52	12.39	4.99	14.60	12.02	5.40
19	29	17.02	14.67	4.27	16.72	14.55	4.41	16.27	14.36	4.63	15.52	14.06	4.99	14.60	13.70	5.40
24	32	18.92	12.31	4.35	18.60	12.21	4.49	18.15	12.06	4.67	17.39	11.81	5.03	16.49	11.52	5.43

Cooling 380 - 415V 50Hz Low Fan

AFR	39.64
BPF	0.11

Indoor Temperature		Outdoor temperature [°C DB]														
EWB	EDB	30			32			35			40			46		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14	20	14.52	10.79	4.15	14.23	10.64	4.29	13.80	10.42	4.51	13.06	10.05	4.84	12.16	9.61	5.26
16	22	15.22	10.61	4.19	14.96	10.48	4.33	14.52	10.27	4.51	13.80	9.93	4.86	12.95	9.54	5.26
16	24	15.22	12.02	4.19	14.96	11.90	4.33	14.52	11.69	4.51	13.80	11.35	4.86	12.95	10.95	5.26
18	25	15.98	11.12	4.20	15.69	10.99	4.33	15.22	10.79	4.55	14.51	10.47	4.88	13.63	10.10	5.28
19	27	16.32	11.69	4.20	16.03	11.57	4.33	15.60	11.39	4.55	14.88	11.09	4.91	14.00	10.72	5.31
19	29	16.32	13.08	4.20	16.03	12.96	4.33	15.60	12.77	4.55	14.88	12.47	4.91	14.00	12.10	5.31
24	32	18.14	11.04	4.28	17.83	10.93	4.41	17.40	10.78	4.60	16.67	10.53	4.95	15.81	10.24	5.34

Symbols

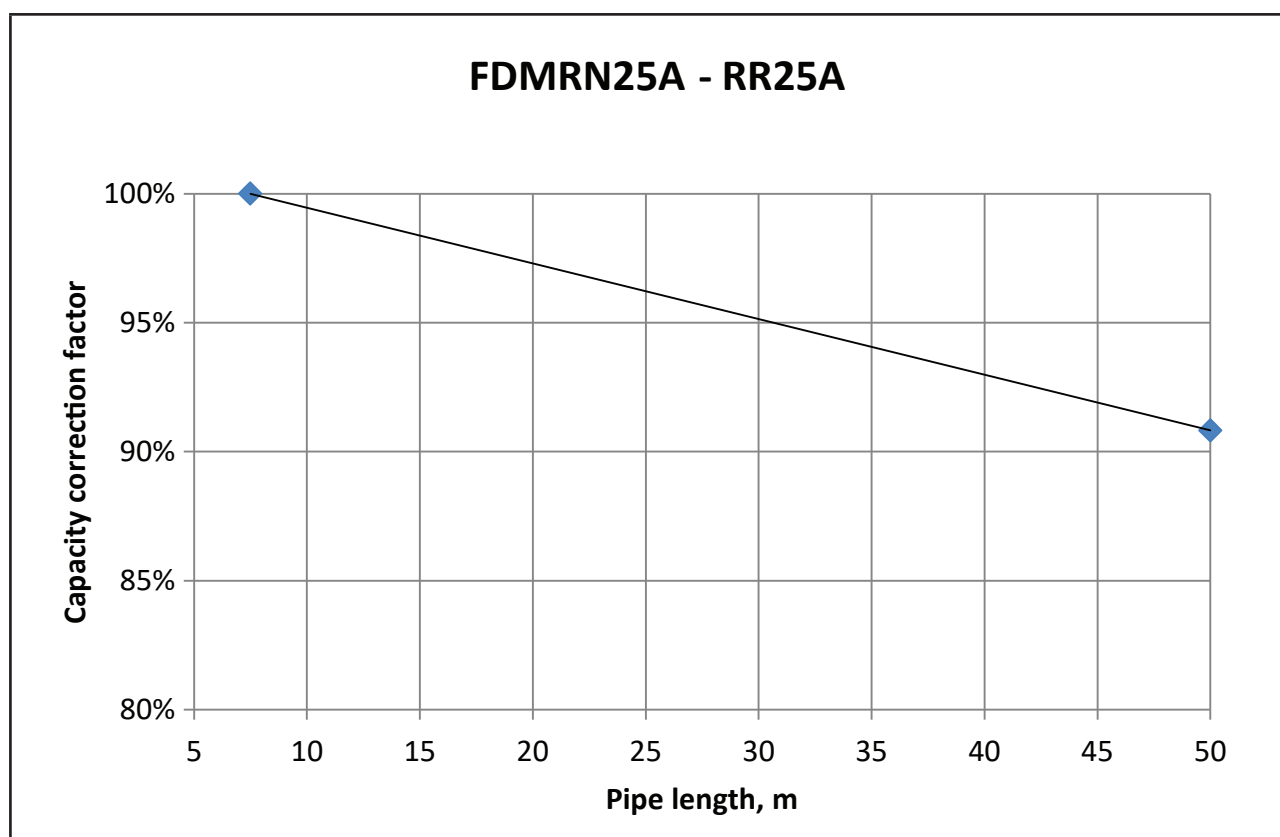
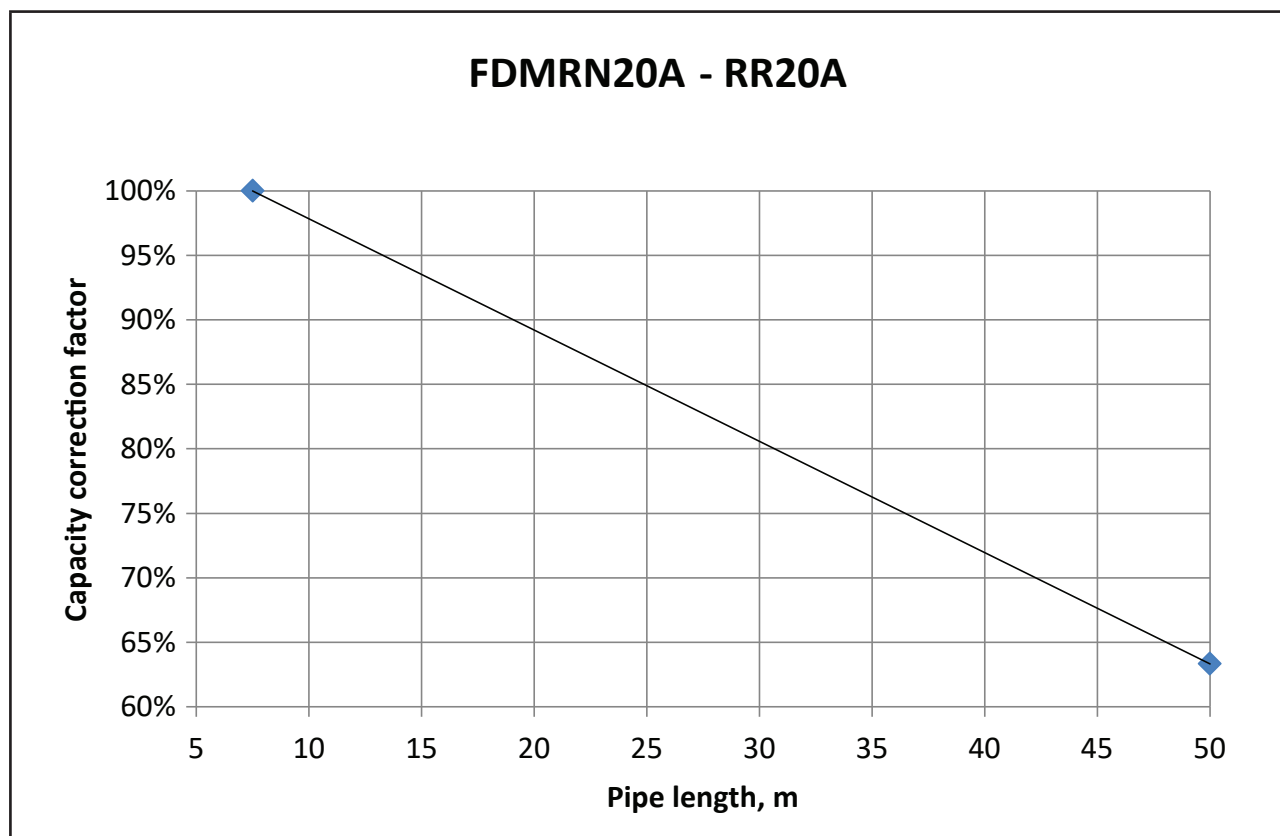
AFR	Air Flow rate	(m3/min)
BPF	Bypass factor	
EWB	Entering Wet Bulb	(°C)
EDB	Entering Dry Bulb	(°C)
TC	Total Capacity	(kW)
SHC	Sensible Heat Capacity	(kW)
PI	Power Input	(kW)

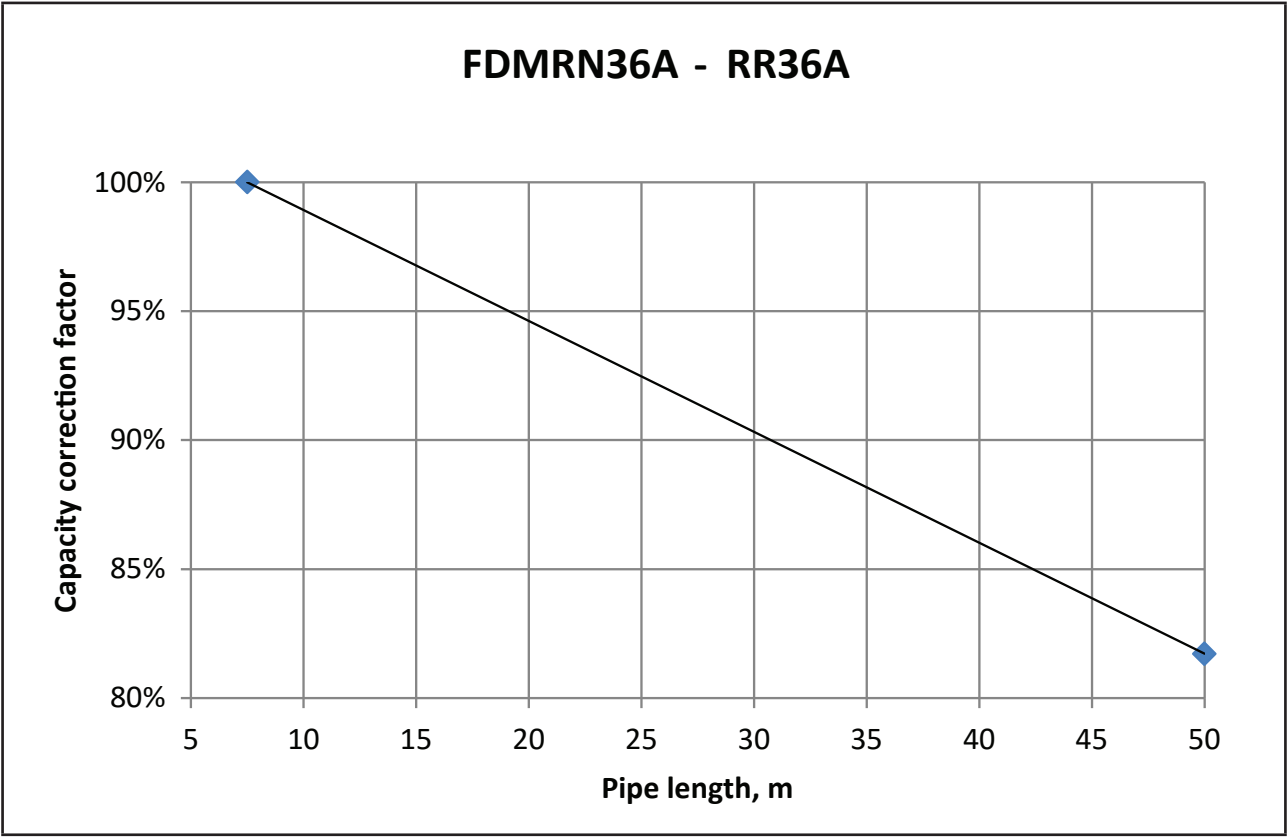
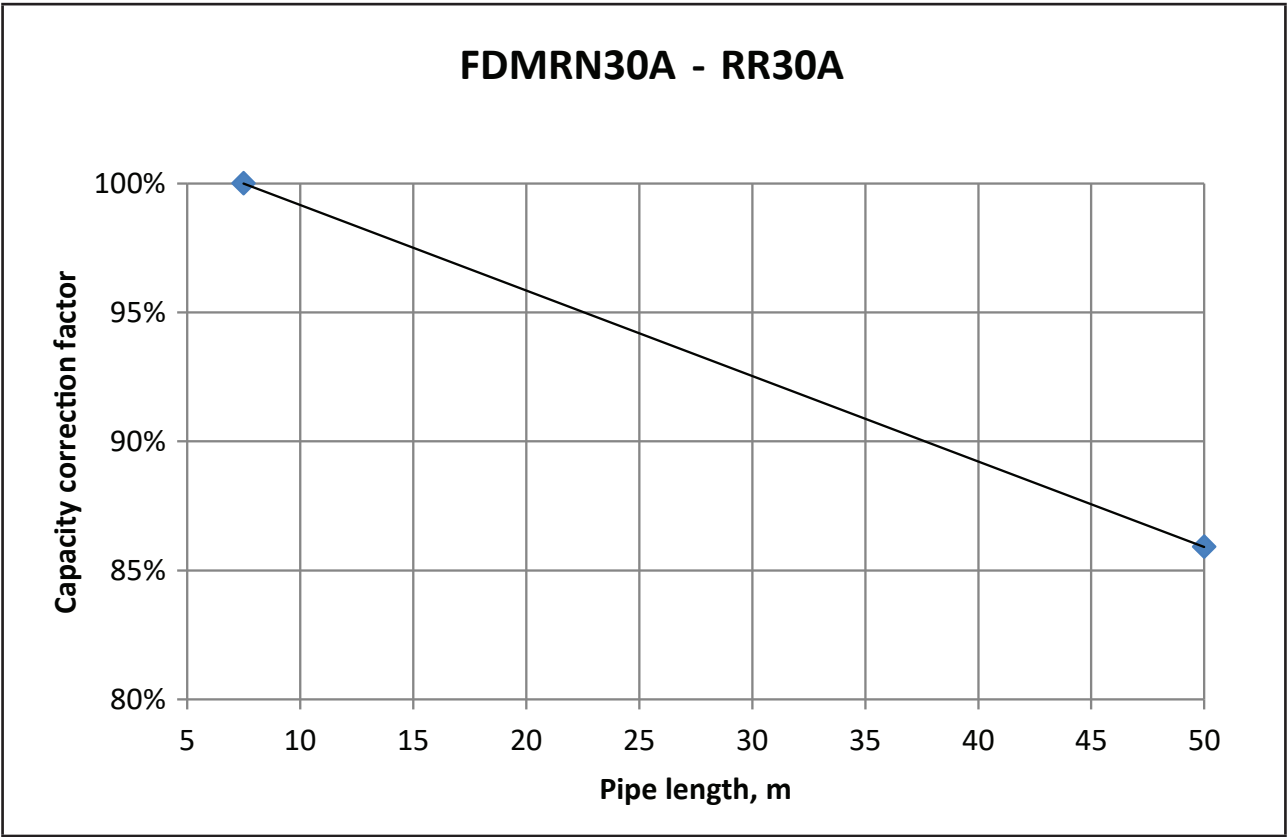
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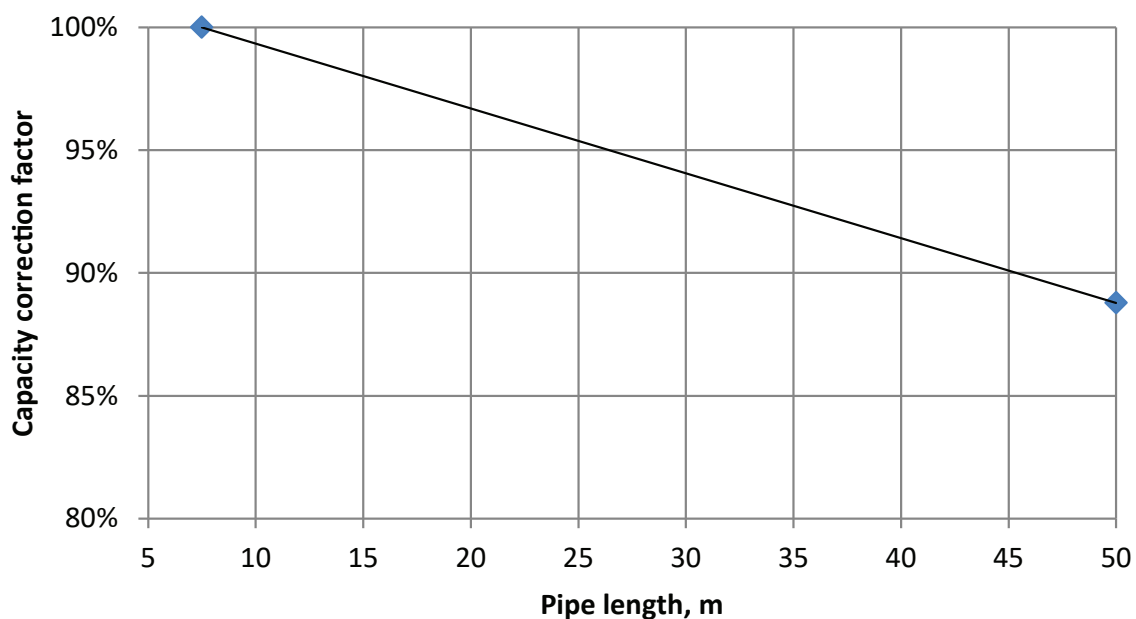
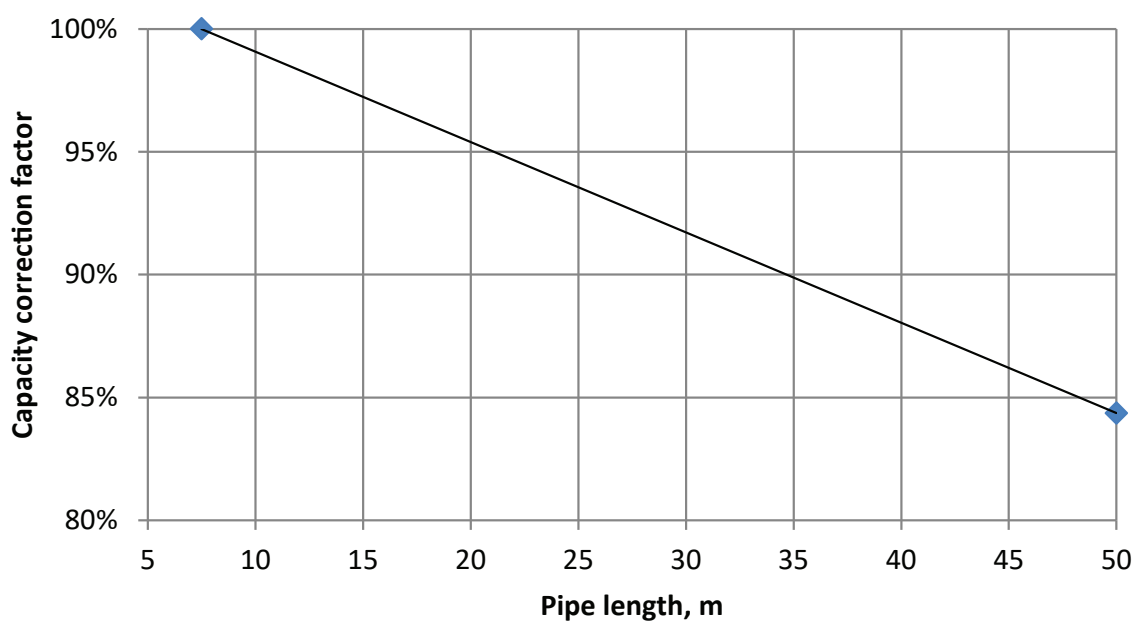
- Shows nominal(rated) capacities and power input at T1 & T3 conditions
- TC, SHC and PI must be calculated by interpolation using the figures in the above table
- Capacities are based on the following condition
Corresponding refrigerant piping length :7.5m
Level difference :0.0m

3D145732

Capacity correction factor by the length of refrigerant piping



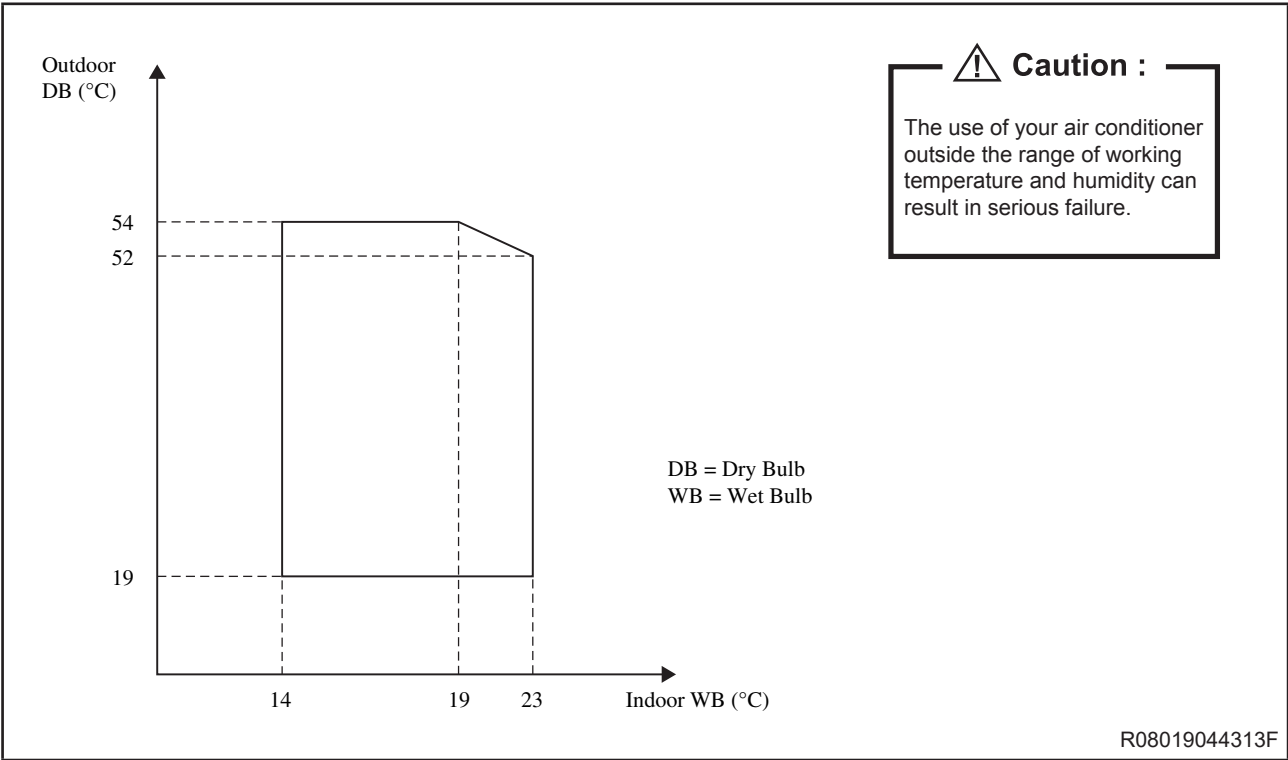


FDMRN50A - RR50A**FDMRN60A - RR60A****Notes:**

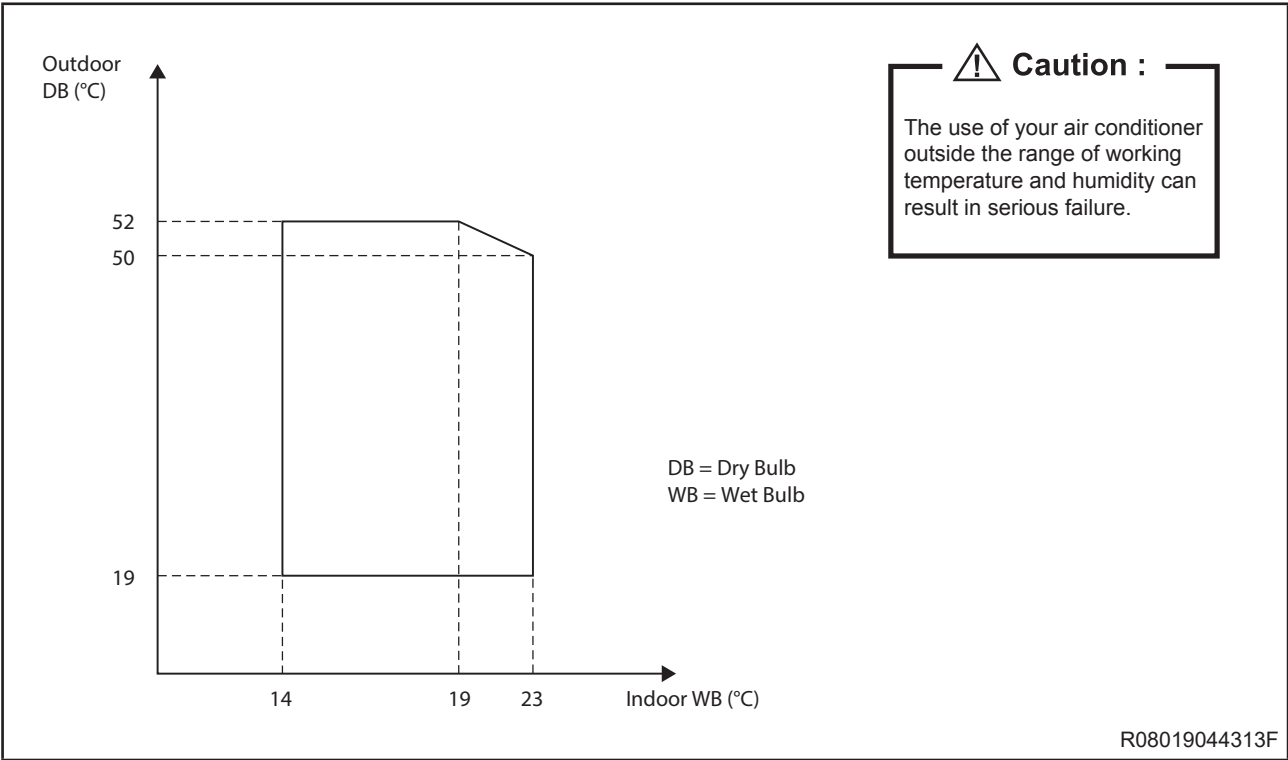
1. ——— represents the capacity correction factor for the capacity when additional refrigerant of the proper quantity is charged.
2. The correction ratio remains the same whether the outdoor unit is to be installed above or below the unit.
3. Calculation method for capacity
Capacity = capacity obtained 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

Model : RR-AV1K / RR-AY1K



Applicable to (RE) , RR50/60A



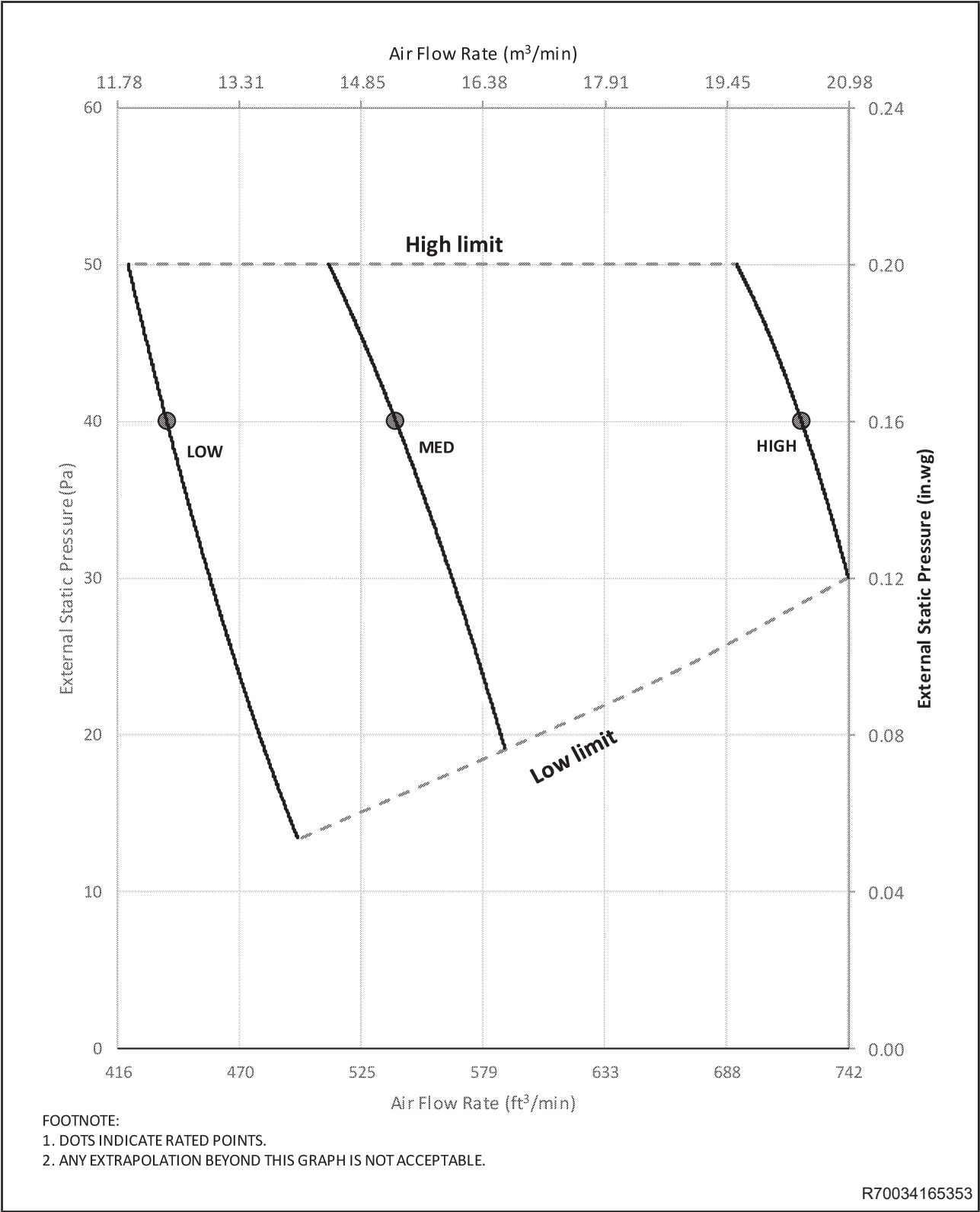
Fan Performance Data

MODEL	SPEED	MOTOR OUTPUT		STANDARD POINT (FACTORY SETTING)							
				20	30	40	50	60	75	80	90
FDMRN20A	HIGH	Air Flow	CFM	742	742	721	692				
		Power Input	kW	0.21	0.20	0.20	0.20				
	MEDIUM	Air Flow	CFM	565	540	540	510				
		Power Input	kW	0.14	0.13	0.13	0.12				
	LOW	Air Flow	CFM	477	461	432	424				
		Power Input	kW	0.13	0.13	0.12	0.12				
FDMRN25A	HIGH	Air Flow	CFM	882	882	800	678				
		Power Input	kW	0.09	0.09	0.08	0.07				
	MEDIUM	Air Flow	CFM	735	735	641	546				
		Power Input	kW	0.07	0.07	0.06	0.05				
	LOW	Air Flow	CFM	624	624	516	409				
		Power Input	kW	0.05	0.05	0.05	0.04				
FDMRN30A	HIGH	Air Flow	CFM	1085	1085	1000	924				
		Power Input	kW	0.14	0.14	0.13	0.12				
	MEDIUM	Air Flow	CFM	878	878	793	708				
		Power Input	kW	0.09	0.09	0.08	0.07				
	LOW	Air Flow	CFM	794	693	593	492				
		Power Input	kW	0.07	0.06	0.05	0.05				
FDMRN36A	HIGH	Air Flow	CFM	1653	1653	1580	1496	1386	1207		
		Power Input	kW	0.28	0.28	0.27	0.25	0.23	0.20		
	MEDIUM	Air Flow	CFM	1552	1552	1473	1378	1253	1056		
		Power Input	kW	0.24	0.24	0.23	0.21	0.19	0.16		
	LOW	Air Flow	CFM	1459	1459	1368	1269	1145	940		
		Power Input	kW	0.21	0.21	0.20	0.18	0.16	0.13		
FDMRN50A	HIGH	Air Flow	CFM	1862	1862	1787	1726	1624	1490		
		Power Input	kW	0.38	0.38	0.36	0.34	0.32	0.29		
	MEDIUM	Air Flow	CFM	1629	1629	1538	1454	1333	1147		
		Power Input	kW	0.27	0.27	0.25	0.24	0.21	0.18		
	LOW	Air Flow	CFM	1490	1490	1395	1300	1167	973		
		Power Input	kW	0.22	0.22	0.20	0.18	0.16	0.14		
FDMRN60A	HIGH	Air Flow	CFM			2079	1990	1906	1744	1685	1500
		Power Input	kW			0.37	0.35	0.34	0.31	0.28	0.24
	MEDIUM	Air Flow	CFM			1879	1750	1649	1446	1348	
		Power Input	kW			0.28	0.27	0.25	0.22	0.20	
	LOW	Air Flow	CFM		1661	1537	1400				
		Power Input	kW		0.20	0.18	0.17				

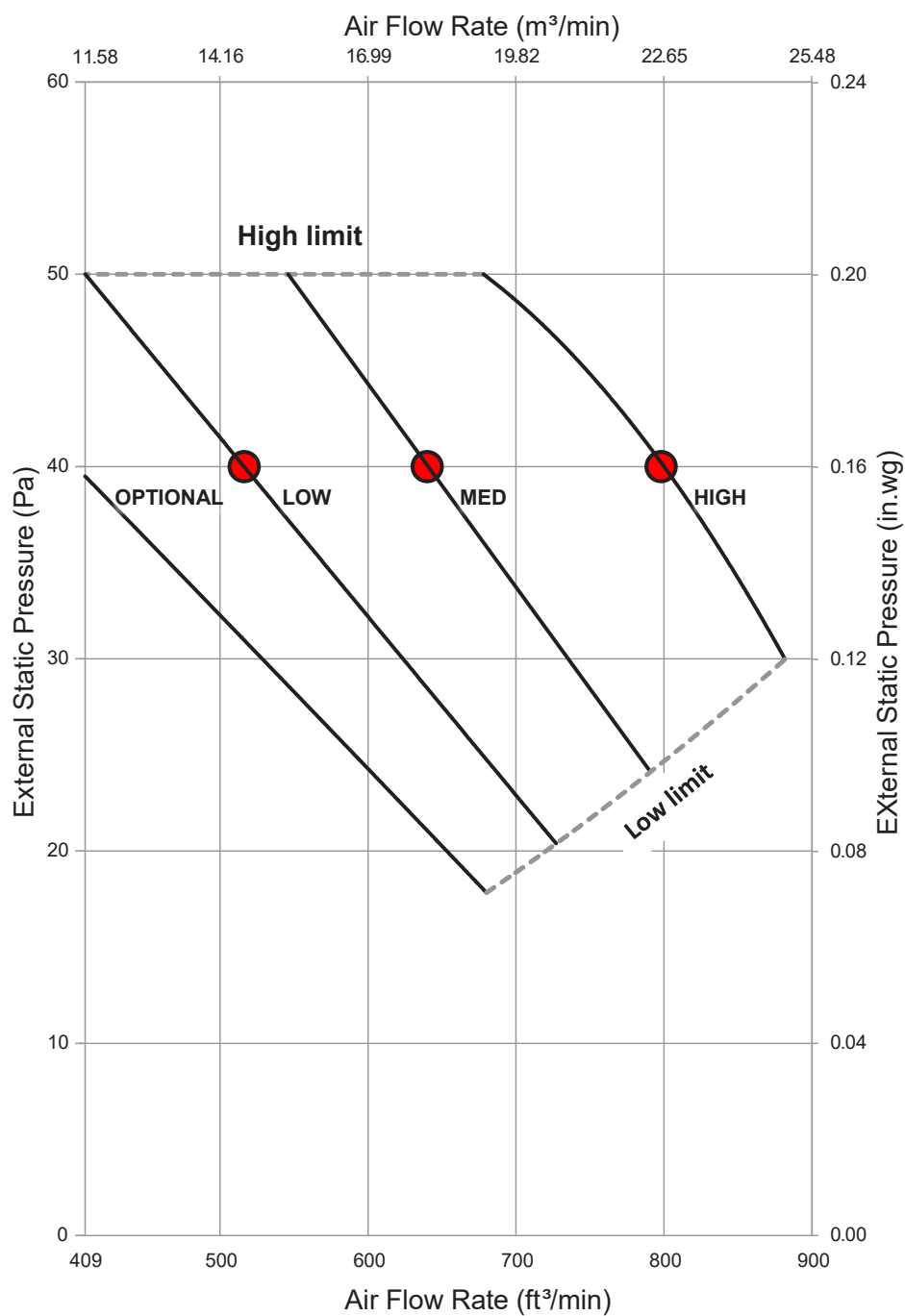
S20111002815

Fan Performance Curve

Model : FDMRN20A



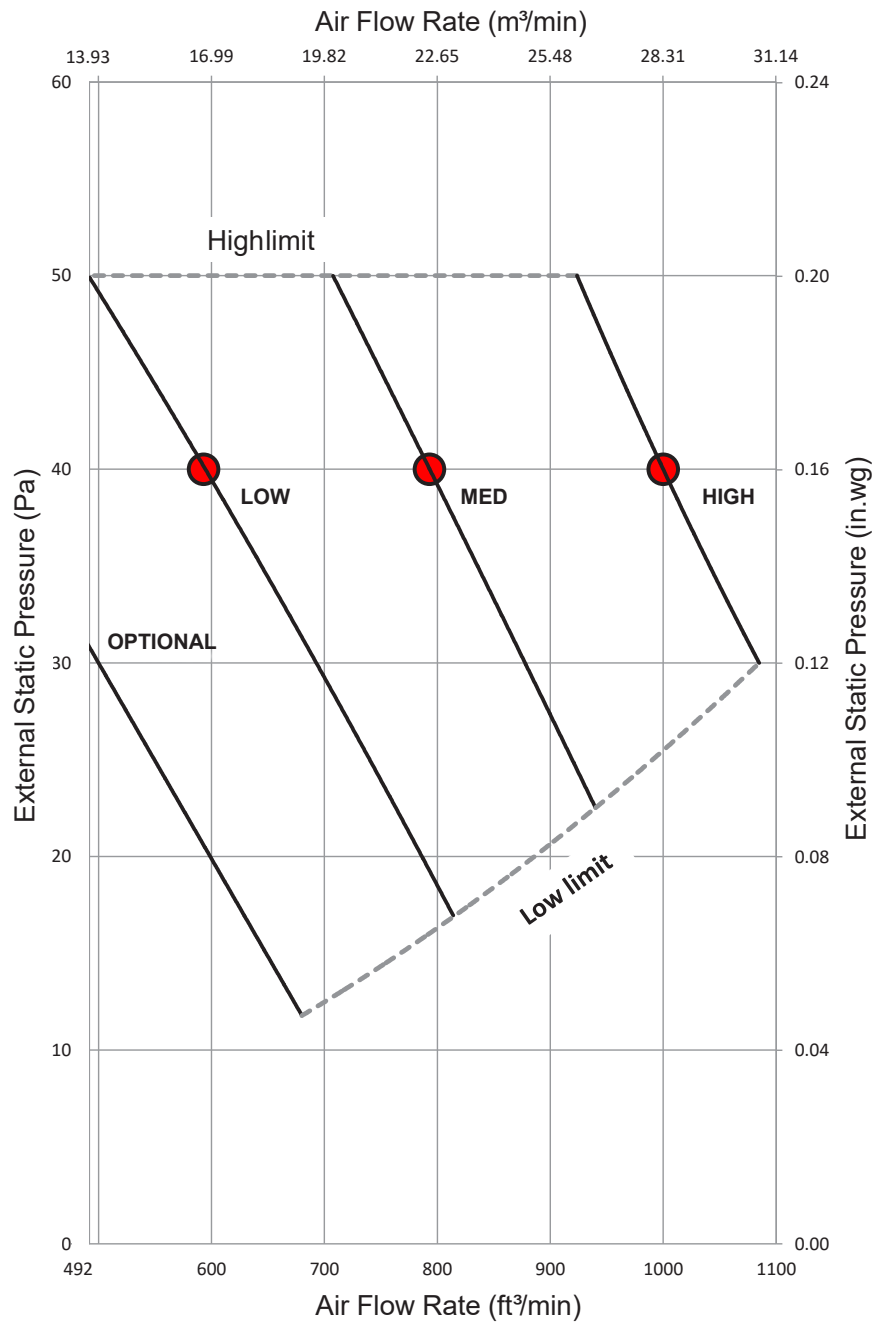
Model : FDMRN25A



FOOTNOTE:
RED DOTS INDICATE RATED POINTS

R70034147066

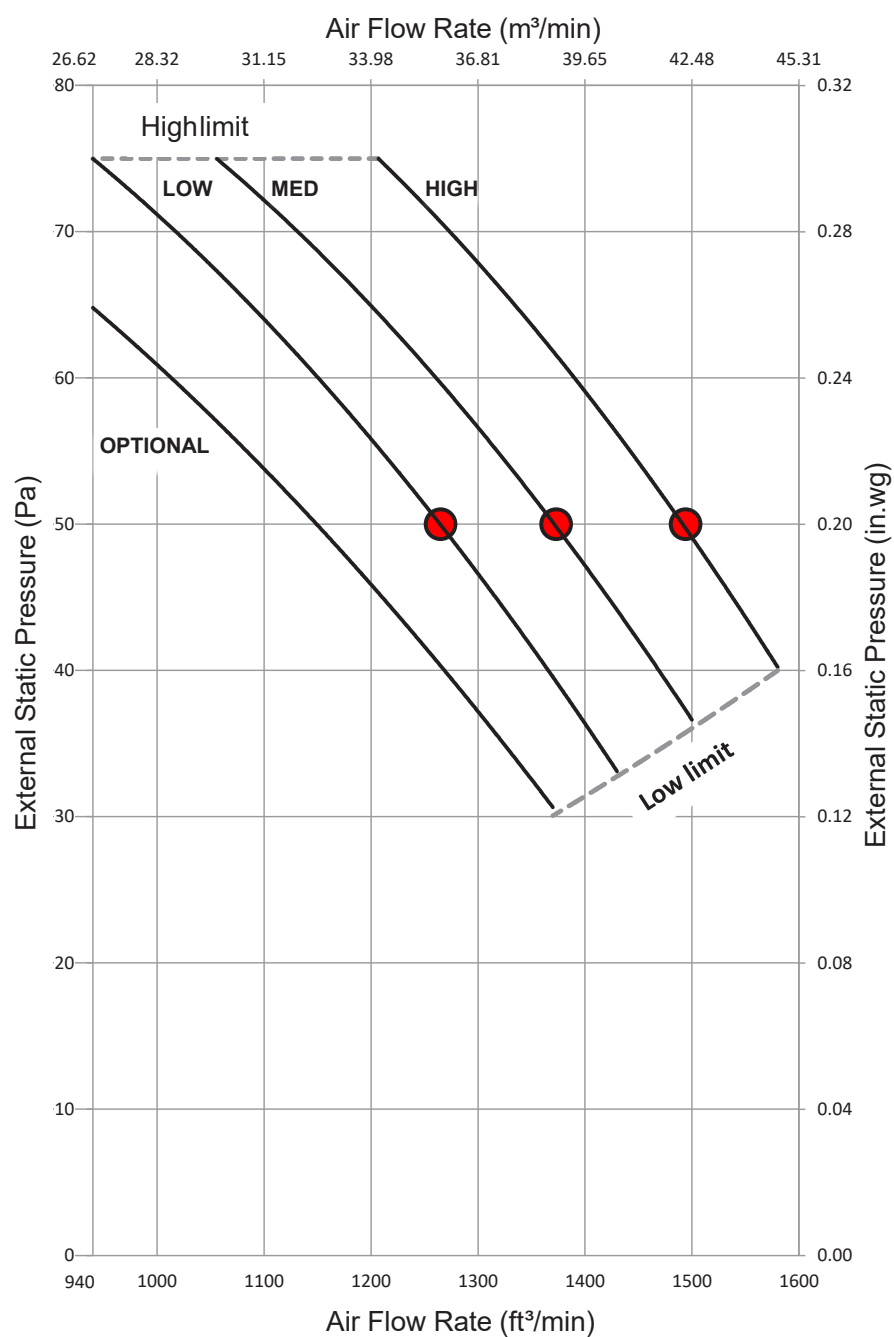
Model : FDMRN30A



FOOTNOTE:
RED DOTS INDICATE RATED POINTS

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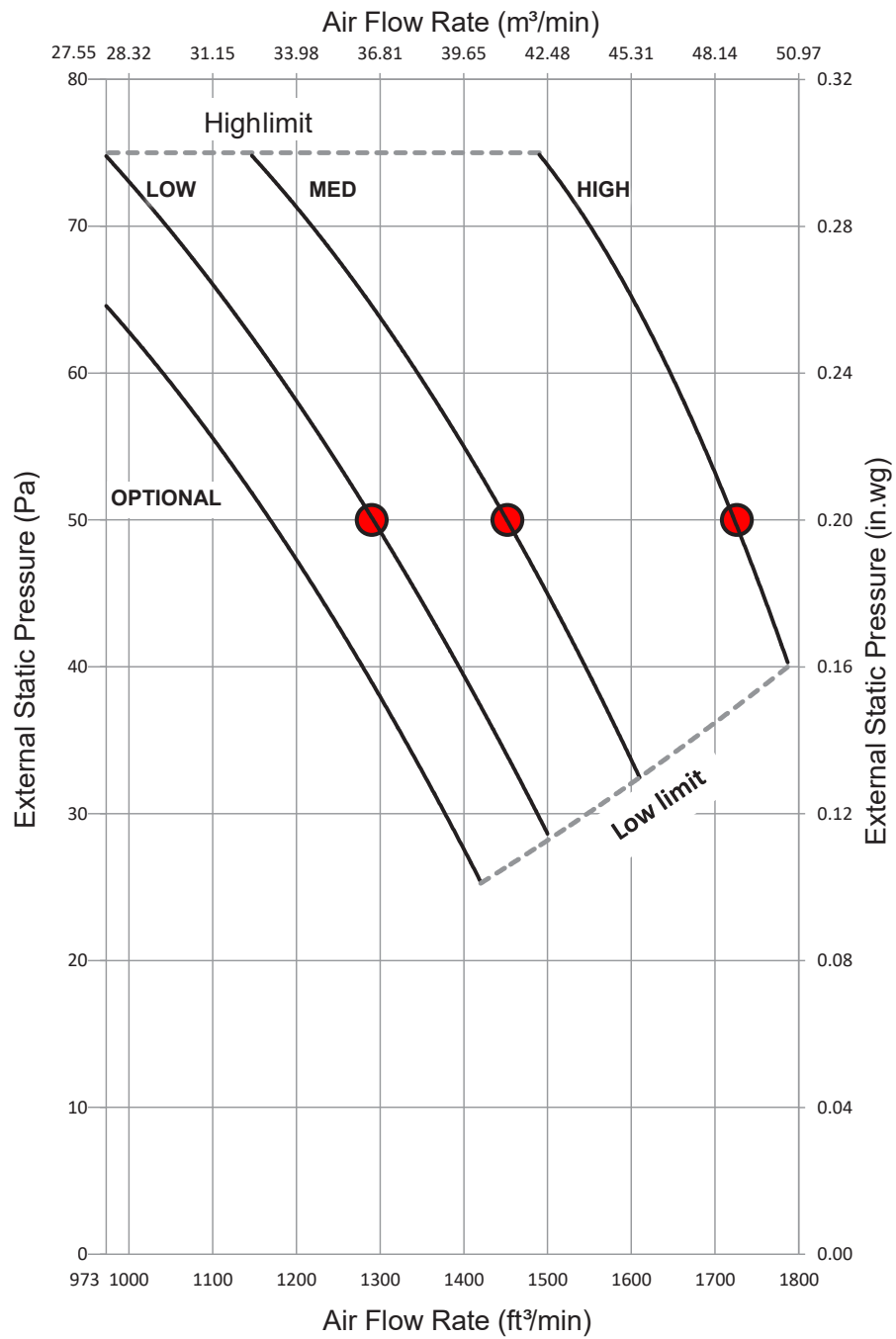
Model : FDMRN36A



FOOTNOTE:
RED DOTS INDICATE RATED POINTS

R70034147028

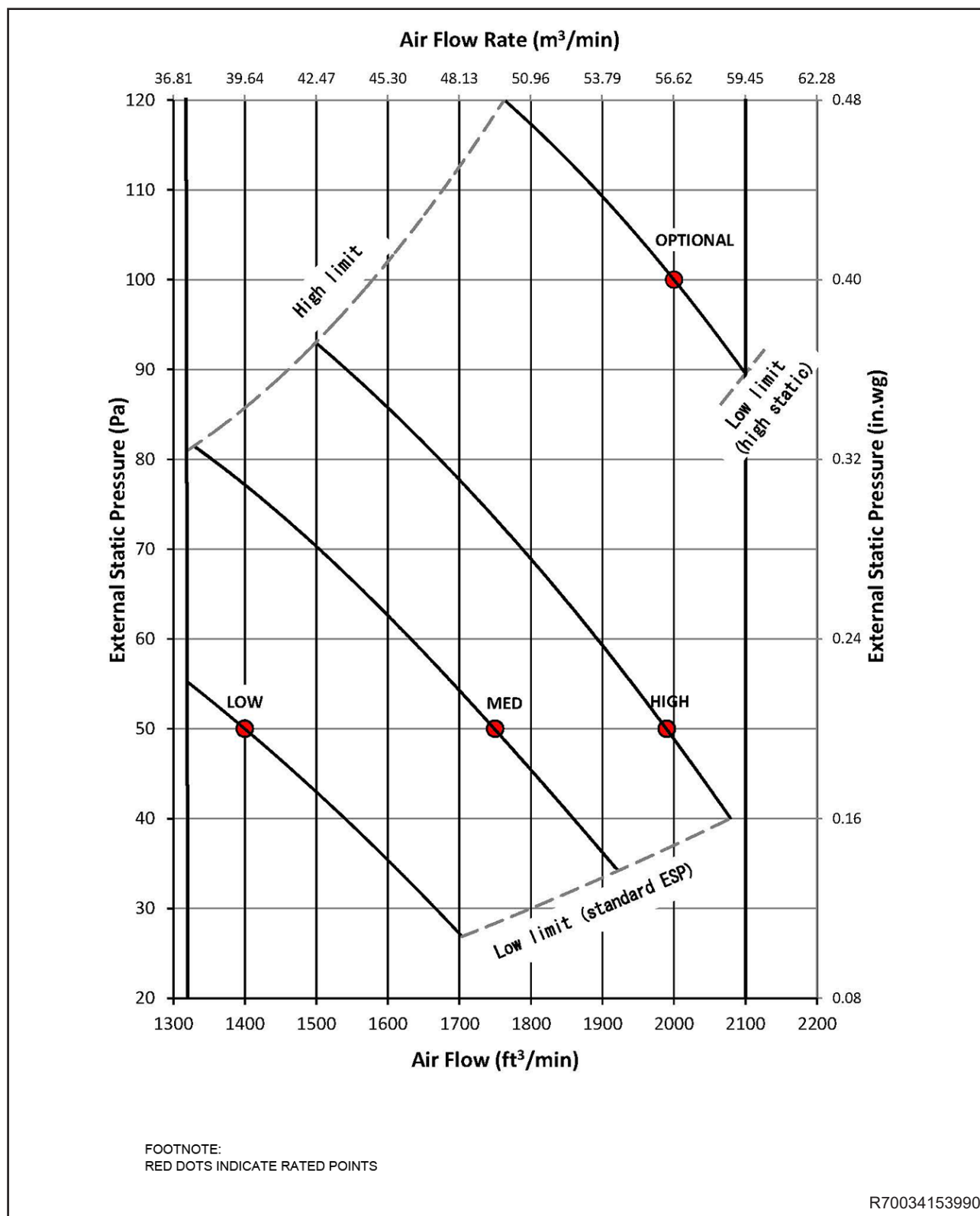
Model : FDMRN50A



FOOTNOTE:
RED DOTS INDICATE RATED POINTS

R70034147027

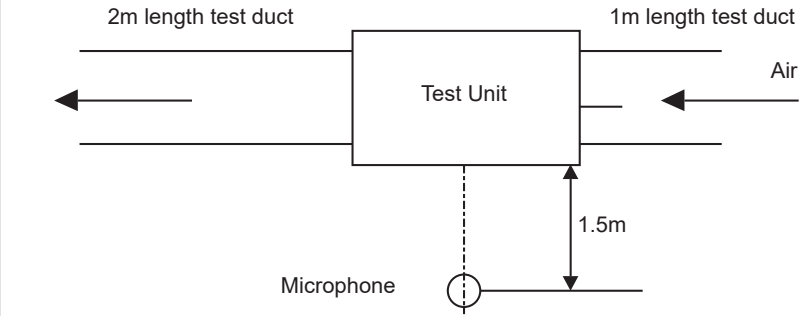
Model : FDMRN60A



R70034153990

Sound Level

Measuring Location

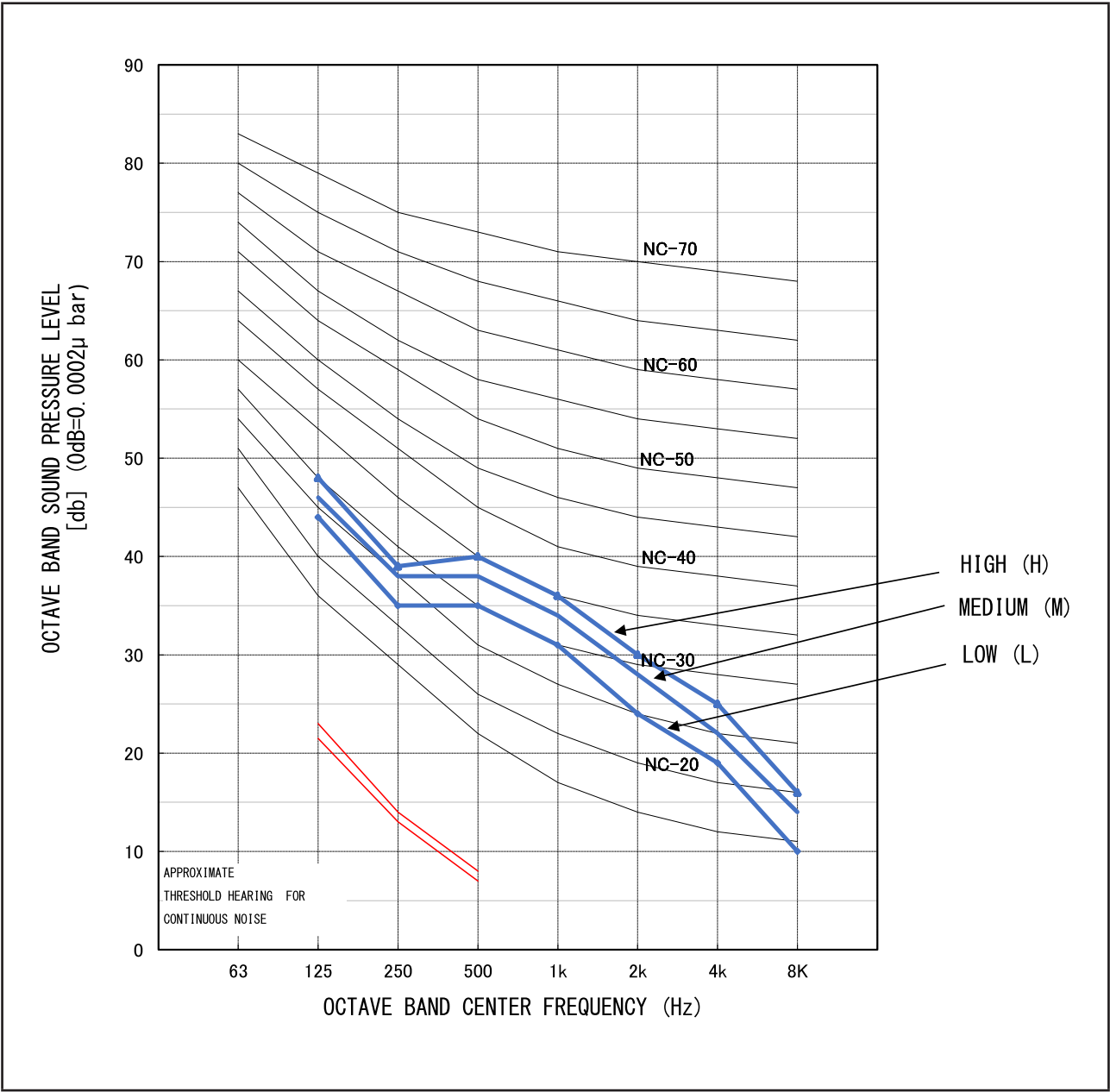
Model	Measuring Location
FDMRN20A FDMRN25A FDMRN30A FDMRN36A FDMRN50A FDMRN60A	

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

Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN20A	High	48	39	40	36	30	25	16	41	35
	Med	46	38	38	34	28	22	14	39	33
	Low	44	35	35	31	24	19	10	36	30

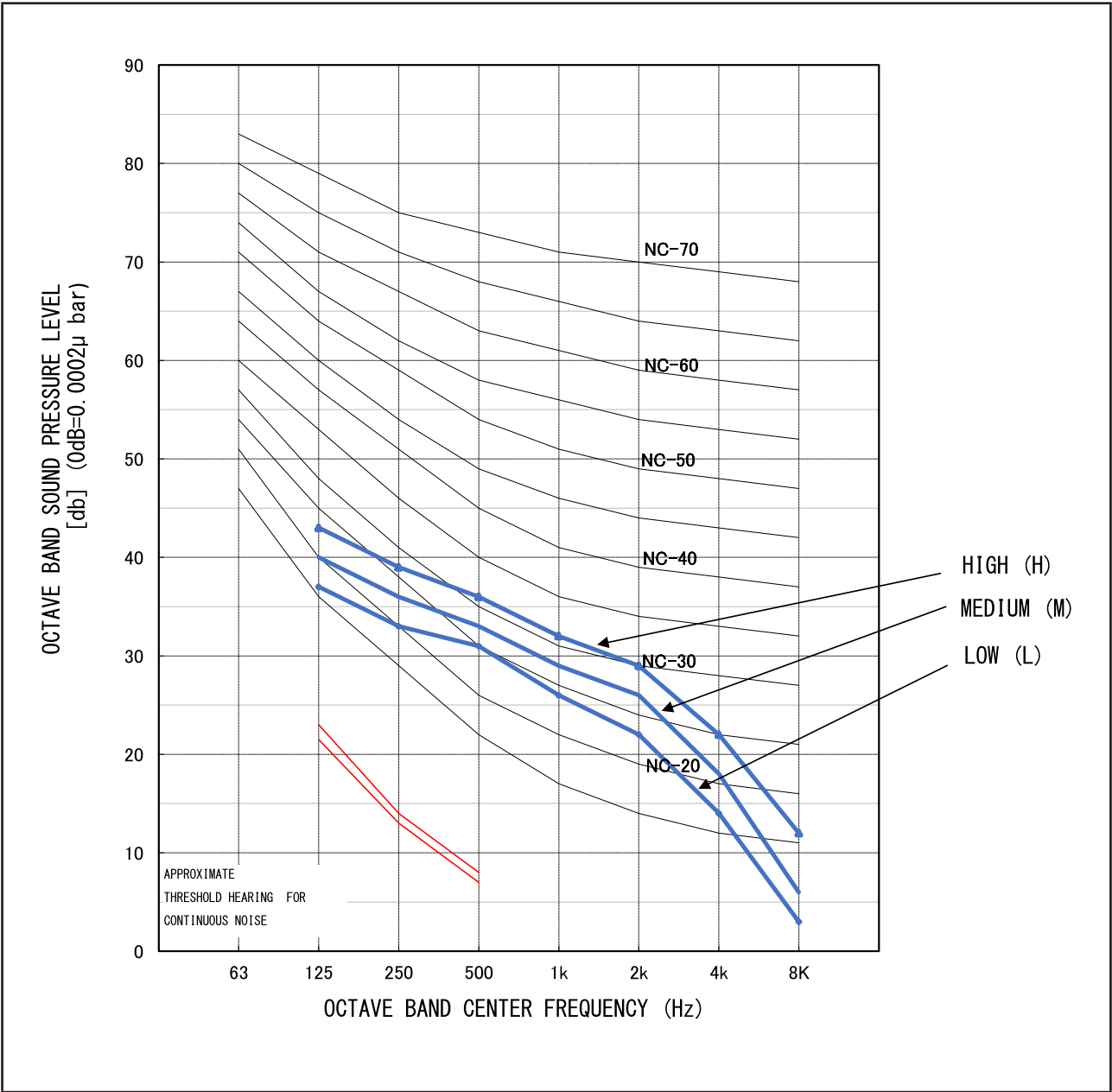
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN25A	High	43	39	36	32	29	22	12	38	31
	Med	40	36	33	29	26	18	6	35	28
	Low	37	33	31	26	22	14	3	32	25

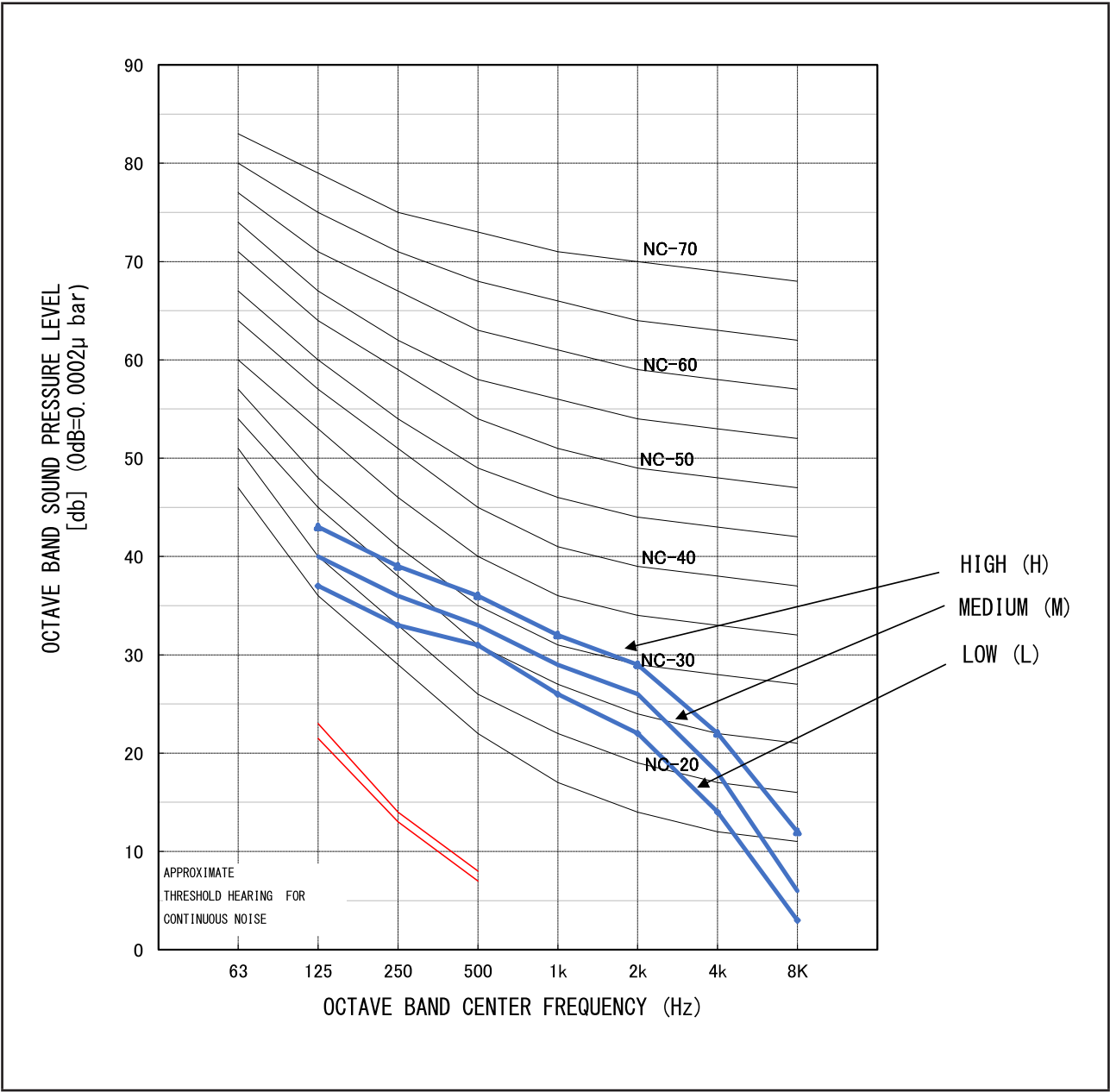
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN30A	High	43	39	36	32	29	22	12	38	31
	Med	40	36	33	29	26	18	6	35	28
	Low	37	33	31	26	22	14	3	32	25

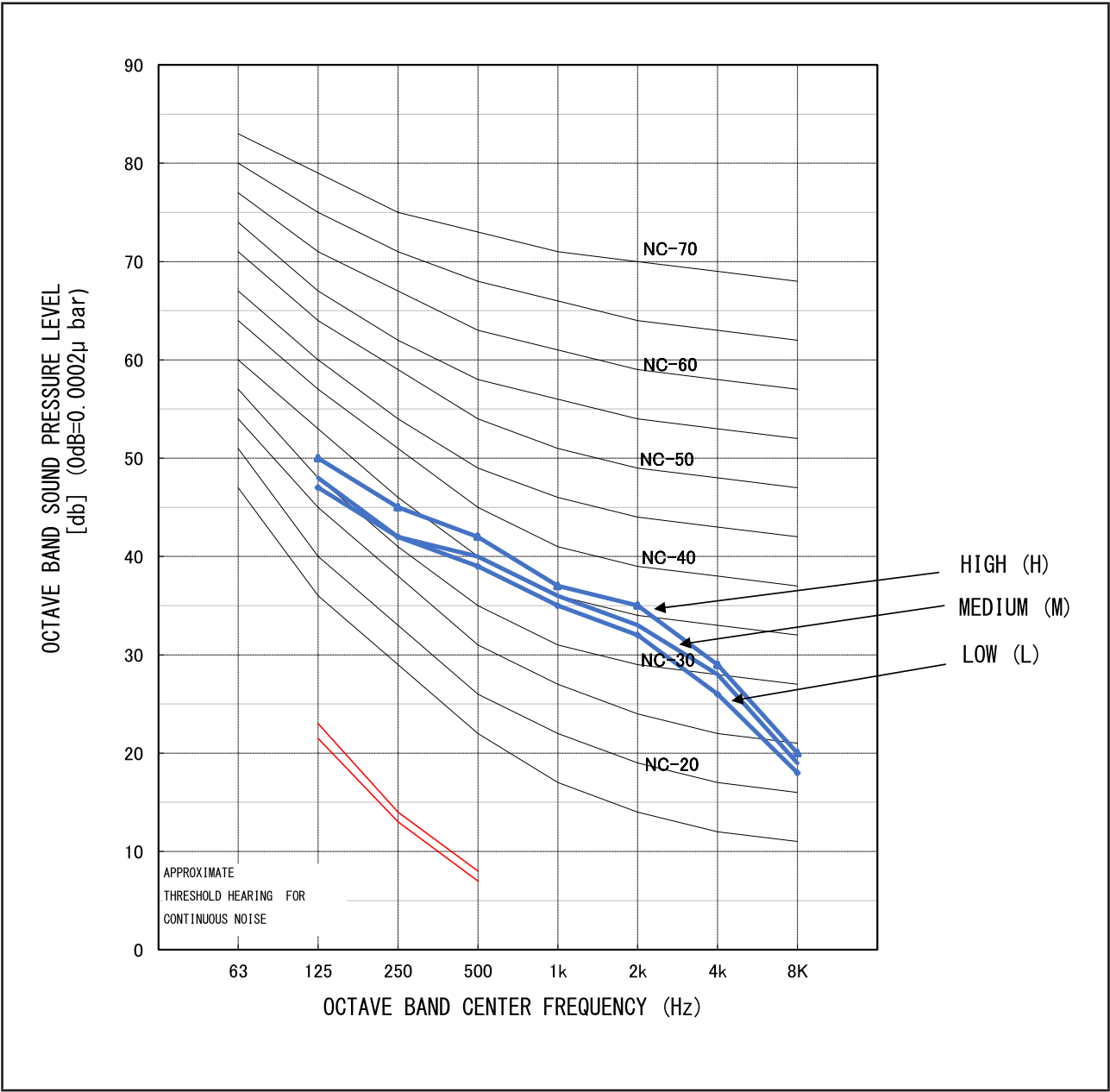
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN36A	High	50	45	42	37	35	29	20	44	37
	Med	48	42	40	36	33	28	19	42	35
	Low	47	42	39	35	32	26	18	41	34

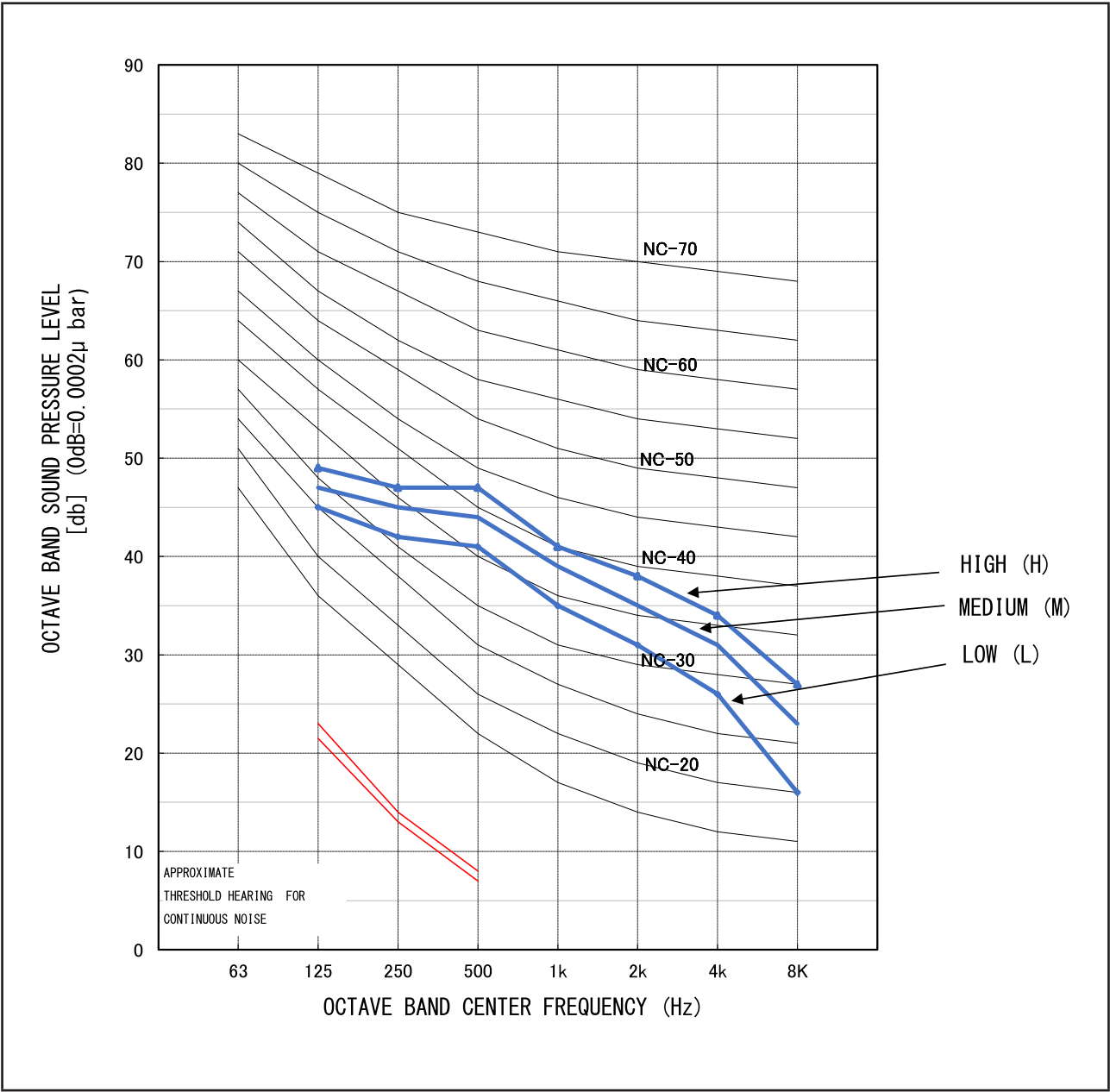
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN50A	High	51	46	46	41	38	34	28	47	41
	Med	49	44	44	38	35	31	24	45	39
	Low	46	40	39	34	30	27	18	40	34

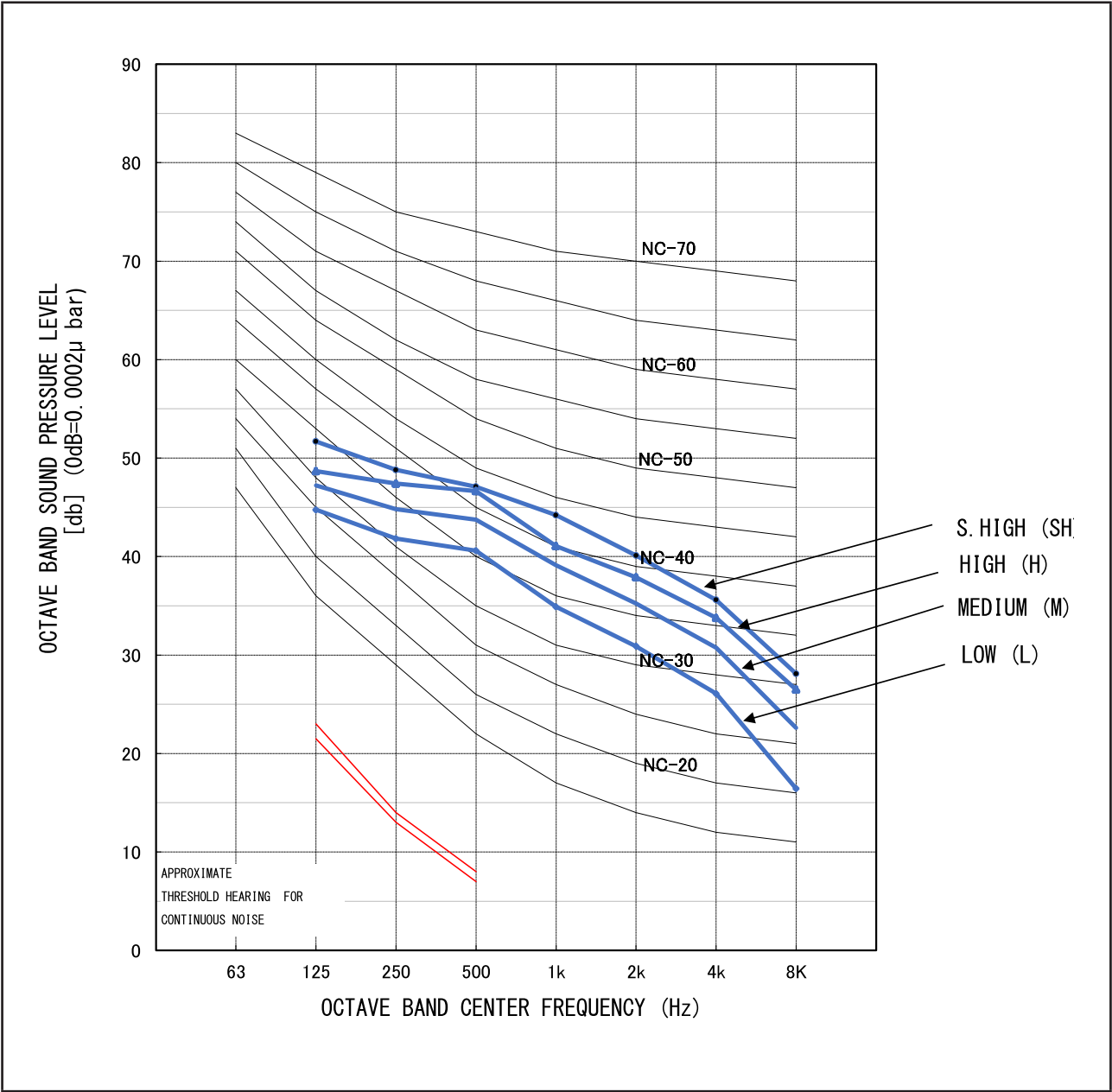
NC Curve



Sound Pressure Level

Model	Speed	1/1 Octave A-weighted Sound Pressure Level (dB, ref 20μPa)							Overall (dBA)	Noise Criteria
		125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz		
FDMRN60A	S.High	52	49	47	44	40	36	28	49	43
	High	49	47	47	41	38	34	27	47	43
	Med	47	45	44	39	35	31	23	45	39
	Low	45	42	41	35	31	26	16	41	36

NC Curve



Electric Characteristic

Unit Combination		Power Supply					COMP		OFM		IFM	
Indoor Unit	Outdoor Unit	Hz	Voltage	Voltage Range	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
FDMRN20A	RR20A	50	220-240	Max. 50Hz 264V Min. 50Hz 198V	13.01	20	50	5.24	0.124	0.54	0.206	0.92
FDMRN25A	RR25A	50	220-240	Max. 50Hz 264V Min. 50Hz 198V	17.90	32	50	7.93	0.128	0.56	0.083	0.86
FDMRN30A	RR30A	50	220-240	Max. 50Hz 264V Min. 50Hz 198V	22.01	32	50	9.22	0.257	1.20	0.135	1.28
FDMRN36A	RR36A	50	220-240	Max. 50Hz 264V Min. 50Hz 198V	25.12	40	50	8.66	0.546	2.37	0.251	2.17
FDMRN50A	RR50A	50	380-415	Max. 50Hz 342V Min. 50Hz 457V	10.19	16	50	5.04	0.350	1.52	0.340	2.74
FDMRN60A	RR60A	50	380-415	Max. 50Hz 342V Min. 50Hz 457V	11.88	16	50	5.27	0.750	3.28	0.350	2.70

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. RLA is based on the following conditions.
Indoor temp. 27°CDB / 19°CWB
Outdoor temp. 35°CDB
2. Select the wire size according to the MCA.
3. Maximum allowable voltage that is unbalance between phases is 2%.
4. Use circuit breaker instead of fuse

Accessories List

Model Number	
Optional Accessories	FDMRN-A
Wireless Remote Controller BRC52A62	R04089036296
BMS Gateway (BAG Controller)	R04084134740

