

# 1 Features

- Outdoor units for pair application
- Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency
- Daikin outdoor units are neat and sturdy and can be mounted easily on a roof or terrace or simply placed against an outside wall.

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## 2 Specifications

2-1 NOMINAL CAPACITY AND NOMINAL INPUT				RX20E2V1B	RX25E2V1B	RX35E2V1B
For combination indoor units + outdoor units	Indoor Units			FTXS20CAVMB	FTXS25CAVMB	FTXS35CAVMB
	Nominal Capacity	Cooling capacity	Minimum	kW	1.2	1.2
Standard			kW	2.0	2.5	3.4
Maximum			kW	2.6	3.0	3.8
Heating capacity		Minimum	kW	1.2	1.2	1.2
		Standard	kW	2.7	3.4	3.7
		Maximum	kW	4.1	4.5	5.0
Nominal input	Cooling	Minimum	kW	0.300	0.300	0.300
		Standard	kW	0.580	0.700	1.060
		Maximum	kW	0.860	1.070	1.300
	Heating	Minimum	kW	0.290	0.290	0.290
		Standard	kW	0.710	0.940	1.020
		Maximum	kW	1.330	1.460	1.590
For combination indoor units + outdoor units	EER	Nominal		3.45	3.25	3.21
	COP	Nominal		3.80	3.62	3.63
	Energy Labeling Directive	Cooling		A		
		Heating		A		
	Annual energy consumption	kWh		290	350	530

2-2 TECHNICAL SPECIFICATIONS				RX20E2V1B	RX25E2V1B	RX35E2V1B	
Casing	Colour			Ivory White			
Dimensions	Unit	Height	mm	550	550	550	
		Width	mm	765	765	765	
		Depth	mm	285	285	285	
	Packing	Height	mm	617	617	617	
		Width	mm	882	882	882	
		Depth	mm	363	363	363	
Weight	Unit		kg	30	30	32	
	Packed Unit		kg	35	35	38	
Heat Exchanger	Dimensions	Length	mm	828	828	805	
		Nr of Rows			1	1	2
		Fin Pitch	mm	1.40	1.4	1.40	
		Nr of Stages			24	24	24
	Tube type		Hi-Xa(7)				
	Fin	Type		Waffle fin			
Fan	Type		Propeller				
	Quantity			1	1	1	
	Air Flow Rate (nominal at 230V)	Cooling	m <sup>3</sup> /min	36.2	36.2	33.5	
		Heating	m <sup>3</sup> /min	32.6	32.6	30.2	
	Motor	Quantity			1	1	
Model		D23C-28					
Motor	Speed (nominal)	Cooling	rpm	860	860	860	
		Heating	rpm	860	860	860	
Fan	Motor	Output	W	23	23	23	
Compressor	Quantity			1	1	1	
	Motor	Model		1YC23NXD#C			
		Type		Hermetically sealed swing compressor			
		Motor Output	W	600	600	600	
Operation Range	Cooling	Min	°CDB	10.0	10.0	10.0	
		Max	°CDB	46.0	46.0	46.0	
	Heating	Min	°CWB	-10	-10	-10	
		Max	°CWB	20	20	20	

## 2 Specifications

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2-2 TECHNICAL SPECIFICATIONS				RX20E2V1B	RX25E2V1B	RX35E2V1B
Sound Level (nominal)	Cooling	Sound Power	dBA	61.0	61.0	62.0
		Sound Pressure	dBA	46.0	46.0	47.0
	Heating	Sound Pressure	dBA	47.0	47.0	48.0
Refrigerant	Type			R-410A		
	Charge	kg		0.8	0.8	1.0
Refrigerant Oil	Type			FVC50K		
	Charged Volume		l	0.375	0.375	0.375
Piping connections	Liquid (OD)	Diameter (OD)	mm	6.35	6.35	6.35
	Gas	Diameter (OD)	mm	9.5	9.5	9.5
	Drain	Diameter (OD)	mm	18	18	18
	Piping Length	Maximum	m	15	15	15
	Additional Refrigerant Charge		kg/m	0.02/>10m		
	Max. internunit level difference		m	10.0	10.0	10.0
	Heat Insulation			Both liquid and gas pipes		
Standard Accessories	Item			Installation manual		
	Quantity			1	1	1
	Item			Drain plug		
	Quantity			1	1	1
Notes				Nominal cooling and heating capacity are based on the following conditions: cooling -27°CDB/19°CWB indoor and 35°CDB/24°CWB outdoor, heating -20°CDB indoor and 7°CDB/6°CWB outdoor.		

2-3 ELECTRICAL SPECIFICATIONS				RX20E2V1B	RX25E2V1B	RX35E2V1B
Power Supply	Name			V1		
	Phase			1	1	1
	Frequency		Hz	50	50	50
	Voltage		V	220-240/220-230		
	Voltage range	Minimum	V	-10%		
Maximum		V	+10%			
Current	Nominal running current (RLA)	Cooling (A)	A	3.02	4.02	4.72
		Heating (A)	A	3.62	4.22	4.52
	Starting current (cooling/heating)		A	3.5	4.4	5.4
Wiring connections	For Power Supply	Quantity		3	3	3
	For connection with indoor	Quantity		4	4	4
		Remark		included earth wiring		

### 3 Features



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# 4 Electrical data

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Representative unit combination		Power supply				Comp.		OFM		IFM	
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	MFA	RHz	RLA	W	FLA	W	FLA
FTXS20CAVMB	RX20E2V1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	9.75	10	38	2.8	23	0.20	18	0.20
		50 - 230					2.7				
		50 - 240					2.6				

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### SYMBOLS

- MCA : Min. Circuit Amps (A)
- MFA : Max. Fuse Amps (A)
- RHz : Rated operating frequency (Hz)
- RLA : Rated Load Amps (A)
- OFM : Outdoor Fan Motor
- IFM : Indoor Fan Motor
- FLA : Full Load Amps (A)
- W : Rated motor output (W)

### NOTES

1. RLA is based on the following conditions:  
Indoor temp.: 27°CDB/19.0°CWB  
Outdoor temp. : 35°CDB
2. Maximum allowable voltage unbalance between phases is 2%
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.
5. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books". Finally, click on the document title of your choice.

Representative unit combination		Power supply				Comp.		OFM		IFM	
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	MFA	RHz	RLA	W	FLA	W	FLA
FTXS25CAVMB	RX25E2V1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	9.75	10	51	3.9	23	0.20	18	0.20
		50 - 230					3.7				
		50 - 240					3.5				

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### SYMBOLS

- MCA : Min. Circuit Amps (A)
- MFA : Max. Fuse Amps (A)
- RHz : Rated operating frequency (Hz)
- RLA : Rated Load Amps (A)
- OFM : Outdoor Fan Motor
- IFM : Indoor Fan Motor
- FLA : Full Load Amps (A)
- W : Rated motor output (W)

### NOTES

1. RLA is based on the following conditions:  
Indoor temp.: 27°CDB/19.0°CWB  
Outdoor temp. : 35°CDB
2. Maximum allowable voltage unbalance between phases is 2%
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.
5. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books". Finally, click on the document title of your choice.

## 4 Electrical data

Representative unit combination		Power supply				Comp.		OFM		IFM	
Indoor unit	Outdoor unit	Hz-volts	Voltage range	MCA	MFA	RHz	RLA	W	FLA	W	FLA
FTXS35CAVMB	RX35E2V1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	9.75	10	77	4.6	23	0.22	18	0.20
		50 - 230					4.4				
		50 - 240					4.2				

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### SYMBOLS

MCA : Min. Circuit Amps (A)  
MFA : Max. Fuse Amps (A)  
RHz : Rated operating frequency (Hz)  
RLA : Rated Load Amps (A)  
OFM : Outdoor Fan Motor  
IFM : Indoor Fan Motor  
FLA : Full Load Amps (A)  
W : Rated motor output (W)

### NOTES

1. RLA is based on the following conditions:  
Indoor temp.: 27°CDB/19.0°CWB  
Outdoor temp. : 35°CDB
2. Maximum allowable voltage unbalance between phases is 2%
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.
5. For more details concerning conditional connections, see <http://extranet.daikineurope.com>, select "E-Data Books". Finally, click on the document title of your choice.

# 5 Capacity tables

## 5 - 1 Cooling/Heating capacity tables

FTXS20CAVMB+RX20E2V1B

### Cooling

50Hz 220-230-240V

AFR	7.7
BF	0.21

Indoor		Outdoor temperature (°CDB)																	
EWB (°C)	EDB (°C)	20			25			30			32			35			40		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.05	1.62	0.44	1.96	1.58	0.49	1.86	1.53	0.53	1.83	1.52	0.55	1.77	1.49	0.57	1.68	1.45	0.62
16.0	22	2.14	1.59	0.45	2.05	1.55	0.49	1.95	1.51	0.53	1.92	1.50	0.55	1.86	1.47	0.58	1.77	1.43	0.62
18.0	25	2.23	1.69	0.45	2.14	1.65	0.49	2.05	1.61	0.54	2.01	1.59	0.55	1.95	1.57	0.58	1.86	1.53	0.62
19.0	27	2.28	1.79	0.45	2.19	1.75	0.49	2.09	1.72	0.54	2.06	1.70	0.55	2.00	1.68	0.58	1.91	1.64	0.62
22.0	30	2.42	1.73	0.46	2.32	1.70	0.50	2.23	1.67	0.54	2.19	1.65	0.56	2.14	1.63	0.58	2.05	1.60	0.63
24.0	32	2.51	1.69	0.46	2.42	1.66	0.50	2.32	1.63	0.54	2.29	1.62	0.56	2.23	1.60	0.59	2.14	1.57	0.63

### Heating

50Hz 220-230-240V

AFR	7.8
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Indoor		Outdoor temperature (°CWB)									
EDB (°C)		-10		-5		0		6		10	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		1.82	0.60	2.12	0.63	2.43	0.66	2.79	0.69	3.04	0.72
20.0		1.72	0.62	2.03	0.65	2.33	0.67	2.70	0.71	2.94	0.73
22.0		1.69	0.62	1.99	0.65	2.30	0.68	2.66	0.72	2.91	0.74
24.0		1.65	0.63	1.95	0.66	2.26	0.69	2.63	0.72	2.87	0.75
25.0		1.63	0.63	1.94	0.66	2.24	0.69	2.61	0.73	2.85	0.75
27.0		1.59	0.64	1.90	0.67	2.20	0.70	2.57	0.73	2.81	0.76

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#### SYMBOLS

AFR:	Air flow rate	(m <sup>3</sup> /min)
BF:	Bypass factor	
EWB:	Entering wet bulb temp.	(°C)
EDB:	Entering dry bulb temp.	(°C)
TC:	Total capacity	(kW)
SHC:	Sensible heating capacity	(kW)
PI:	Power input	(kW)

#### NOTES

- Capacities are based on the following conditions:
  - (1) Corresponding refrigerant piping length: 7.5 m
  - (2) Level difference: 0 m
-  shows nominal (rated) capacities and power input.

# 5 Capacity tables

## 5 - 1 Cooling/Heating capacity tables

FTXS25CAVMB+RX25E2V1B																					
Cooling																		AFR		7.7	
50Hz 220-230-240V																		BF		0.21	
Indoor		Outdoor temperature (°CDB)																			
EWB (°C)	EDB (°C)	20			25			30			32			35			40				
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI		
14.0	20	2.56	1.88	0.59	2.44	1.82	0.65	2.33	1.76	0.70	2.28	1.74	0.73	2.21	1.70	0.76	2.10	1.64	0.82		
16.0	22	2.68	1.84	0.59	2.56	1.79	0.65	2.44	1.73	0.71	2.40	1.71	0.73	2.33	1.68	0.76	2.21	1.63	0.82		
18.0	25	2.79	1.93	0.60	2.68	1.88	0.65	2.56	1.82	0.71	2.51	1.80	0.73	2.44	1.77	0.77	2.33	1.72	0.83		
19.0	27	2.85	2.03	0.60	2.73	1.98	0.66	2.62	1.93	0.71	2.57	1.91	0.74	2.50	1.88	0.77	2.38	1.83	0.83		
22.0	30	3.02	1.95	0.60	2.91	1.91	0.66	2.79	1.87	0.72	2.74	1.85	0.74	2.67	1.82	0.78	2.56	1.78	0.83		
24.0	32	3.14	1.90	0.61	3.02	1.86	0.66	2.90	1.82	0.72	2.86	1.81	0.74	2.79	1.78	0.78	2.67	1.74	0.84		

Heating												AFR		7.8	
Indoor		Outdoor temperature (°CWB)													
EDB (°C)	TC	-10		-5		0		6		10					
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI				
15.0	2.29	0.79	2.67	0.83	3.06	0.87	3.52	0.92	3.82	0.95					
20.0	2.17	0.82	2.56	0.85	2.94	0.89	3.40	0.94	3.71	0.97					
22.0	2.29	0.79	2.67	0.83	3.06	0.87	3.52	0.92	3.82	0.95					
24.0	2.17	0.82	2.56	0.85	2.94	0.89	3.40	0.94	3.71	0.97					
25.0	2.05	0.84	2.44	0.88	2.82	0.91	3.28	0.96	3.59	0.99					
27.0	2.01	0.85	2.39	0.88	2.77	0.92	3.24	0.97	3.54	1.00					

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SYMBOLS			NOTES		
AFR:	Air flow rate	(m <sup>3</sup> /min)	1.	Capacities are based on the following conditions:	
BF:	Bypass factor		(1)	Corresponding refrigerant piping length: 7.5 m	
EWB:	Entering wet bulb temp.	(°C)	(2)	Level difference: 0 m	
EDB:	Entering dry bulb temp.	(°C)	2.	[ ] shows nominal (rated) capacities and power input.	
TC:	Total capacity	(kW)			
SHC:	Sensible heating capacity	(kW)			
PI:	Power input	(kW)			



# 5 Capacity tables

## 5 - 1 Cooling/Heating capacity tables

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FTXS35CAVMB+RX35E2V1B																			
Cooling																		50Hz 220-230-240V	
Indoor		Outdoor temperature (°CDB)																	
EWB (°C)	EDB (°C)	20			25			30			32			35			40		
		TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.96	2.09	0.81	2.96	2.09	0.89	2.96	2.09	0.97	2.96	2.09	1.00	2.96	2.09	1.05	2.85	2.03	1.13
16.0	22	3.64	2.33	0.82	3.48	2.25	0.90	3.32	2.17	0.97	3.26	2.13	1.01	3.17	2.08	1.05	3.01	2.00	1.13
18.0	25	3.80	2.40	0.82	3.64	2.32	0.90	3.48	2.25	0.98	3.42	2.22	1.01	3.32	2.17	1.06	3.16	2.10	1.14
19.0	27	3.87	2.50	0.82	3.72	2.42	0.90	3.56	2.35	0.98	3.49	2.32	1.01	3.40	2.27	1.06	3.24	2.20	1.14
22.0	30	4.11	2.40	0.83	3.95	2.33	0.91	3.79	2.26	0.99	3.73	2.24	1.02	3.63	2.20	1.07	3.48	2.13	1.15
24.0	32	4.27	2.32	0.84	4.11	2.26	0.91	3.95	2.20	0.99	3.89	2.17	1.02	3.79	2.14	1.07	3.63	2.06	1.15

Heating																		50Hz 220-230-240V	
																		AFR	8.1
Indoor		Outdoor temperature (°CWB)																	
EDB (°C)		-10		-5		0		6		10									
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI								
15.0		2.49	0.86	2.91	0.90	3.33	0.95	3.83	1.00	4.16	1.03								
20.0		2.36	0.89	2.78	0.93	3.20	0.97	3.70	1.02	4.03	1.05								
22.0		2.31	0.89	2.73	0.94	3.15	0.98	3.65	1.03	3.98	1.06								
24.0		2.26	0.90	2.68	0.95	3.10	0.99	3.60	1.04	3.93	1.07								
25.0		2.24	0.91	2.65	0.95	3.07	0.99	3.57	1.04	3.91	1.08								
27.0		2.18	0.92	2.60	0.96	3.02	1.00	3.52	1.05	3.73	1.07								

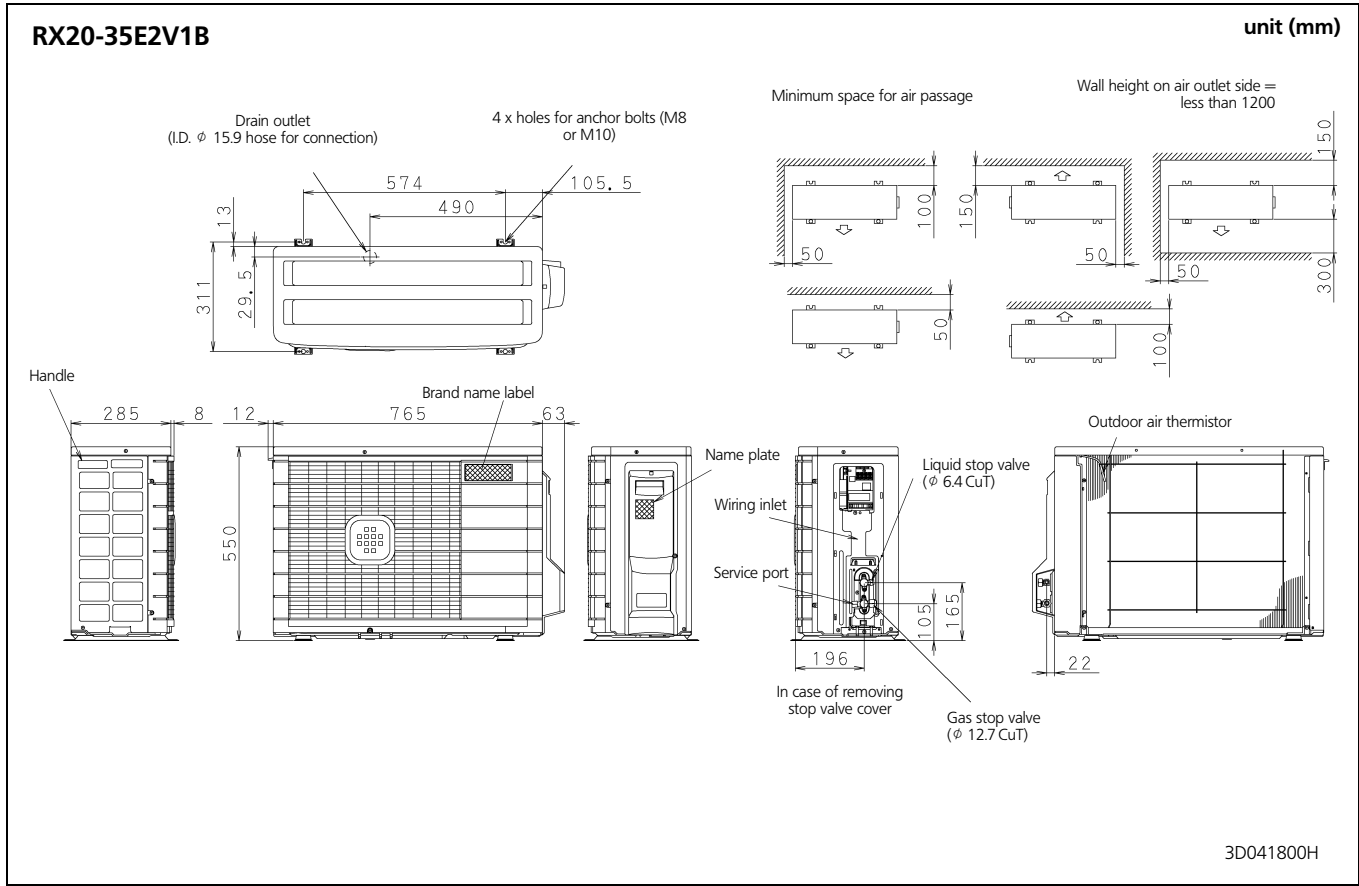
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SYMBOLS			NOTES		
AFR:	Air flow rate	(m <sup>3</sup> /min)	1.	Capacities are based on the following conditions:	
BF:	Bypass factor		(1)	Corresponding refrigerant piping length:	7.5 m
EWB:	Entering wet bulb temp.	(°C)	(2)	Level difference:	0 m
EDB:	Entering dry bulb temp.	(°C)	2.	<div style="border: 1px solid black; width: 15px; height: 10px; display: inline-block;"></div> shows nominal (rated) capacities and power input.	
TC:	Total capacity	(kW)			
SHC:	Sensible heating capacity	(kW)			
PI:	Power input	(kW)			

# 6 Dimensional drawing & centre of gravity

## 6 - 1 Dimensional drawing



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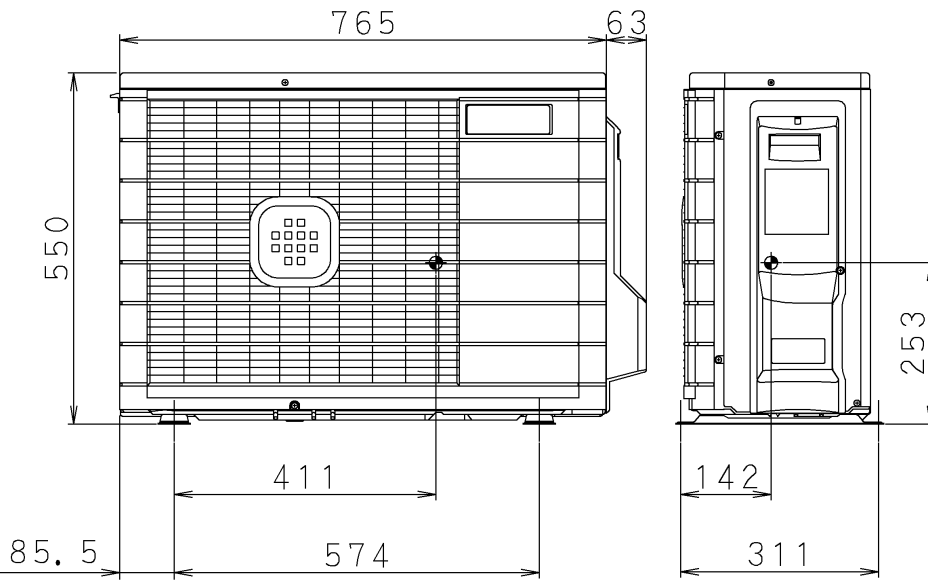
## 6 Dimensional drawing & centre of gravity

### 6 - 2 Centre of gravity

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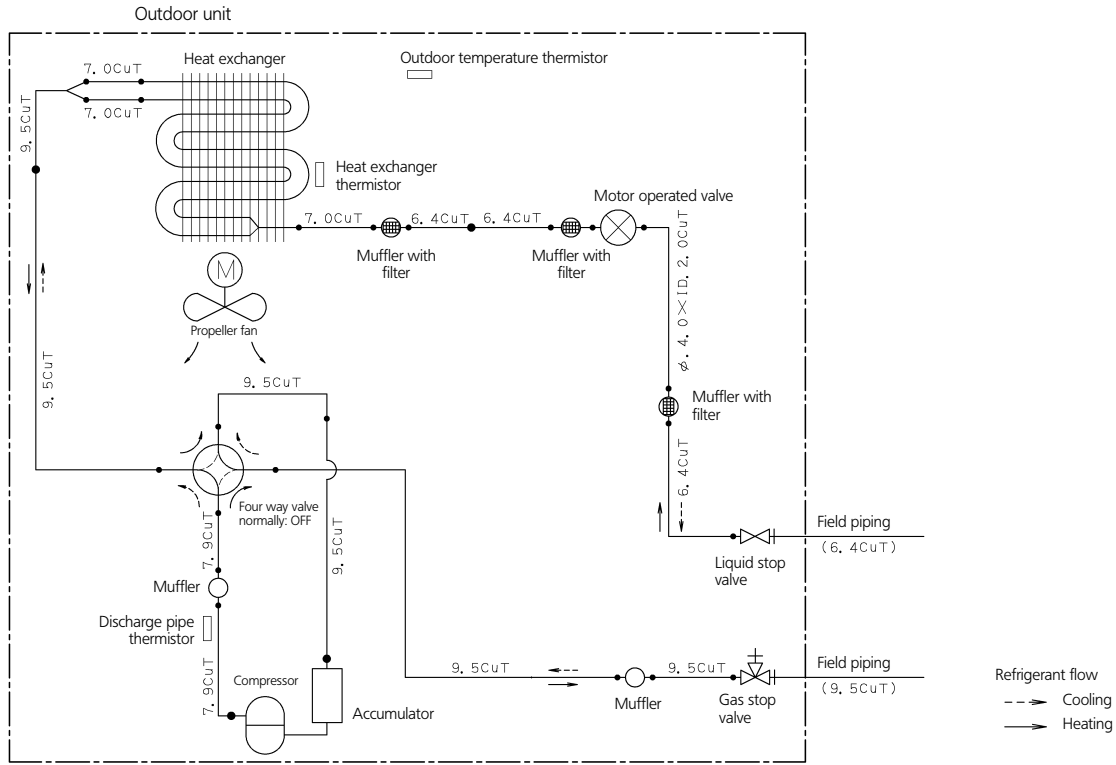
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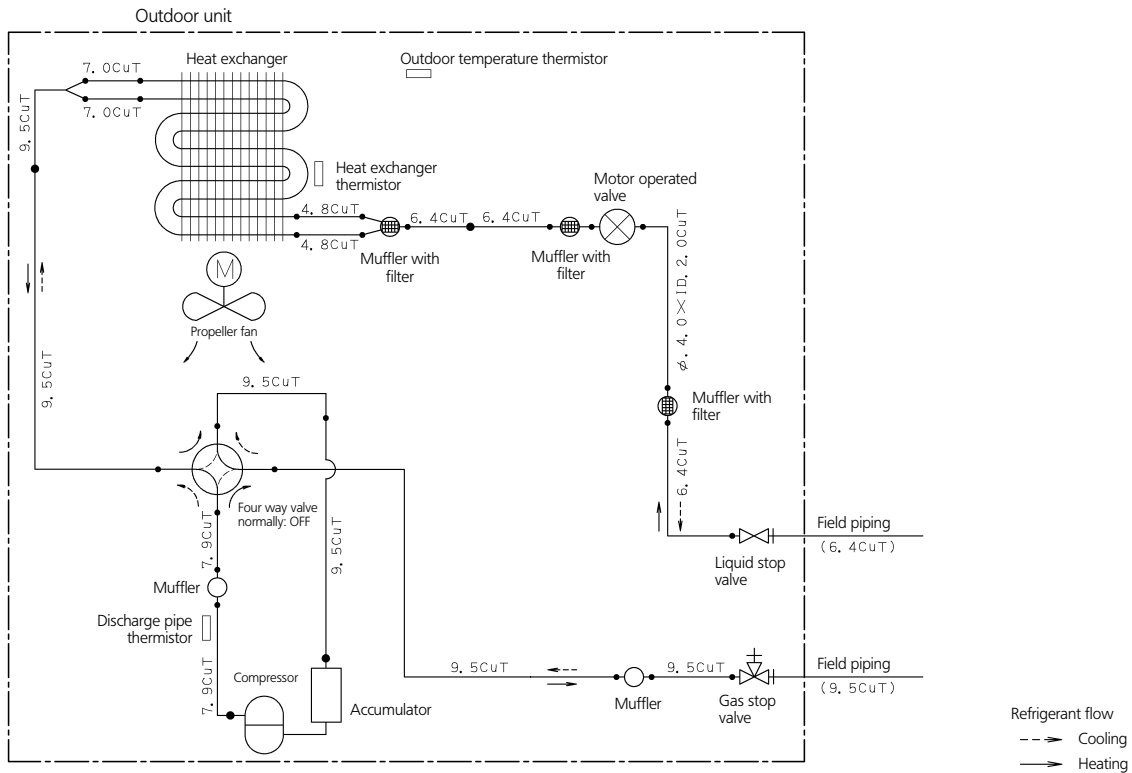
# 7 Piping diagram

## RX20-25E2V1B



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## RX35E2V1B

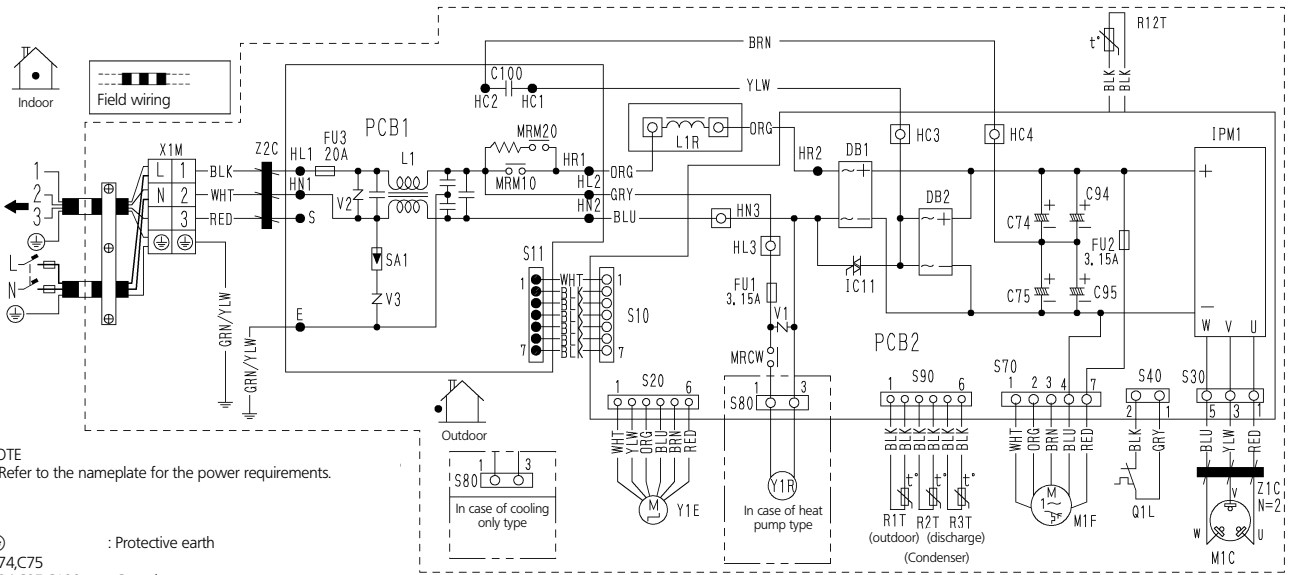


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# 8 Wiring diagram

## 8 - 1 Wiring diagram

### RX20-35E2V1B



NOTE  
1. Refer to the nameplate for the power requirements.

- ⊕ : Protective earth
- C74,C75 : Capacitor
- C94,C95,C100 : Capacitor
- DB1,DB2 : Diode bridge
- FU1,FU2,FU3 : Fuse
- IC11 : Solid state relay
- IPM1 : Triac
- L : Live
- L1 : Coil
- L1R : Reactor
- M1C : Compressor motor
- M1F : Fan motor
- MRCW,MRM10,MRM20 : Magnetic relay

- N : Neutral
- PCB1,PCB2 : Printed circuit board
- Q1L : Overload protector
- R1T,R2T,R3T,R12T : Thermistor
- S10S11,S20 : Thermistor
- S30,S40,S70 : Thermistor
- S80,S90,S91 : Thermistor
- HC3,HC4,HL3,HN3 : Connector

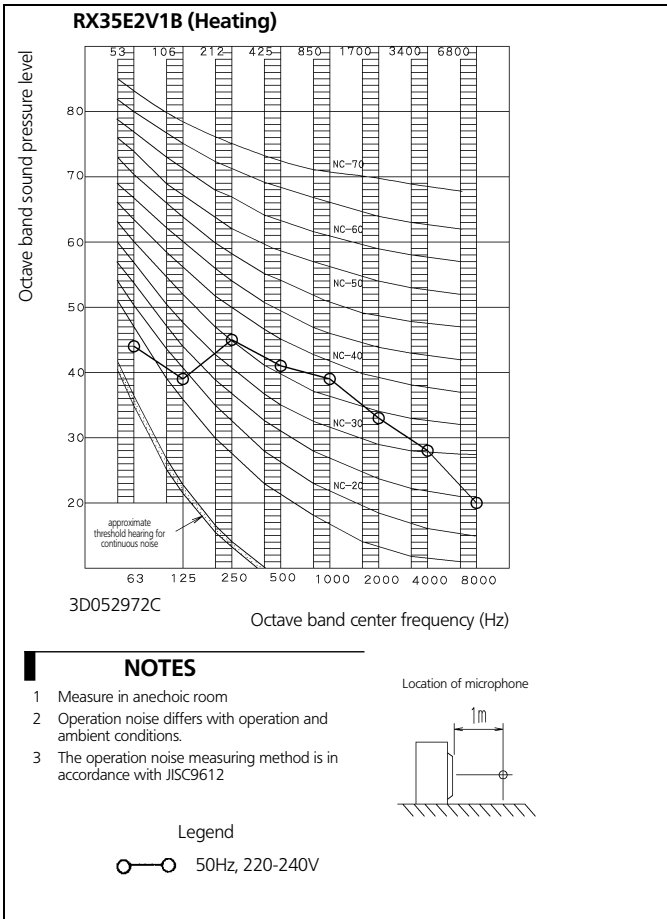
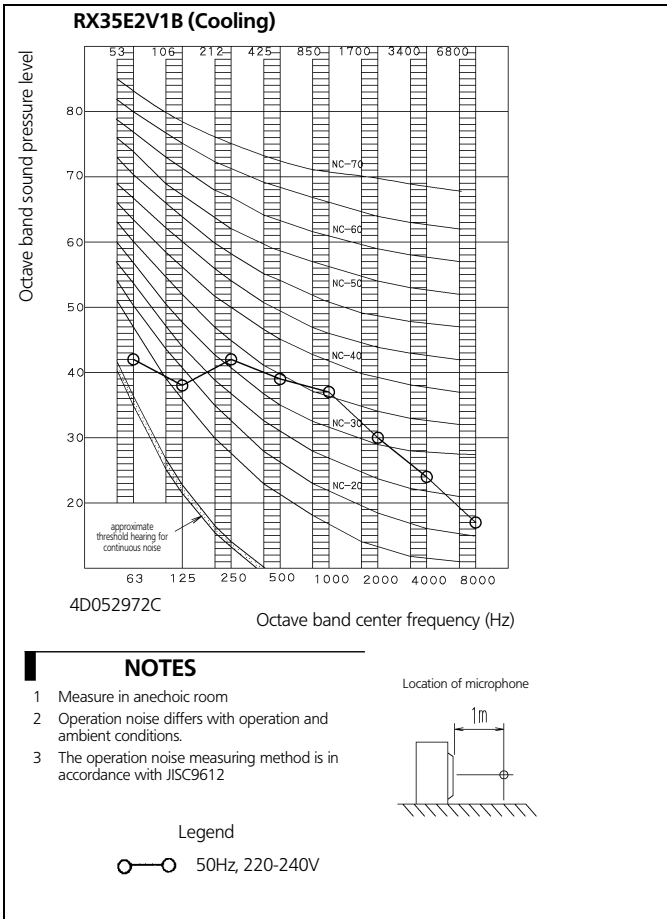
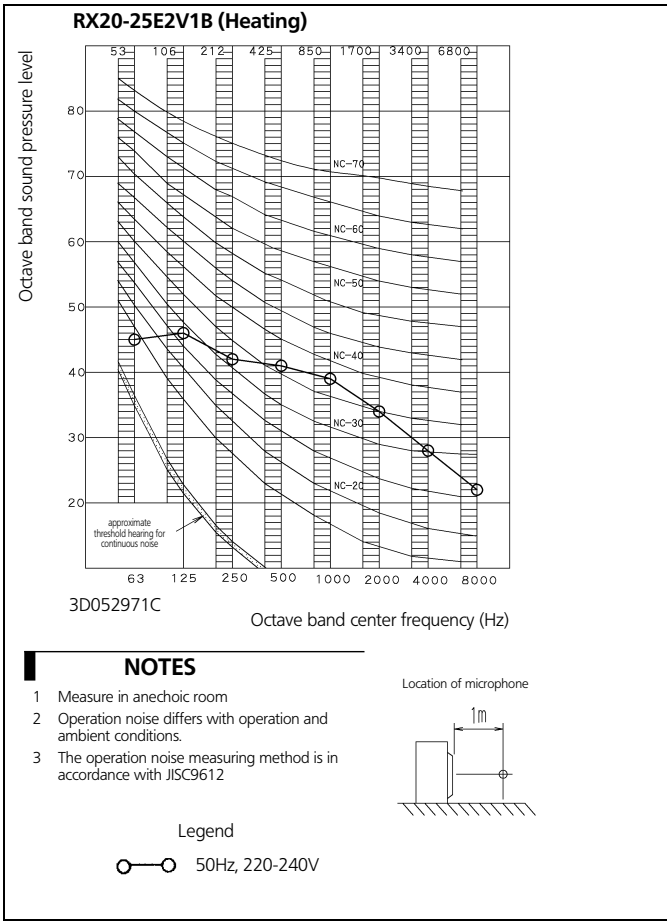
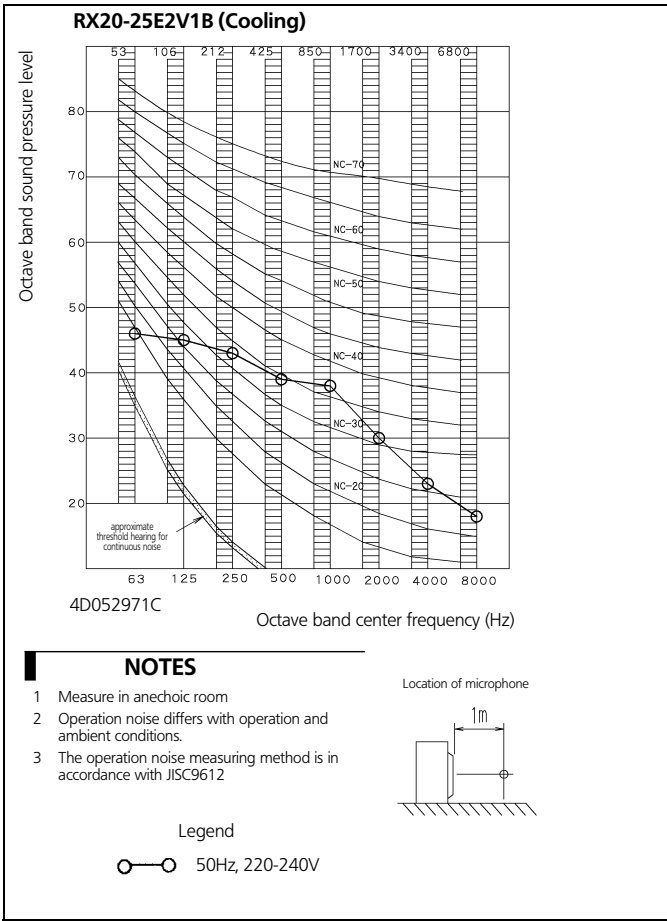
- SA1 : Surge arrester
- V1,V2,V3 : Varistor
- X1M : Terminal strip
- Y1E : Electronic expansion valve coil
- Y1R : Reversing solenoid valve coil
- Z1C,Z2C : Ferrite core

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# 9 Sound data

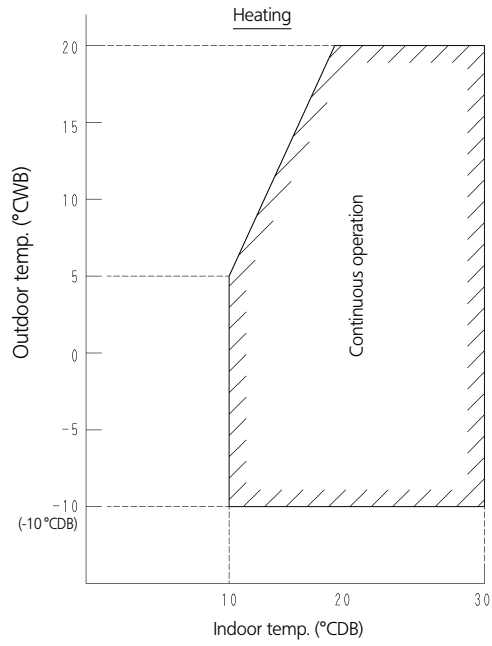
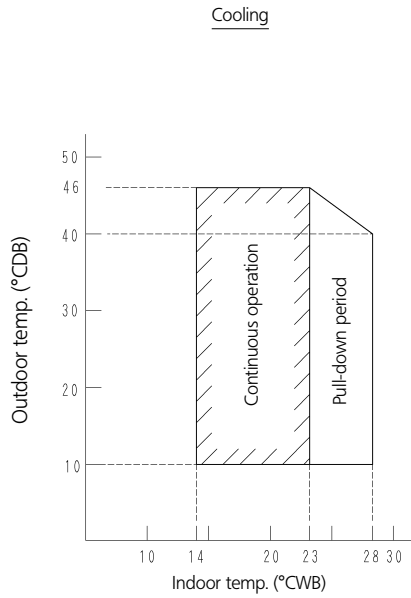
## 9 - 1 Sound pressure spectrum



# 10 Operation range

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## RX20-35E2V1B



**Notes:**

The graphs are based on the following conditions:

- Equivalent piping length 7.5 m
- Level difference 0 m
- Air flow rate high

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