DAIKIN

Air Conditioning

Technical Data

Outdoor unit

EEDEN13-100

RX-JV

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RX-JV

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1 Features

- Outdoor units for pair application
- Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency
- Energy saving during standby mode: reduces current consumption by about 80% when operating In standby. If no people are detected for more than 20 minutes, the system will automatically switch to the current-saving mode.
- Daikin outdoor units are neat, sturdy and can easily be mounted on a roof or terrace or simply placed against an outside wall

2 Specifications

2-1 Nominal Capacity And Nominal Input					FTX20JV/RX20JV	FTX25JV/RX25JV	FTX35JV/RX35JV
Cooling capacity	Min.			kW	1.3		
				Btu/h	4,400		
				kcal/h	1,120		
	Nom.			kW	2.0	2.5	3.3
				Btu/h	6,800	8,500	11,300
				kcal/h	1,720	2,150	2,840
	Max.			kW	2.6	3.0	3.8
				Btu/h	8,900	10,200	13,000
				kcal/h	2,240	2,580	3,270
Heating capacity	Min.			kW	1.3		
				Btu/h	4,400		
				kcal/h	1,120		
	Nom.			kW	2.5	2.8	3.5
				Btu/h	8,500	9,600	11,900
				kcal/h	2,150	2,410	3,010
	Max.			kW	3.5	4.0	4.8
				Btu/h	11,600	13,600	16,400
				kcal/h	3,010	3,440	4,130
Seasonal efficiency (according to EN14825)	Cooling	Energy label			A+		
		Pdesign		kW	2.00	2.50	3.30
		SEER			5.63		5.66
		Annual energy consumption		kWh	124	155	204
	Heating (Average climate)	Energy label			A++	A+	
		Pdesign		kW	2.20	2.40	2.80
		SCOP			4.67	4.50	4.14
		Annual energy consumption		kWh	660	747	945
Nominal efficiency (cooling at 35º/27º nominal load, heating at 7º/20º nominal load)	EER				3.64	3.42	3.37
	COP				4.24	4.06	3.76
	Annual energy consumption			kWh	275	365	490
	Energy label	Cooling			A		
		Heating			A		
Piping connections	Liquid	OD		mm	6.35		
	Gas	OD		mm	9.52		
	Drain	OD		mm	18		
	Heat insulation				Both liquid and gas pipes		

2-2 Technical Specifications				RX20JV	RX25JV	RX35JV
Capacity control	Method			Inverter controlled		
Casing	Colour			Ivory white		
Dimensions	Unit	Height	mm	550		
		Width	mm	658		
		Depth	mm	275		
	Packed unit	Height	mm	616		
		Width	mm	788		
		Depth	mm	359		
Weight	Unit		kg	28		30
	Packed unit		kg	31		34
Heat exchanger	Length		mm	670		647
	Rows	Quantity		1		2
	Fin pitch		mm	1.4		
	Stages	Quantity		24		
	Tube type			ø7 Hi-XA		
	Fin	Type		Waffle louvered fin		
Compressor	Model			1YC23AEXDA		
	Type			Hermetically sealed swing compressor		
	Output		W	750		

2 Specifications

2-2 Technical Specifications					RX20JV	RX25JV	RX35JV
Fan	Type				Propeller fan		
	Air flow rate	Cooling	High	m³/min	29.2		27.60
				cfm	1,030		975
			Nom.	m³/min	29.2		27.6
				cfm	1,030		975
			Super low	m³/min	-		
				cfm	-		
		Heating	High	m³/min	26.2		24.5
				cfm	927		865
			Super low	m³/min	-		
				cfm	-		
Fan motor	Model				KFD-280-33-8A		
	Output			W	33.00		
	Speed	Cooling	High	rpm	860		
			Low	rpm	720		
			Super low	rpm	-		
		Heating	High	rpm	860		
			Low	rpm	350		
			Super low	rpm	-		
Sound power level	Cooling	Nom.		dBA	60		62
Sound pressure level	Cooling	High		dBA	46		48
	Heating	High		dBA	47		48
Operation range	Cooling	Ambient	Min.	ºCDB	10		
			Max.	ºCDB	46		
	Heating	Ambient	Min.	ºCWB	-15		
			Max.	ºCWB	18		
Refrigerant	Type				R-410A		
	Charge			kg	0.74		1.0
	GWP				1,975		
Refrigerant oil	Type				FVC50K		
	Charged volume			l	0.375		
Piping connections	Drain	ID		mm	-		
	Piping length	OU - IU	Max.	m	15		
	Level difference	IU - IU	Max.	m	12		

2-3 Electrical Specifications				RX20JV	RX25JV	RX35JV
Power supply	Name			V1		
	Phase			1~		
	Frequency		Hz	50		
	Voltage		V	220-240		
Current	Nominal running current (RLA)	Cooling	A	2.52	3.52	5.02
		Heating	A	2.62	3.02	4.52
	Starting current	Cooling	A	2.7	3.7	5.0
		Heating	A	2.7	3.7	5.0
Current - 50Hz	Maximum fuse amps (MFA)		A	16		
Current - 60Hz	Maximum fuse amps (MFA)		A	-		
Wiring connections	For power supply	Quantity		3		
	For connection with indoor	Quantity		4		
		Remark		Earth wire included		

3 Electrical data

3 - 1 Electrical Data

RX-JV

Representative unit combination		Power supply				Comp		OFM		IFM	
Indoor unit	Outdoor unit	Hz-Volts	Voltage range	MCA	MFA	RHz	RLA	W	FLA	W	FLA
FTX20JV	RX20JV	50 - 220 50 - 230 50 - 240	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	36	2.2	33	0.17	16	0.12
FTX25JV	RX25JV	50 - 220 50 - 230 50 - 240	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	48	3.2	33	0.17	16	0.12
FTX35JV	RX35JV	50 - 220 50 - 230 50 - 240	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	70	4.7	33	0.17	16	0.12

SYMBOLS

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps (A)
RLA : Rated Load Amps (A)
OFM : Outdoor Fan Motor
IFM : Indoor Fan Motor
FLA : Full Load Amps (A)
W : Fan Motor Rated Output (W)
RHz : Rated Operating Frequency (Hz)

NOTES

1. RLA is based on the following conditions.
   - Indoor temp. 27°C DB/19°C WB.
   - Outdoor temp. 35°C DB.
2. Maximum allowable voltage variation between phases is 2%.
3. Select wire size based on the larger value of MCA.
4. Instead of fuse, use circuit breaker.

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4 Capacity tables

4 - 1 Cooling/Heating Capacity Tables

FTX20JV + RX20JV

Cooling 50Hz 220-240V

AFR	9.1
BF	0.24

Indoor		Outdoor temperature (°C DB)																	
EWB	EDB	20			25			30			32			35			40		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.05	1.71	0.42	1.96	1.67	0.46	1.86	1.62	0.50	1.83	1.61	0.52	1.77	1.58	0.54	1.68	1.54	0.58
16.0	22	2.14	1.68	0.42	2.05	1.64	0.47	1.95	1.60	0.51	1.92	1.59	0.52	1.86	1.56	0.55	1.77	1.52	0.59
18.0	25	2.23	1.79	0.43	2.14	1.75	0.47	2.05	1.71	0.51	2.01	1.70	0.52	1.95	1.68	0.55	1.86	1.64	0.59
19.0	27	2.28	1.91	0.43	2.19	1.88	0.47	2.09	1.84	0.51	2.06	1.83	0.53	2.00	1.80	0.55	1.91	1.77	0.59
22.0	30	2.42	1.85	0.43	2.32	1.82	0.47	2.23	1.79	0.51	2.19	1.78	0.53	2.14	1.76	0.55	2.05	1.73	0.59
24.0	32	2.51	1.81	0.43	2.42	1.78	0.47	2.32	1.76	0.52	2.29	1.74	0.53	2.23	1.73	0.56	2.14	1.70	0.60

Heating 50Hz 220-240V

AFR	9.4

Indoor	Outdoor temperature (°C WB)									
EDB	-10		-5		0		6		10	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	1.68	0.50	1.97	0.52	2.25	0.55	2.59	0.58	2.81	0.60
20.0	1.60	0.51	1.88	0.54	2.16	0.56	2.50	0.59	2.73	0.61
22.0	1.56	0.52	1.84	0.54	2.13	0.57	2.47	0.60	2.69	0.61
24.0	1.53	0.52	1.81	0.55	2.09	0.57	2.43	0.60	2.66	0.62
25.0	1.51	0.53	1.79	0.55	2.07	0.57	2.41	0.60	2.64	0.62
27.0	1.48	0.53	1.76	0.56	2.04	0.58	2.38	0.61	2.61	0.63

SYMBOLS

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

NOTES

1. Capacities are based on the following conditions.
   (1) Corresponding refrigerant piping length : 5m
   (2) Level difference : 0m
2. ☐ shows nominal (rated) capacities and power input

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FTX25JV + RX25JV

Cooling 50Hz 220-240V

AFR	9.2
BF	0.29

Indoor		Outdoor temperature (°CDB)																	
EWB	EDB	20			25			30			32			35			40		
°C	°C	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.15	1.72	0.52	2.15	1.72	0.58	2.15	1.72	0.65	2.15	1.72	0.68	2.15	1.72	0.72	2.10	1.69	0.78
16.0	22	2.68	1.89	0.56	2.56	1.83	0.62	2.44	1.78	0.67	2.40	1.76	0.69	2.33	1.72	0.73	2.21	1.67	0.78
18.0	25	2.79	1.98	0.57	2.68	1.93	0.62	2.56	1.88	0.67	2.51	1.86	0.70	2.44	1.83	0.73	2.33	1.78	0.78
19.0	27	2.85	2.09	0.57	2.73	2.04	0.62	2.62	1.99	0.68	2.57	1.97	0.70	2.50	1.94	0.73	2.38	1.90	0.78
22.0	30	3.02	2.02	0.57	2.91	1.97	0.63	2.79	1.93	0.68	2.74	1.91	0.70	2.67	1.89	0.73	2.56	1.85	0.79
24.0	32	3.14	1.96	0.58	3.02	1.92	0.63	2.90	1.89	0.68	2.86	1.87	0.71	2.79	1.85	0.74	2.67	1.81	0.79

Heating 50Hz 220-240V

AFR	9.7

Indoor	Outdoor temperature (°CWB)									
EDB	-10		-5		0		6		10	
°C	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	1.88	0.58	2.20	0.61	2.52	0.64	2.90	0.67	3.15	0.70
20.0	1.79	0.60	2.10	0.63	2.42	0.66	2.80	0.69	3.05	0.71
22.0	1.75	0.61	2.07	0.63	2.38	0.66	2.76	0.70	3.01	0.72
24.0	1.71	0.61	2.03	0.64	2.34	0.67	2.72	0.70	2.98	0.73
25.0	1.69	0.61	2.01	0.64	2.32	0.67	2.70	0.71	2.96	0.73
27.0	1.65	0.62	1.97	0.65	2.29	0.68	2.66	0.71	2.92	0.73

SYMBOLS

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

NOTES

1. Capacities are based on the following conditions.
   (1) Corresponding refrigerant piping length : 5m
   (2) Level difference : 0m
2. ☐ show nominal (rated) capacities and power input

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4 Capacity tables

4 - 1 Cooling/Heating Capacity Tables

FTX35JV + RX35JV

Cooling **50Hz 220-240V**

AFR	9.3
BF	0.25

Indoor		Outdoor temp. (°CDB)																	
EWB	EDB	20			25			30			32			35			40		
(°C)	(°C)	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI	TC	SHC	PI
14.0	20	2.30	1.83	0.72	2.30	1.83	0.82	2.30	1.83	0.90	2.30	1.83	0.93	2.30	1.83	0.97	2.30	1.83	1.04
16.0	22	3.07	2.11	0.75	3.07	2.11	0.83	3.07	2.11	0.90	3.07	2.11	0.93	3.07	2.11	0.97	2.92	2.04	1.05
18.0	25	3.68	2.43	0.76	3.53	2.36	0.83	3.38	2.29	0.91	3.32	2.26	0.93	3.22	2.22	0.98	3.07	2.15	1.05
19.0	27	3.76	2.54	0.76	3.61	2.48	0.84	3.45	2.41	0.91	3.39	2.38	0.94	3.30	2.34	0.98	3.15	2.27	1.05
22.0	30	3.99	2.45	0.77	3.84	2.39	0.84	3.68	2.32	0.91	3.62	2.30	0.94	3.53	2.27	0.99	3.37	2.21	1.06
24.0	32	4.14	2.38	0.77	3.99	2.32	0.85	3.83	2.26	0.92	3.77	2.24	0.95	3.68	2.21	0.99	3.53	2.16	1.06

Heating **50Hz 220-240V**

AFR	10.1

Indoor	Outdoor temp. (°CWB)									
EDB	-10		-5		0		6		10	
(°C)	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0	2.36	0.79	2.75	0.82	3.15	0.86	3.62	0.91	3.94	0.94
20.0	2.24	0.81	2.63	0.85	3.03	0.88	3.50	0.93	3.82	0.96
22.0	2.19	0.82	2.58	0.85	2.98	0.89	3.45	0.94	3.77	0.97
24.0	2.14	0.82	2.53	0.86	2.93	0.90	3.40	0.95	3.72	0.98
25.0	2.11	0.83	2.51	0.87	2.90	0.90	3.38	0.95	3.70	0.98
27.0	2.07	0.84	2.46	0.88	2.86	0.91	3.33	0.96	3.65	0.99

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SYMBOLS

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

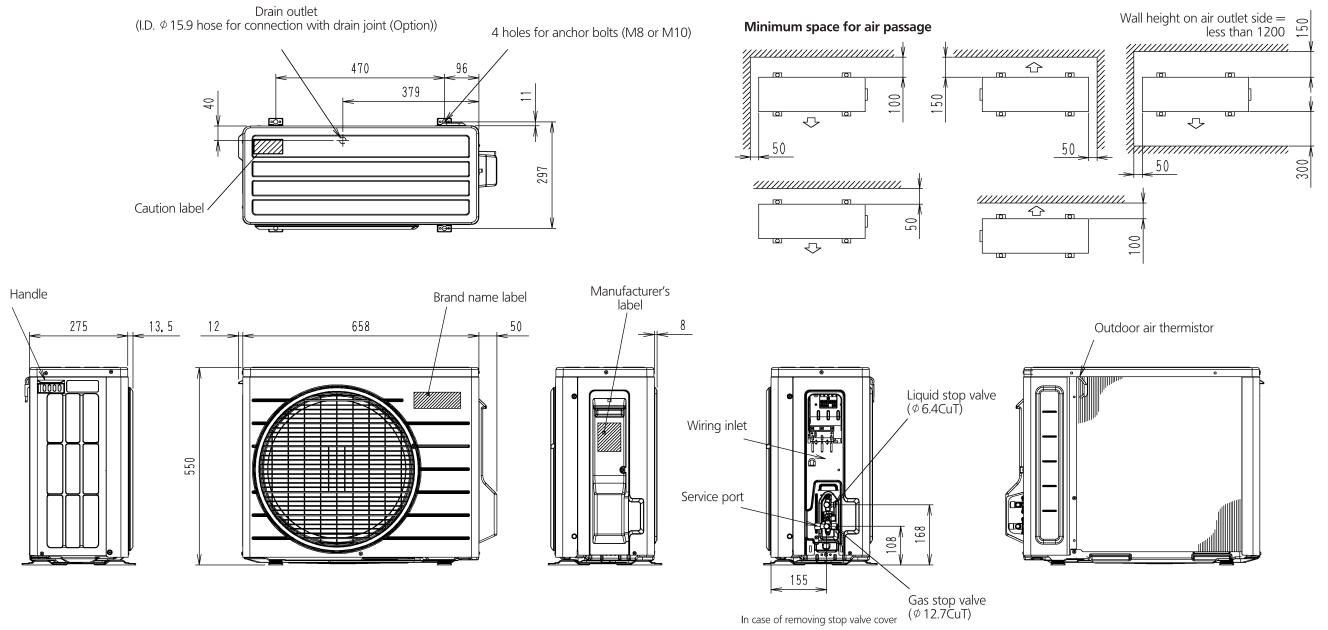
NOTES

1. Capacities are based on the following conditions:
   (1) Corresponding refrigerant piping length: 5m
   (2) Level difference: 0m
2. ☐ shows nominal (rated) capacities and power input.

5 Dimensional drawings

5 - 1 Dimensional Drawings

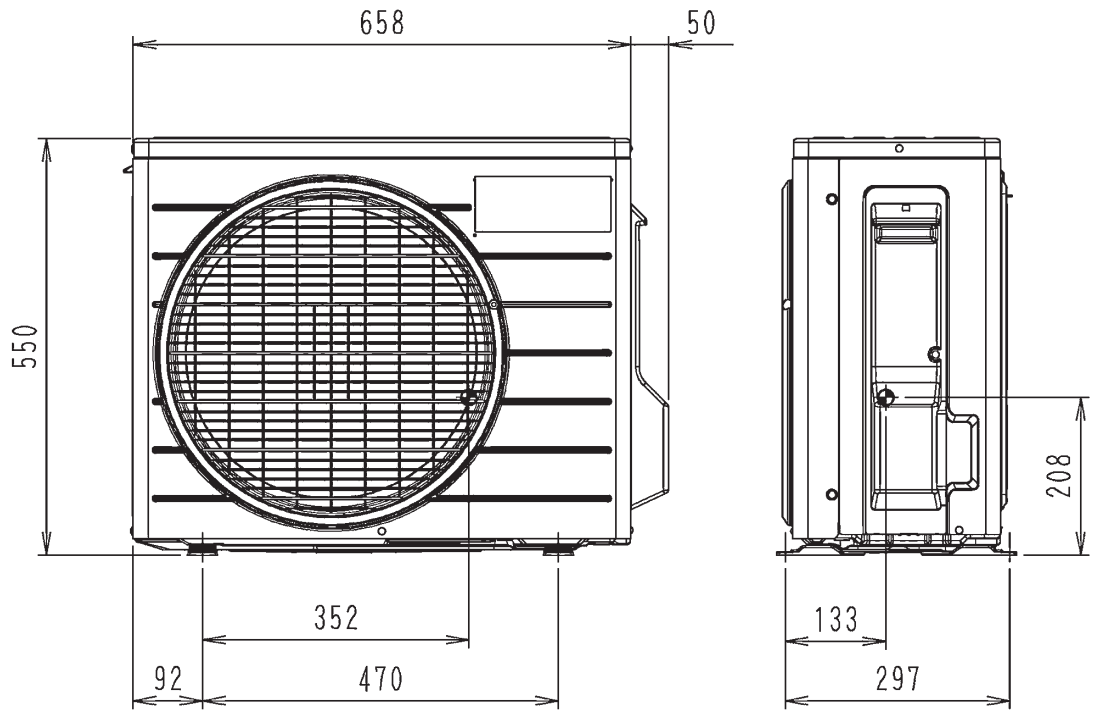
RX-JV



6 Centre of gravity

6 - 1 Centre of Gravity

RX20-25JV



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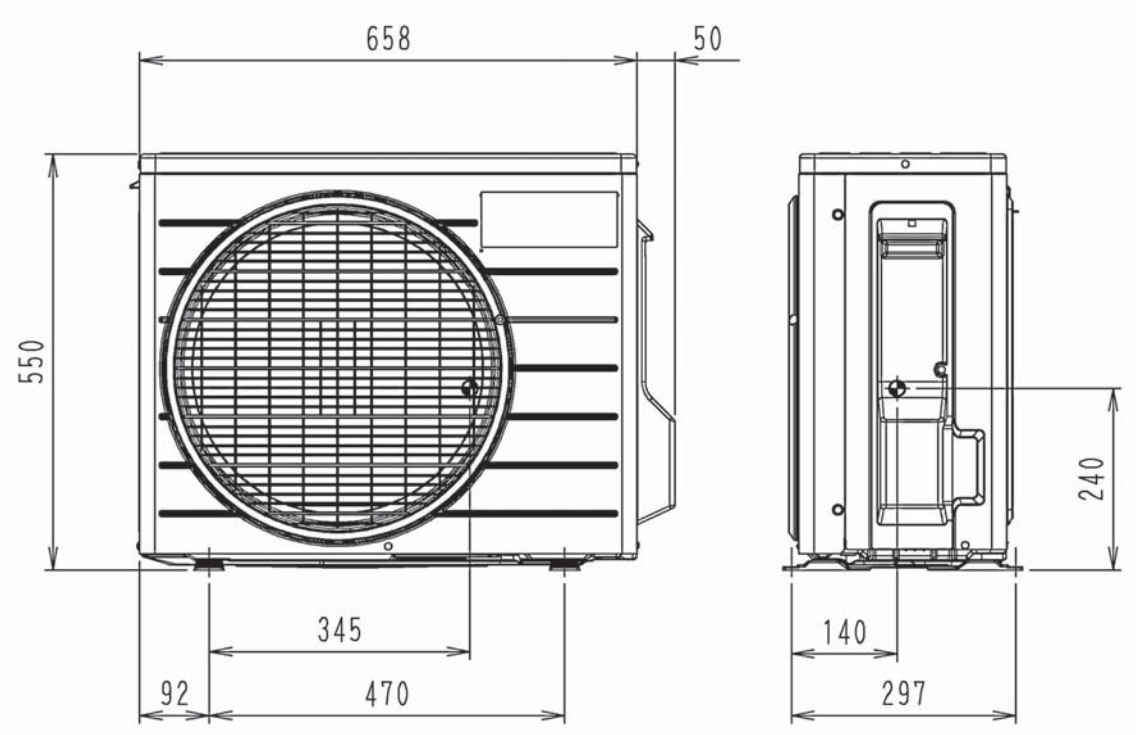
RX35JV



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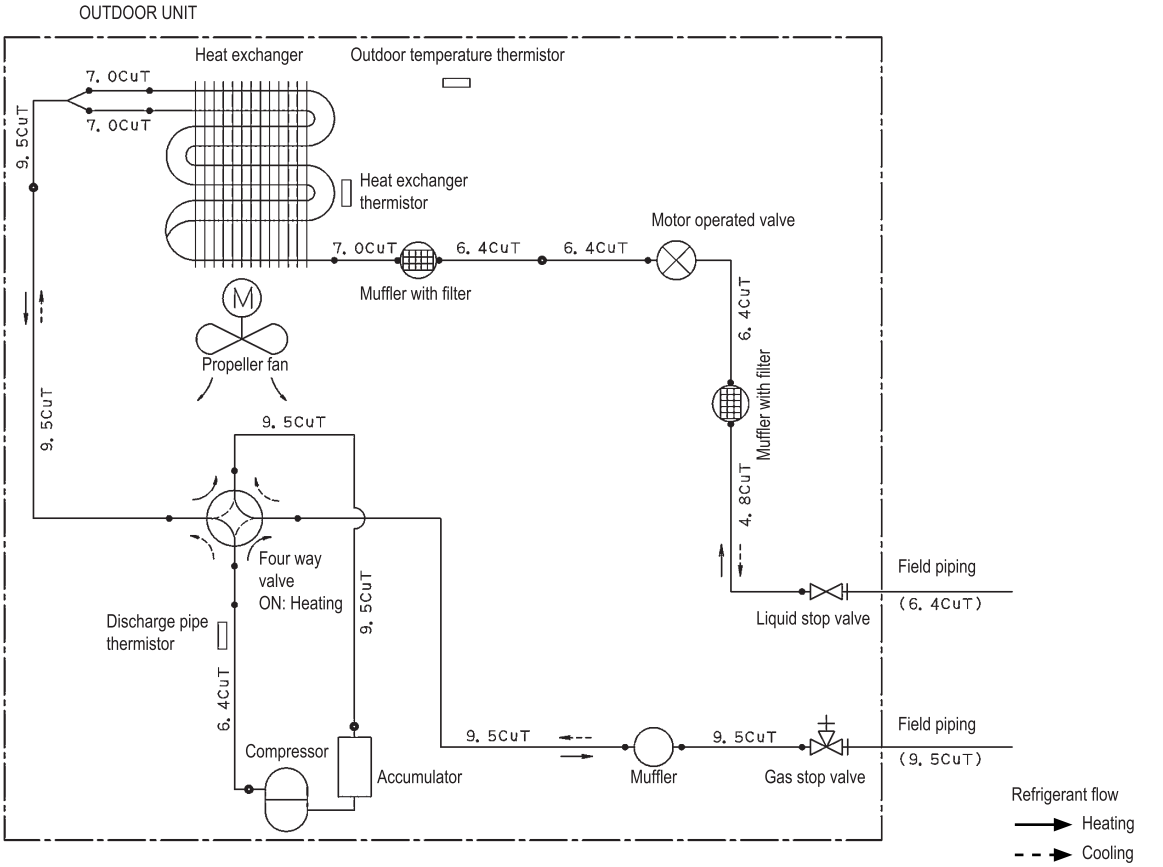
7 Piping diagrams

7 - 1 Piping Diagrams

RX20-25JV



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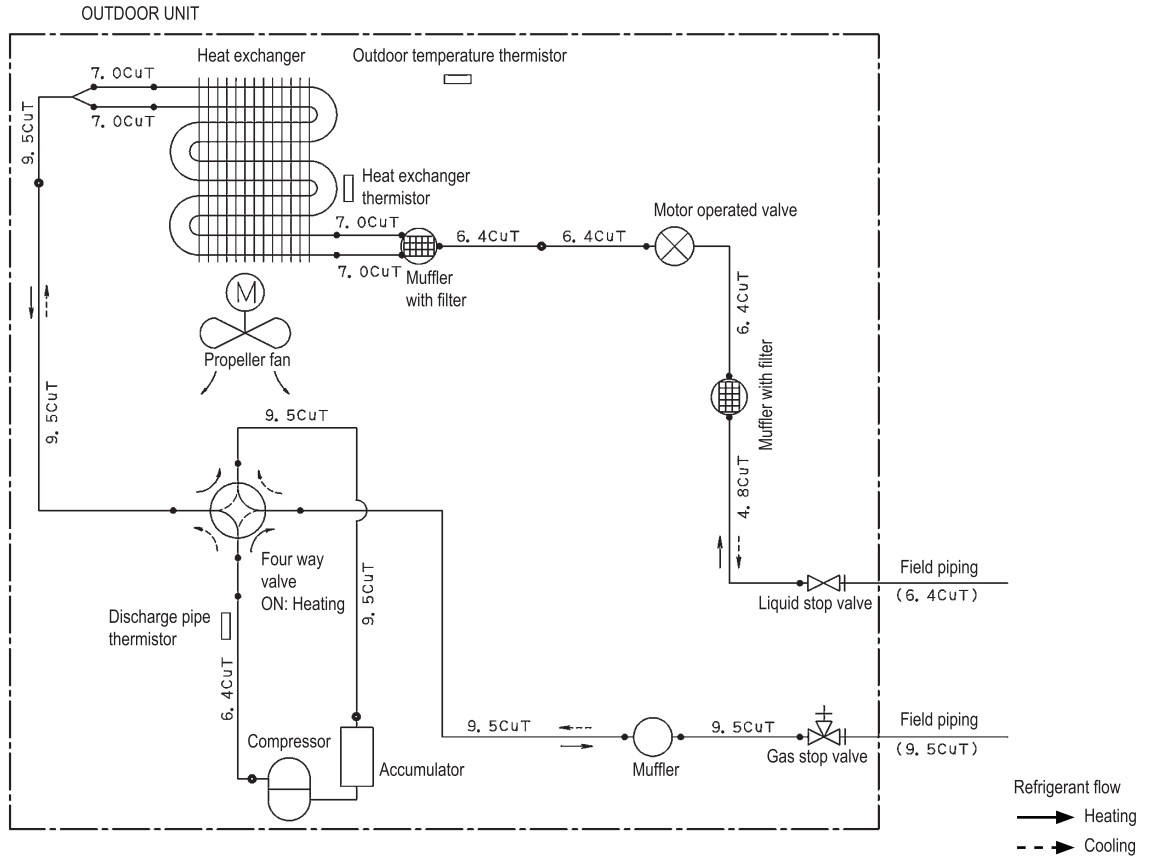
RX35JV



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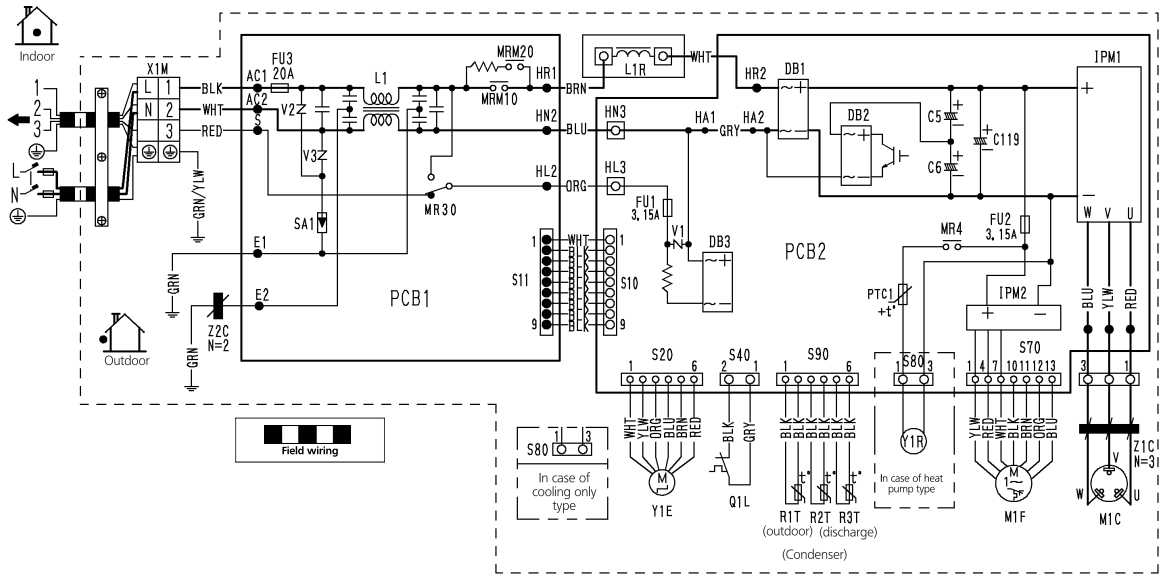
8 Wiring diagrams

8 - 1 Wiring Diagrams - Single Phase

RX-JV



Notes
1. Size: Length 132 X Width 185.
2. Refer to purchasing specification AS(Y)303002, unless otherwise specified.
3. This drawing was drawn on CAD system.
4. Refer to the nameplate for the power requirements.

C5,C6,C119	: Capacitor	N	: Neutral	SA1	: Surge arrester
DB1,DB2,DB3	: Diode bridge	Q1L	: Overload protector	V1,V2,V3	: Varistor
FU1,FU2,FU3	: Fuse	PCB1,PCB2	: Printed circuit board	X1M	: Terminal strip
IPM1,IPM2	: Intelligent power module	PTC1	: Thermistor PTC	Y1E	: Electronic expansion valve coil
L	: Live	S10,S11,S20,S40		Y1R	: Reversing solenoid valve coil
L1	: Coil	S70,S80,S90,HL3		Z1C,Z2C	: Ferrite core
L1R	: Reactor	HN3	: Connector	⏚	: Protective earth
M1C	: Compressor motor	R1T,R2T,R3T	: Thermistor		
M1F	: Fan motor				
MR4,MR30, MRM10,MRM20	: Magnetic relay				

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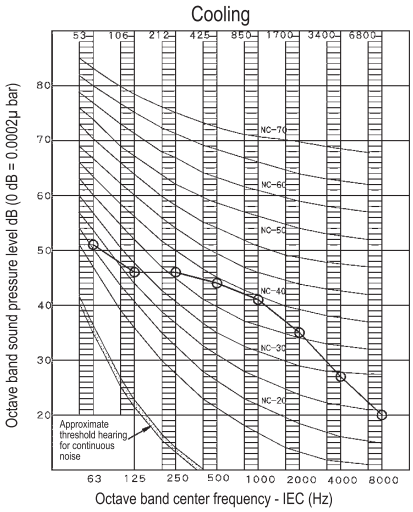
9 Sound data

9 - 1 Sound Pressure Spectrum - Cooling

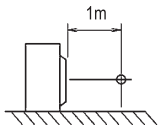
RX20JV



NOTES

Scale	50Hz 230v (H)
A	46

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612



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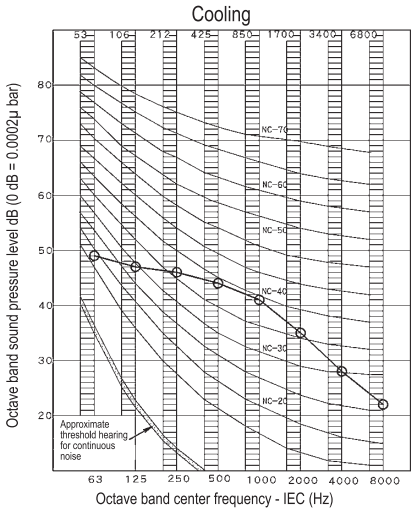
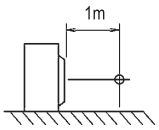
RX25JV



NOTES

Scale	50Hz 230v (H)
A	46

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612



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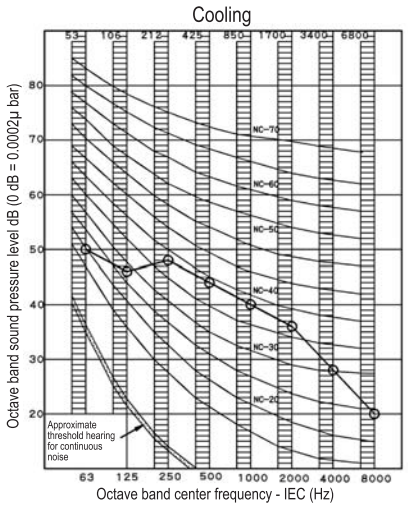
9 Sound data

9 - 1 Sound Pressure Spectrum - Cooling

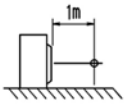
RX35JV



NOTES

Scale	50Hz 230V (H)
A	48

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612

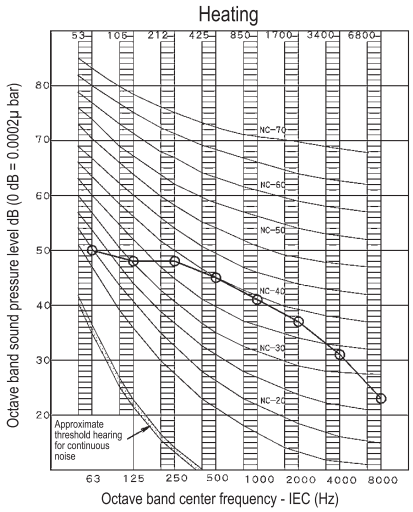


3D059004B

9 Sound data

9 - 2 Sound Pressure Spectrum - Heating

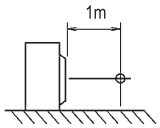
RX20JV



NOTES

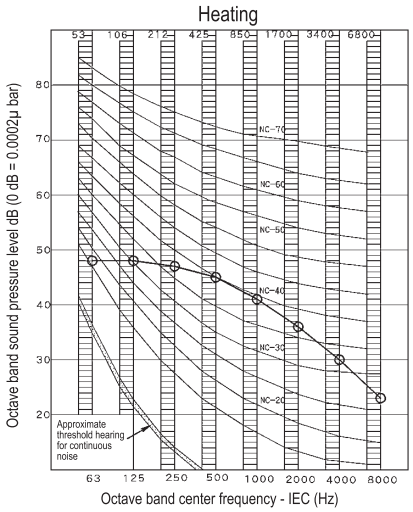
Scale	50Hz 230v (H)
A	47

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612



3D059002B

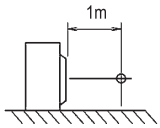
RX25JV



NOTES

Scale	50Hz 230v (H)
A	47

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612

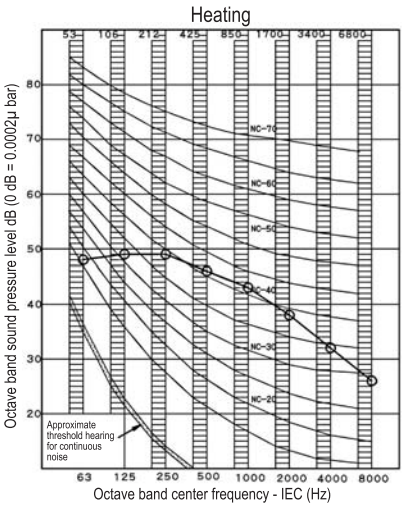


3D059003B

9 Sound data

9 - 2 Sound Pressure Spectrum - Heating

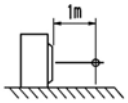
RX35JV



NOTES

Scale	50Hz 230V (H)
A	48

1 Over All (dB):
(B,G,N is already rectified)
2 Measuring place: measure in anechoic room.
3 Operation noise differs with operation and ambient conditions.
4 Location of microphone.
JISC9612
The operation noise measuring method is in accordance with JISC9612



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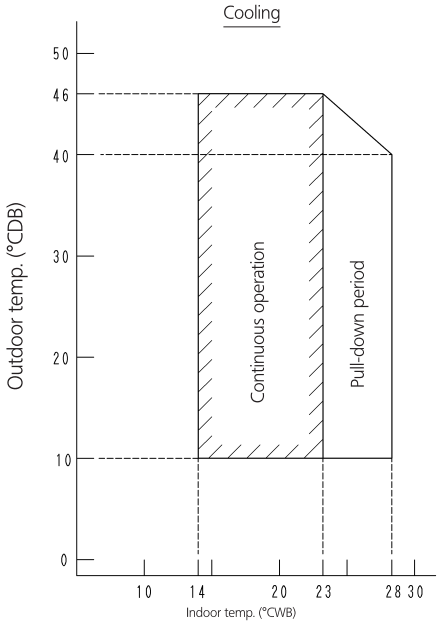
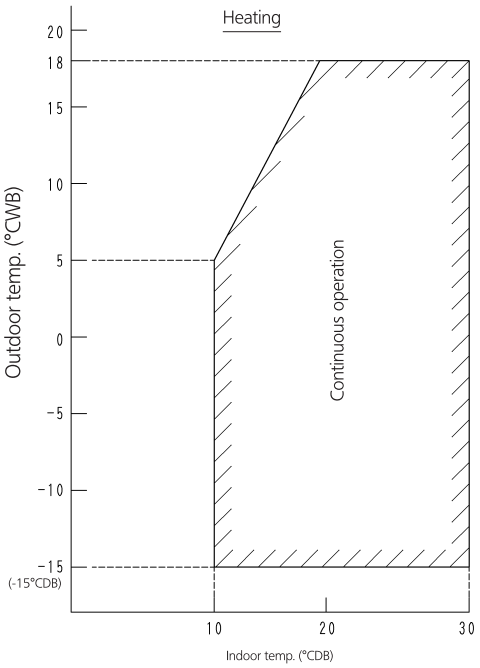
10 Operation range

10 - 1 Operation Range

RX-JV





Notes:
The graphs are based on the following conditions:
- Equivalent piping length 5.0 m
- Level difference 0 m
- Air flow rate high

3D058975B

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