



technical data

Outdoor units
ARX-JV1B

air conditioning systems

R-410A



technical data

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ARX-JV1B

air conditioning systems

R-410A

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ARX-JV1B

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1 Features

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



2 Specifications

2-1 Nominal capacity and nominal input				ARX20JV1B	ARX25JV1B	ARX35JV1B
For combination indoor units + outdoor units	Indoor Units			ATX20JV1B	ATX25JV1B	ATX35JV1B
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
Piping connections	Drain	OD	mm	18.0		
	Gas	OD	mm	9.52		
	Heat insulation			Both liquid and gas pipes		
	Liquid	OD	mm	6.35		
Power Input	Cooling	Min.	kW	0.310	0.310	0.290
		Nom.	kW	0.550	0.730	0.980
		Max.	kW	0.720	1.050	1.300
	Heating	Min.	kW	0.250	0.250	0.290
		Nom.	kW	0.950	0.690	0.930
		Max.	kW	0.950	1.110	1.290
For combination indoor units + outdoor units	EER	Nominal		3.64	3.42	3.37
	COP	Nominal		4.24	4.06	3.76
	Energy Label	Cooling		A		
		Heating		A		
Annual energy consumption		kWh		275	365	490
Notes				Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB, 24°CWB; equivalent piping length: 5m		
				Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m		
				SL: The silent fan level of the air flow rate setting		

2-2 TECHNICAL SPECIFICATIONS				ARX20JV	ARX25JV	ARX35JV
Casing	Colour			Ivory white		
Dimensions	Unit	Height	mm	550		
		Width	mm	658		
		Depth	mm	275		
	Packing	Height	mm	616		
		Width	mm	788		
		Depth	mm	359		
Weight	Unit	kg	28		30	
	Packed Unit	kg	31		34	
Heat Exchanger	Dimensions	Length	mm	670		647
		Nr of Rows		1		2
		Fin Pitch	mm	1.4		
		Nr of Stages		24		
	Tube type		ø7 Hi-XA			
	Fin	Type	Waffle fin			

2 Specifications

2-2 TECHNICAL SPECIFICATIONS				ARX20JV	ARX25JV	ARX35JV
Fan	Type			Propeller		
	Air Flow Rate	Cooling (High)	m³/min	29.2		27.6
		Heating (High)	m³/min	26.2		24.5
		Cooling (High)	cfm	1,030		975
		Heating (High)	cfm	927		865
	Power consumption	Cooling (Standard)	W	510	690	940
Heating (Standard)		W	550	650	890	
Motor	Speed (nominal)	Cooling Min.	rpm	720		
		Cooling Max.	rpm	860		
		Heating Min.	rpm	350		
		Heating Max.	rpm	860		
Fan	Motor	Output	W	33		
		Model		KFD-280-33-8A		
Compressor	Motor	Model		1YC23AEXDA		
		Type		Hermetically sealed swing compressor		
		Motor Output	W	750		
Operation Range	Cooling	Min.	°CDB	10		
		Max.	°CDB	46		
	Heating	Min.	°CWB	-15		
		Max.	°CWB	20		
Sound Level (nominal)	Cooling	Sound Power	dB(A)	60		62
		Sound Pressure High	dB(A)	46		48
	Heating	Sound Pressure High	dB(A)	47		48
Refrigerant	Type			R-410A		
	Charge		kg	0.740		1.000
Refrigerant Oil	Type			FVC50K		
	Charged Volume		l	0.375		
Piping connections	Piping Length	Maximum	m	15		
		System Chargeless	m	10		
	Additional Refrigerant Charge		kg/m	0.02 (for piping length exceeding 10m)		
	Level difference	Maximum	m	12		
Standard Accessories				Drain plug 1		
				Installation manual 1		

2-3 Electrical Specifications				ARX20JV1B	ARX25JV1B	ARX35JV1B
Power Supply	Name			V1		
	Phase			1~		
	Frequency		Hz	50		
	Voltage		V	220-240		
Running current	Standard	Cooling	A	2.52	3.52	5.02
		Heating	A	2.62	3.02	4.52
Wiring connections	For power supply	Remark	3 for power supply, 4 for interunit wiring (including earth wiring)			

3 Electrical data

ARX20-35JV

Representative unit combination		Power supply				Comp		OFM		IFM	
Indoor unit	Outdoor unit	Hz-Volts	Voltage range	MCA	MFA	RHz	RLA	W	FLA	W	FLA
ATX20JV1B	ARX20JV1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	36	2.2	33	0.17	16	0.12
		50 - 230									
		50 - 240									
ATX25JV1B	ARX25JV1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	48	3.2	33	0.17	16	0.12
		50 - 230									
		50 - 240									
ATX35JV1B	ARX35JV1B	50 - 220	Max. 50Hz 264V Min. 50Hz 198V	14.5	16	70	4.7	33	0.17	16	0.12
		50 - 230									
		50 - 240									

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/19.0°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

ATX20JV1B+ARX20JV1B

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
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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 (m³/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

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

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4 Capacity tables

4 - 1 Cooling/Heating capacity tables

ATX25JV1B+ARX25JV1B

Cooling 50Hz 220-240V

AFR	9.2
BF	0.29

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	2.15	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
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Indoor		Outdoor temperature (°C WB)									
EDB		-10		-5		0		6		10	
°C		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15.0		1.88	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 (m³/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

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

4 Capacity tables

4 - 1 Cooling/Heating capacity tables

ATX35JV1B+ARX35JV1B

Cooling 50Hz 220-240V

AFR	9.3
BF	0.25

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	2.30	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
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Indoor		Outdoor temperature (°C WB)									
EDB		-10		-5		0		6		10	
°C	°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

SYMBOLS

AFR : Air flow rate (m³/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

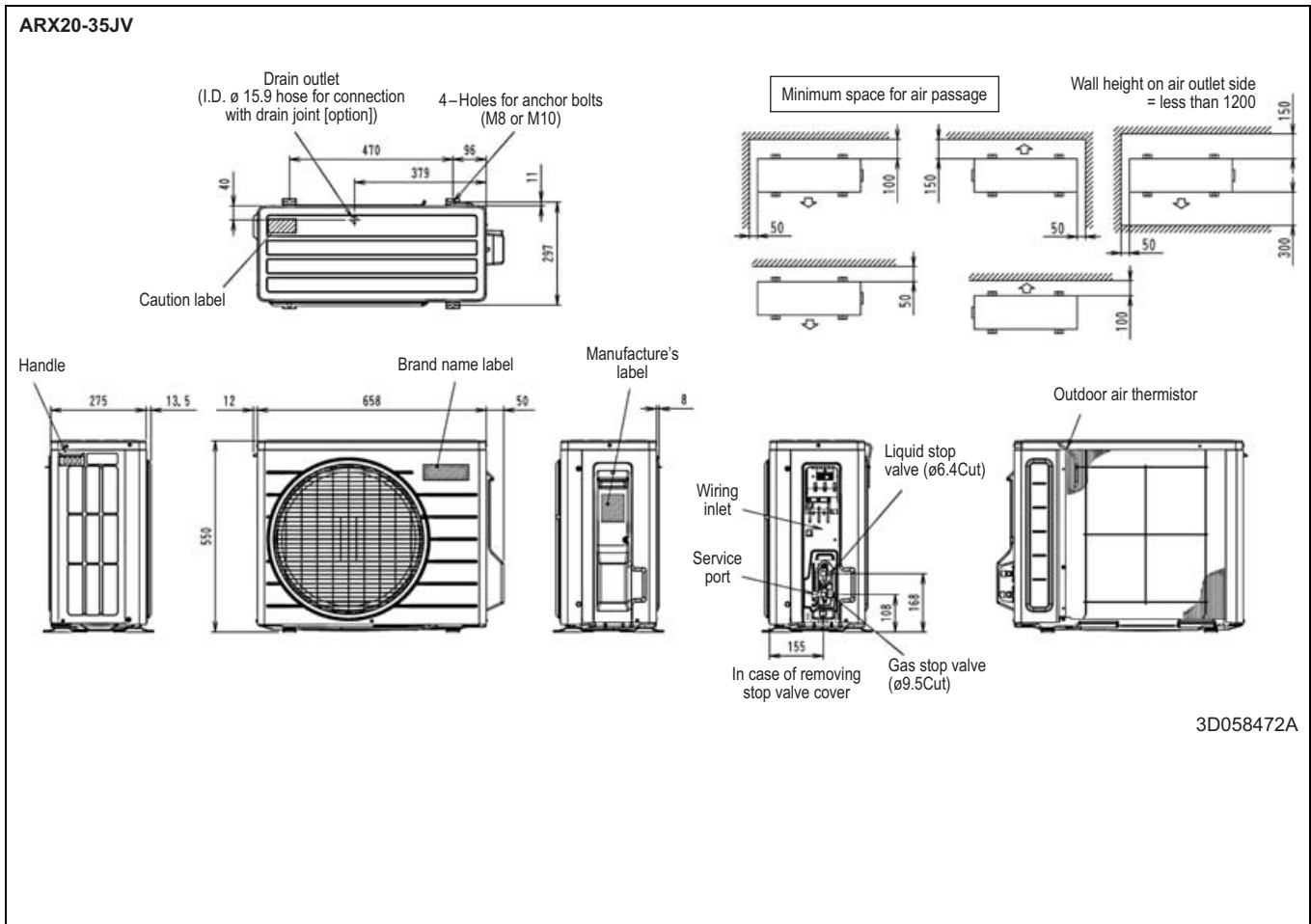
- Capacities are based on the following conditions.
 (1) Corresponding refrigerant piping length : 5m
 (2) Level difference : 0m
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 shows nominal (rated) capacities and power input.

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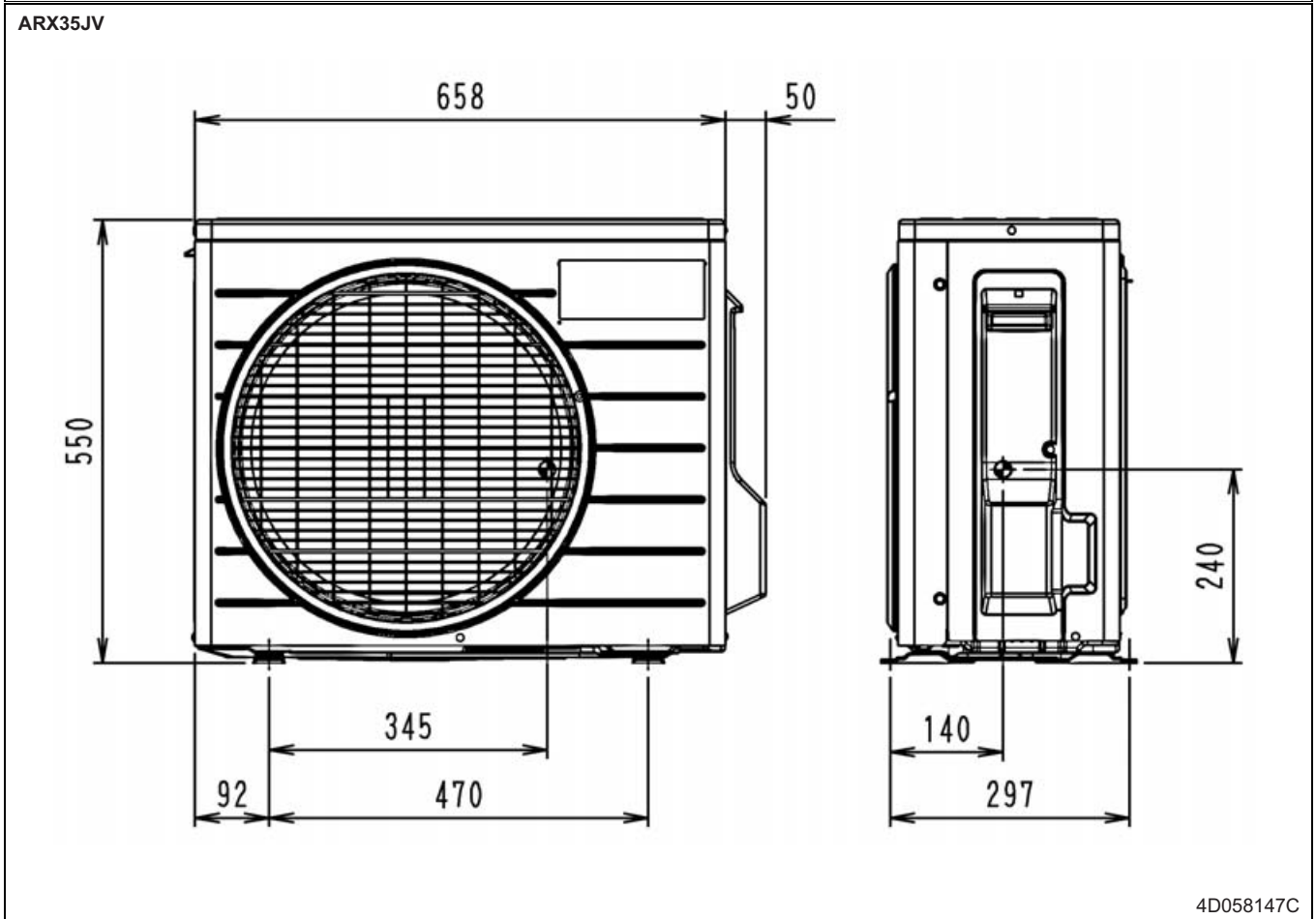
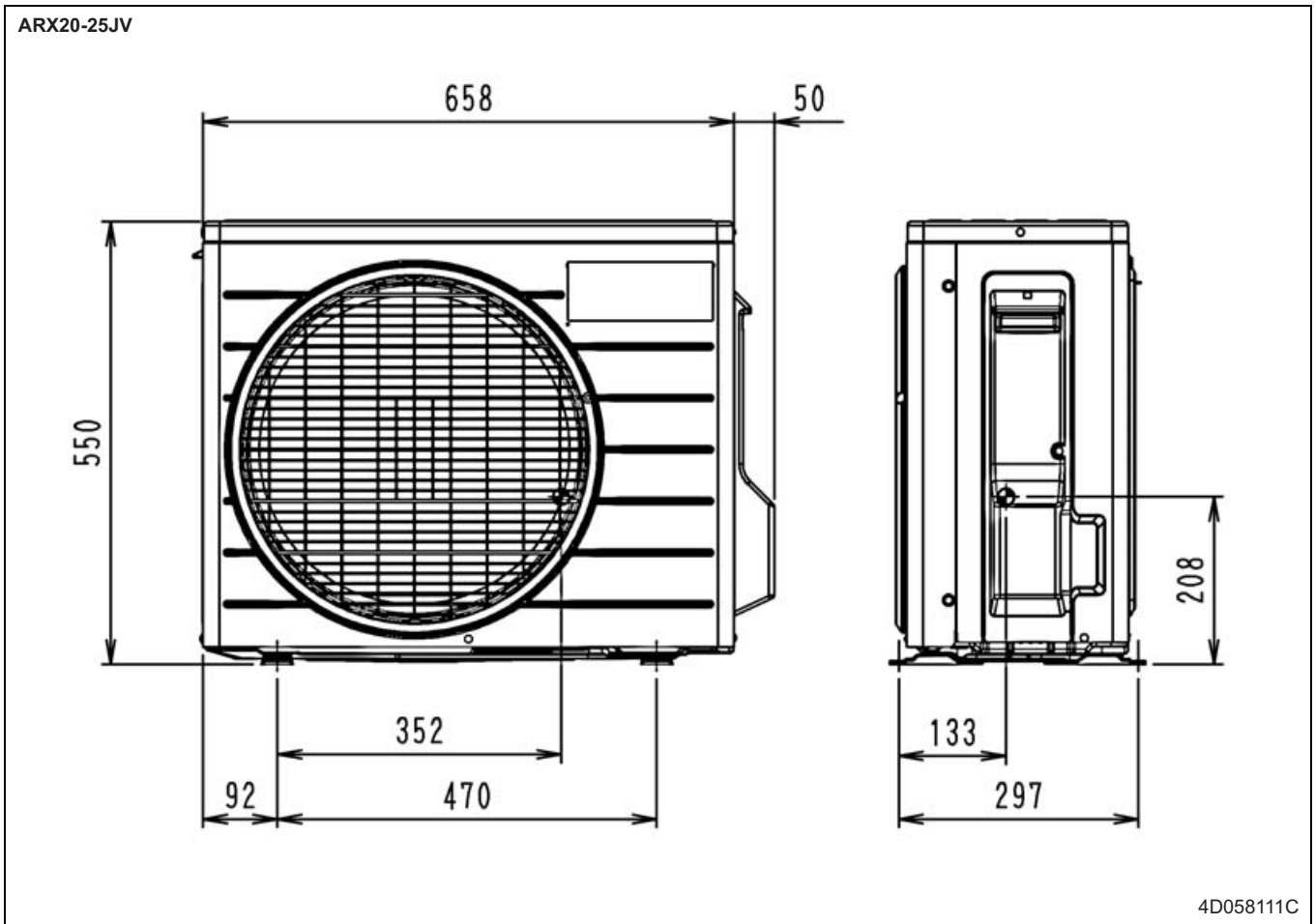
5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

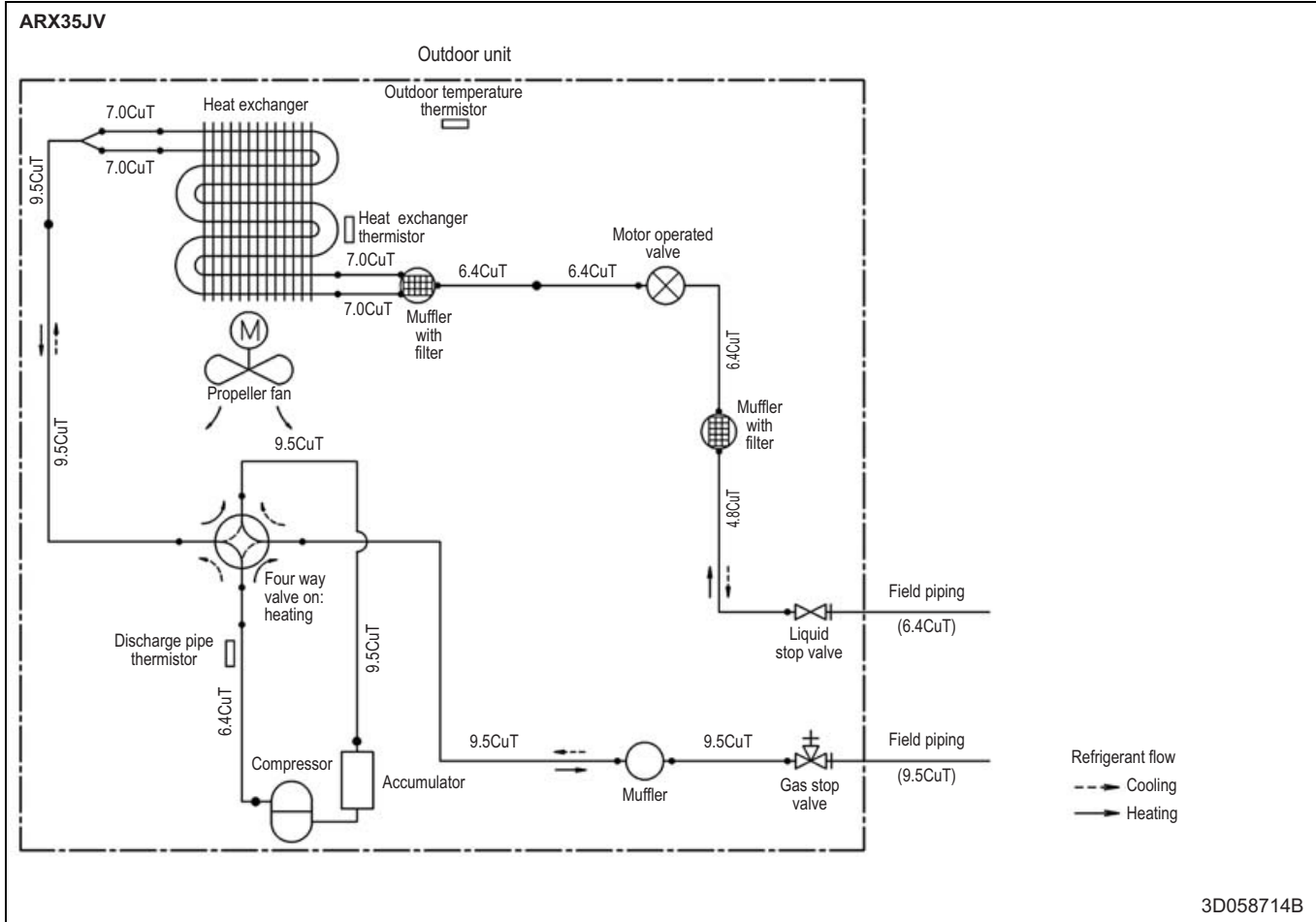
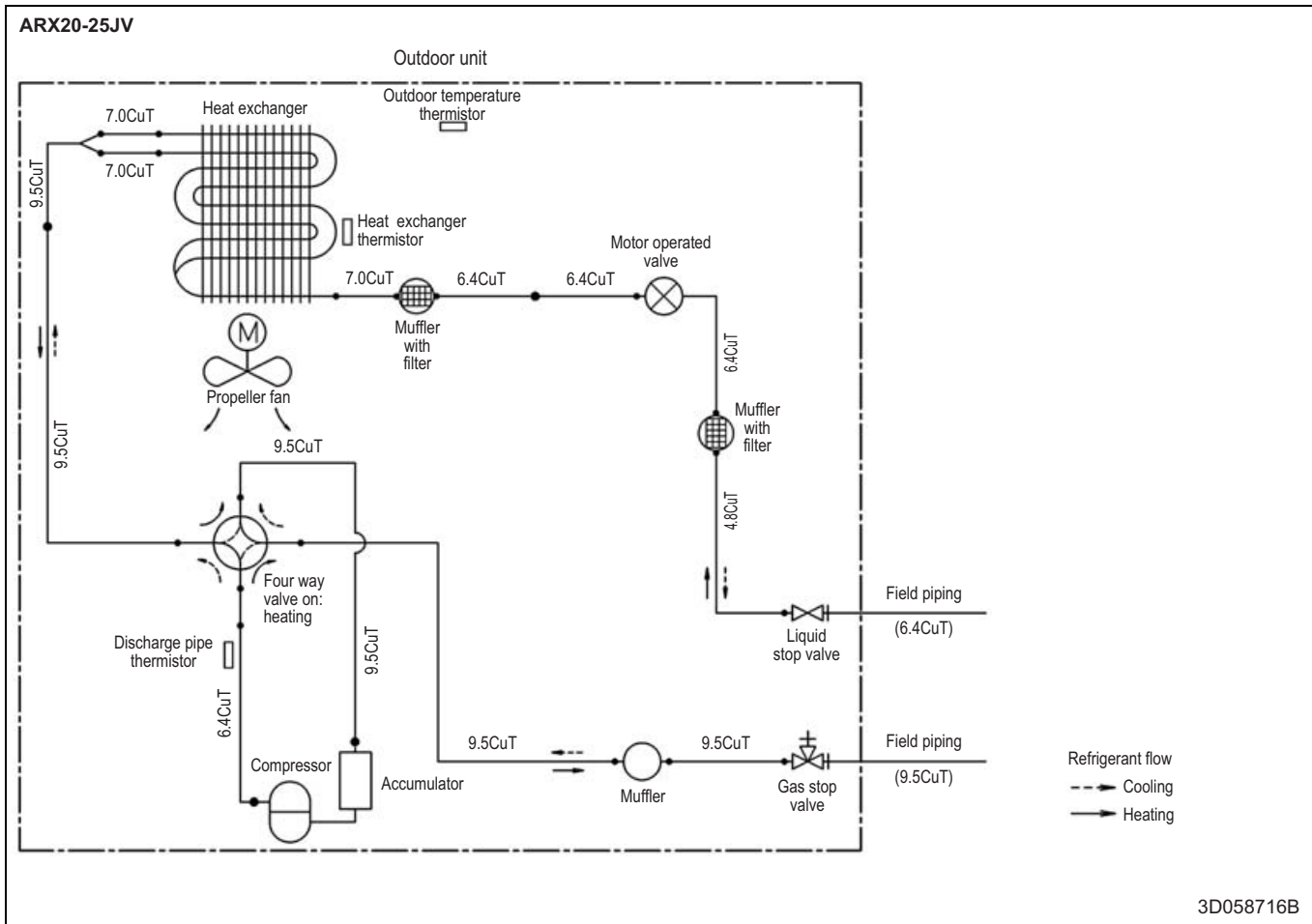


5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

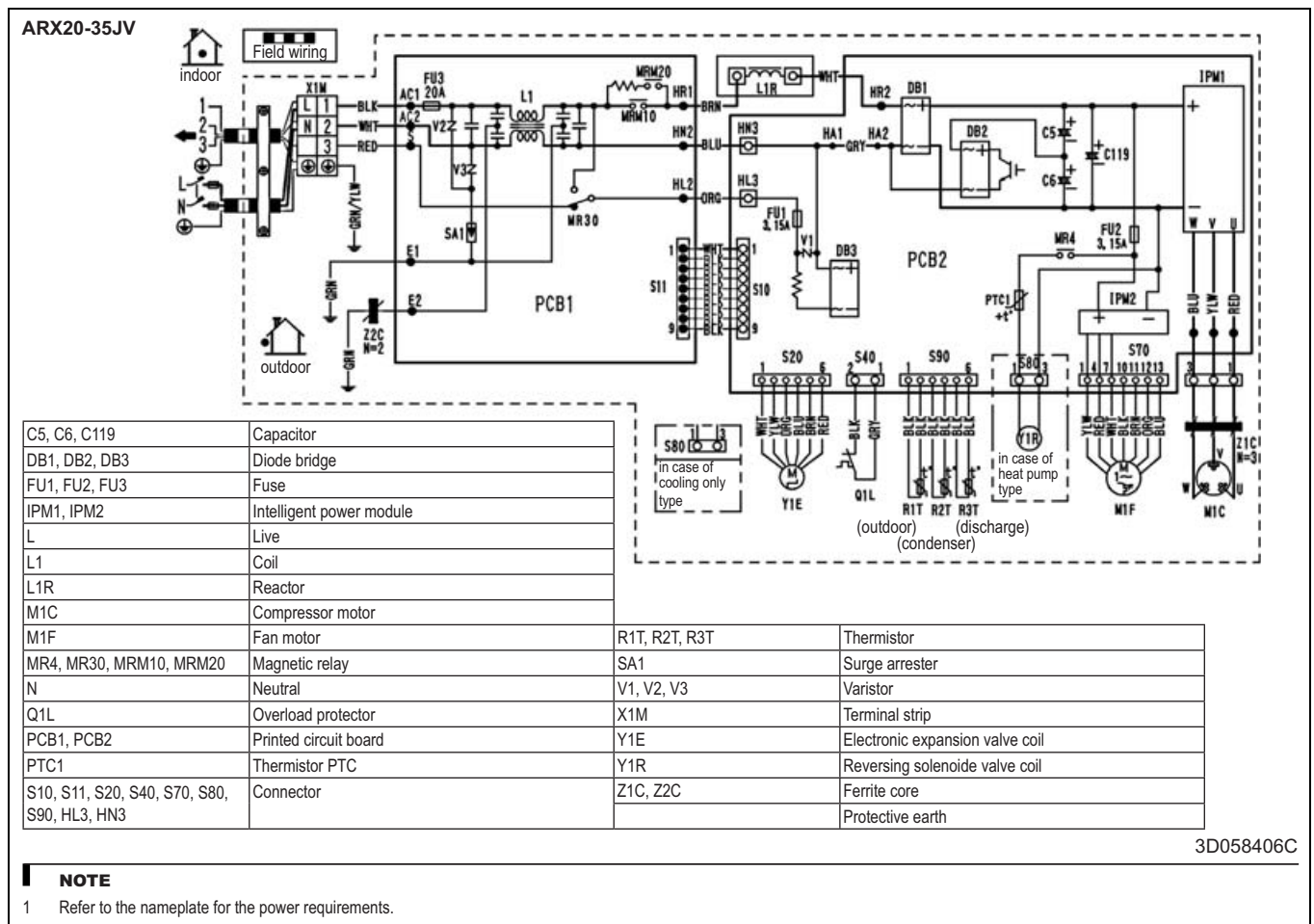


6 Piping diagram



7 Wiring Diagram

7 - 1 Wiring Diagram



8 Sound data

8 - 1 Sound pressure spectrum

ARX20JV

Cooling

Heating

NOTES

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

Scale	50Hz 230V (H)
A	46

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ARX25JV

Cooling

Heating

NOTES

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

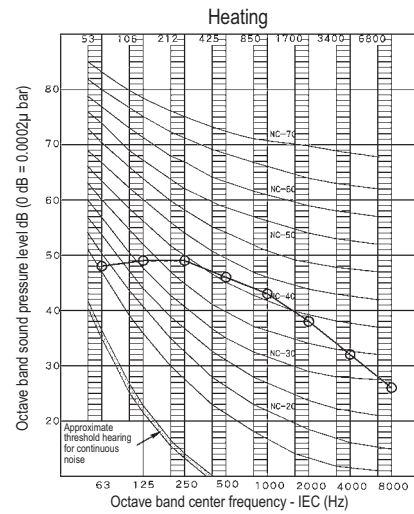
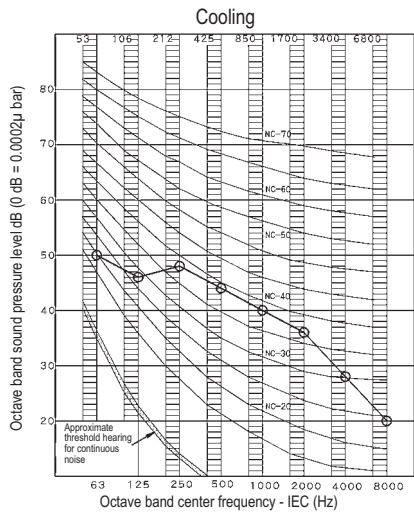
Scale	50Hz 230V (H)
A	46

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8 Sound data

8 - 1 Sound pressure spectrum

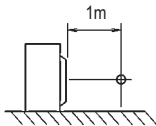
ARX35JV



NOTES

- 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

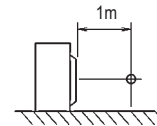


Scale	50Hz 230v (H)
A	48

NOTES

- 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.

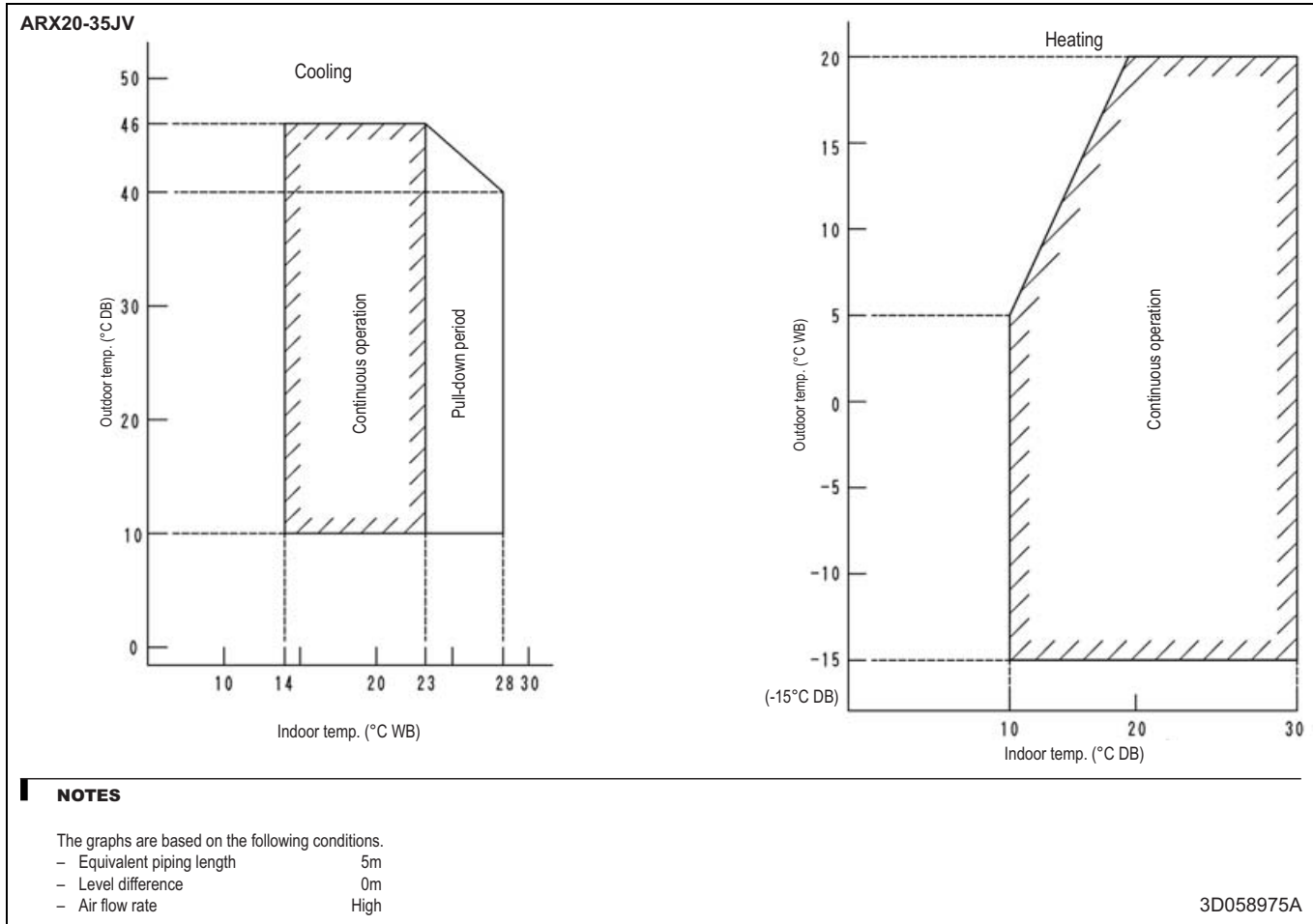
JISC9612
The operation noise measuring method is in accordance with JISC9612



Scale	50Hz 230v (H)
A	48

3D059004A

9 Operation range



In all of us,
a green heart



Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intension to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.



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ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



Daikin units comply with the European regulations that guarantee the safety of the product.

VRV® products are not within the scope of the Eurovent certification programme.



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