



Air Conditioning Technical Data

ARXM-M9



TABLE OF CONTENTS

ARXM-M9

1	Features	2
2	Specifications	3
	Technical Specifications	3
	Electrical Specifications	4
3	Electrical data	5
4	Capacity tables	6
	Cooling/Heating Capacity Tables	6
5	Dimensional drawings	7
6	Centre of gravity	8
7	Piping diagrams	9
8	Wiring diagrams	10
	Wiring Diagrams - Single Phase	10
9	Sound data	11
	Sound Pressure Spectrum	11
10	Operation range	13

1 Features

- Seasonal efficiency values up to A+++
- Anti-corrosion treated outdoor heat exchanger fin
- Choosing for an R-32 product, reduces the environmental impact with 68% compared to R-410A and leads directly to lower energy consumption thanks to its high energy efficiency
- Daikin outdoor units are neat, sturdy and can easily be mounted 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
- Outdoor units for pair application



Outdoor unit
silent operation

2 Specifications

2-1 Technical Specifications					ARXM25M9		ARXM35M9		ARXM50M9	
Capacity control	Method				Variable (inverter)					
Casing	Colour				Ivory white					
Dimensions	Unit	Height		mm	550				735	
		Width		mm	765				825	
		Depth		mm	285				300	
	Packed unit	Height		mm	612				797	
		Width		mm	906				992	
		Depth		mm	402				437	
Weight	Unit			kg	32				47	
	Packed unit			kg	34				50	
Packing	Weight			kg	-				3	
Heat exchanger	Length			mm	805				845	
	Rows	Quantity			2					
	Fin pitch			mm	1.40				1.80	
	Stages	Quantity			24				32	
	Passes	Quantity			3.1				5.8	
	Tube type				ø7 Hi-XD				ø8 Hi-XA	
	Fin	Type			Waffle fin (PE)					
	Compressor	Model				1YC25GXD#C				2YC40JXD#C
Oil Amount			cm³	-				650		
Type				Hermetically sealed swing compressor						
Output			W	800.0				1,300		
Oil Type				-				FW68DA		
Fan	Type				Propeller fan				Propeller	
	Air flow rate	Cooling	Nom.	m³/min	36.0				50.4	
				cfm	1,271				1,780	
		Heating	Nom.	m³/min	28.3				40.4	
				cfm	999				1,427	
	Fan motor	Model				ARW34W8P50DA				ARW7406DA
Output			W	50				68		
Speed		Cooling	High	rpm	920				780	
			Nom.	rpm	920				780	
			Low	rpm	800				690	
		Heating	High	rpm	860				730	
			Nom.	rpm	800				730	
			Low	rpm	400				530	
Sound power level	Cooling			dBA	59	61		62		
	Heating			dBA	59	61		62		
Sound pressure level	Cooling	Nom.		dBA	46	49		48		
	Heating	Nom.		dBA	47	49				
Operation range	Cooling	Ambient	Min.	°CDB	-10 (1)					
			Max.	°CDB	46 (1)					
	Heating	Ambient	Min.	°CWB	10					
			Max.	°CWB	18					
				°CDB	24 (1)					
Refrigerant	Type				R-32					
	Charge			kg	0.76				1.40	
				TCO ₂ eq	0.52				0.95	
	GWP				675.0					
Piping connections	Liquid	OD		mm	6.35				6.4	
	Gas	OD		mm	9.50				12.7	
	Drain	OD		mm	18					
	Piping length	OU - IU	Max.	m	20.0				30	
		System	Chargeless	m	10.0				-	
	Additional refrigerant charge			kg/m	0.02 (for piping length exceeding 10m)					
	Level difference	IU - OU	Max.	m	20.0					
	Heat insulation				Both liquid and gas pipes				-	

2 Specifications

Standard Accessories : Drain plug; Quantity : 1;

Standard Accessories : Installation manual; Quantity : 1;

Standard Accessories : Refrigerant charge label; Quantity : 1;

Standard Accessories : Multilingual fluorinated greenhouse gases labels; Quantity : 1;

2

2-2 Electrical Specifications			ARXM25M9	ARXM35M9	ARXM50M9
Power supply	Phase		1~		
	Frequency	Hz	50		
	Voltage	V	220-240		
Wiring connections	For power supply	Quantity	3		
		Remark	Earth wire included		
	For connection with indoor	Quantity	4		
		Remark	Earth wire included		

Notes

(1) Contains fluorinated greenhouse gases

See separate drawing for operation range

See separate drawing for electrical data

3 Electrical data

3 - 1 Electrical Data

ARXM25-35M9

Unit combination restrictions		Power supply					COMP		OFM		IFM	
Outdoor unit	Indoor unit	Hz	Voltage	Voltage range	MCA	MFA	RHz	RLA	kW	FLA	kW	FLA
RXM20M3V1B9	FTXM20M2V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	9,88	10	35	2,0	0,024	0,23	0,022	0,22
		50	230					2,1				
		50	240					2,2				
		50	220					2,6				
RXM25M3V1B9	FTXM25M2V1B	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,82	13	46	2,7	0,024	0,23	0,022	0,22
		50	240					2,8				
		50	220					2,3				
		50	230					2,5				
RXM25M3V1B9	FFA25A2VEB	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,79	13	40	2,5	0,023	0,23	0,050	0,20
		50	240					2,6				
		50	220					2,1				
		50	230					2,2				
RXM25M3V1B9	FDXM25F3V1B	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,92	13	39	2,2	0,023	0,23	0,034	0,30
		50	240					2,3				
		50	220					2,4				
		50	230					2,5				
RXM25M3V1B9	FNA25A2VEB	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	11,17	13	43	2,3	0,023	0,23	0,034	0,50
		50	230					2,4				
		50	240					2,5				
		50	220					4,2				
RXM35M3V1B9	FTXM35M2V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	10,86	13	60	4,4	0,023	0,23	0,028	0,25
		50	230					4,6				
		50	240					3,6				
		50	220					3,3				
RXM35M3V1B9	FCAG35AVEB	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	10,92	13	63	3,6	0,023	0,23	0,048	0,30
		50	230					3,8				
		50	240					4,0				
		50	220					3,3				
RXM35M3V1B9	FBA35A2VEB	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	12,29	13	56	3,5	0,023	0,23	0,089	1,40
		50	240					3,6				
		50	220					3,8				
		50	230					4,2				
RXM35M3V1B9	FHA35AVEB	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	11,29	13	64	4,0	0,023	0,23	0,090	0,60
		50	240					4,2				
		50	220					3,6				
		50	230					3,8				
RXM35M3V1B9	FFA35A2VEB	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,79	13	64	3,8	0,023	0,23	0,050	0,20
		50	240					4,0				
		50	220					3,6				
		50	230					3,8				
RXM35M3V1B9	FDXM35F3V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	10,92	13	65	3,6	0,023	0,23	0,034	0,30
		50	230					3,9				
		50	240					3,9				
		50	220					3,8				
RXM35M3V1B9	FNA35A2VEB	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	11,17	13	65	3,8	0,023	0,23	0,034	0,50
		50	240					3,9				
		50	220					2,6				
		50	230					2,7				
ARXM25M3V1B9	ATXM25M2V1B	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,82	13	46	2,7	0,024	0,23	0,022	0,22
		50	240					2,8				
		50	220					4,2				
		50	230					4,4				
ARXM35M3V1B9	ATXM35M2V1B	50	230	MAX. 50Hz 264V MIN. 50Hz 198V	10,86	13	60	4,4	0,023	0,23	0,028	0,25
		50	240					4,6				
		50	220					4,4				
		50	230					4,6				

Notes

- 1) The RLA is based on the following conditions.
Outdoor temperature 35°C DB
Indoor temperature 27°C DB / 19°C WB
Select the wire size according to the MCA.
- 2) Select the wire size according to the MCA.
- 3) The maximum allowable voltage that is unbalanced between phases is 2%.
- 4) Use a circuit breaker instead of a fuse.

Symbols

MCA:	Minimum Circuit Ampere [A]
MFA:	Maximum Fuse Ampere [A]
RLA:	Rated load amps [A]
OFM:	Outdoor fan motor
IFM:	Indoor fan motor
FLA:	Full Load Ampere [A]
kW:	Fan motor rated output [kW]
RHz:	Rated operating frequency [Hz]

3D110162

4 Capacity tables

4 - 1 Cooling/Heating Capacity Tables

ATXM25M / ARXM25M9

Cooling 220-240V 50Hz

AFR	11,1
BF	0,24

1	2	3																	
		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	20	2,56	1,95	0,40	2,44	1,90	0,45	2,32	1,85	0,51	2,28	1,83	0,53	2,21	1,79	0,55	2,09	1,74	0,60
16	22	2,68	1,92	0,43	2,56	1,87	0,47	2,44	1,82	0,51	2,40	1,80	0,53	2,33	1,76	0,56	2,21	1,71	0,60
18	25	2,79	2,02	0,43	2,68	1,97	0,47	2,56	1,92	0,52	2,51	1,90	0,53	2,44	1,88	0,56	2,33	1,83	0,60
19	27	2,85	2,14	0,43	2,73	2,09	0,48	2,62	2,05	0,52	2,57	2,03	0,53	2,50	2,00	0,56	2,38	1,95	0,60
22	30	3,02	2,07	0,44	2,91	2,03	0,48	2,79	1,98	0,52	2,74	1,97	0,54	2,67	1,94	0,56	2,56	1,90	0,61
24	32	3,14	2,02	0,44	3,02	1,98	0,48	2,90	1,94	0,52	2,86	1,92	0,54	2,79	1,90	0,57	2,67	1,87	0,61

Heating 220-240V 50Hz

AFR	10,4
-----	------

2	4											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15	1,33	0,36	1,60	0,38	1,87	0,40	2,52	0,52	2,90	0,55	3,15	0,57
20	1,25	0,37	1,52	0,39	1,79	0,41	2,42	0,53	2,80	0,56	3,05	0,58
22	1,22	0,37	1,49	0,40	1,76	0,42	2,38	0,53	2,76	0,57	3,01	0,59
24	1,19	0,38	1,45	0,40	1,72	0,42	2,34	0,54	2,72	0,57	2,98	0,59
25	1,17	0,38	1,44	0,40	1,71	0,42	2,32	0,54	2,70	0,57	2,96	0,59
27	1,14	0,39	1,41	0,41	1,67	0,42	2,29	0,55	2,66	0,58	2,92	0,60

Notes

- The capacities are based on the following conditions:
Corresponding refrigerant piping length: 5.0 m
Level difference: 0m
- The bold cells indicate the standard conditions.

Symbols

TC: Total capacity [kW]
PI: Power input [kW]
SHC: Sensible heat capacity [kW]

AFR: Air flow rate [m³/min]

BF: Bypass factor

- Indoor air temperature [°C DB]
- Indoor air temperature [°C WB]
- Outdoor air temperature [°C DB]
- Outdoor air temperature [°C WB]

3D100071C

ATXM35M / ARXM35M9

Cooling 220-240V 50Hz

AFR	12,6
BF	0,12

1	2	3																	
		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	20	3,48	2,66	0,59	3,32	2,60	0,67	3,16	2,52	0,73	3,11	2,49	0,75	3,01	2,45	0,79	2,85	2,38	0,85
16	22	3,64	2,63	0,62	3,48	2,57	0,68	3,32	2,49	0,73	3,27	2,46	0,76	3,17	2,42	0,79	3,01	2,35	0,86
18	25	3,80	2,77	0,62	3,64	2,70	0,68	3,48	2,64	0,74	3,42	2,61	0,76	3,32	2,58	0,80	3,17	2,51	0,86
19	27	3,88	2,93	0,62	3,72	2,88	0,69	3,56	2,81	0,74	3,50	2,78	0,76	3,40	2,74	0,80	3,25	2,68	0,86
22	30	4,11	2,84	0,63	3,96	2,78	0,69	3,79	2,72	0,74	3,73	2,70	0,77	3,63	2,67	0,81	3,48	2,61	0,87
24	32	4,27	2,77	0,63	4,11	2,71	0,70	3,96	2,66	0,75	3,89	2,64	0,77	3,79	2,61	0,81	3,63	2,57	0,87

Heating 220-240V 50Hz

AFR	10,4
-----	------

2	4											
	-15		-10		-5		0		6		10	
	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
15	1,90	0,64	2,29	0,67	2,67	0,71	3,60	0,92	4,14	0,97	4,50	1,00
20	1,79	0,66	2,17	0,68	2,56	0,72	3,46	0,94	4,00	0,99	4,36	1,03
22	1,74	0,66	2,12	0,70	2,51	0,73	3,40	0,96	3,94	1,00	4,31	1,04
24	1,69	0,67	2,08	0,71	2,46	0,73	3,35	0,96	3,89	1,01	4,25	1,04
25	1,67	0,67	2,05	0,71	2,44	0,74	3,32	0,97	3,86	1,01	4,22	1,05
27	1,62	0,68	2,01	0,71	2,39	0,74	3,26	0,97	3,81	1,03	4,17	1,05

Symbols

TC: Total capacity [kW]
PI: Power input [kW]
SHC: Sensible heat capacity [kW]
AFR: Air flow rate [m³/min]
BF: Bypass factor

- Indoor air temperature [°C DB]
- Indoor air temperature [°C WB]
- Outdoor air temperature [°C DB]
- Outdoor air temperature [°C WB]

Notes

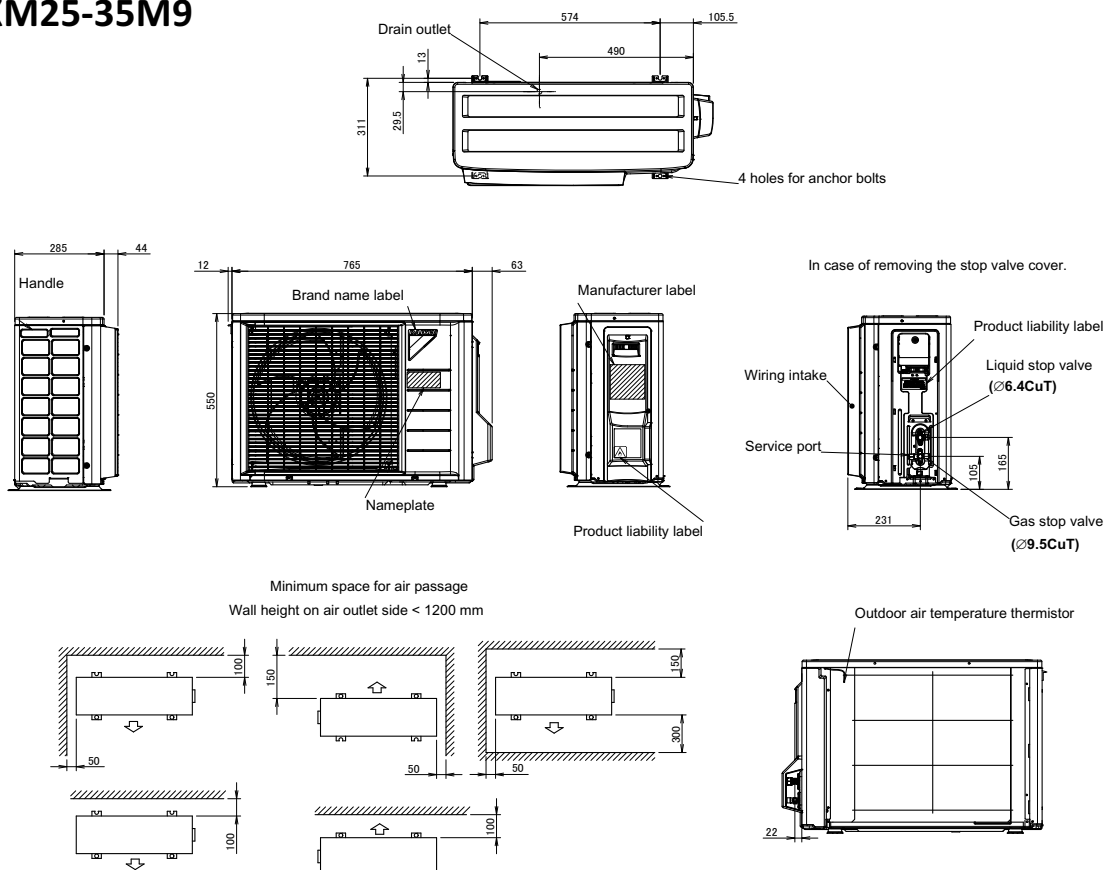
- The capacities are based on the following conditions:
Corresponding refrigerant piping length: 5.0 m
Level difference: 0m
- The bold cells indicate the standard conditions.
Rated operating frequency [Hz]

3D100070C

5 Dimensional drawings

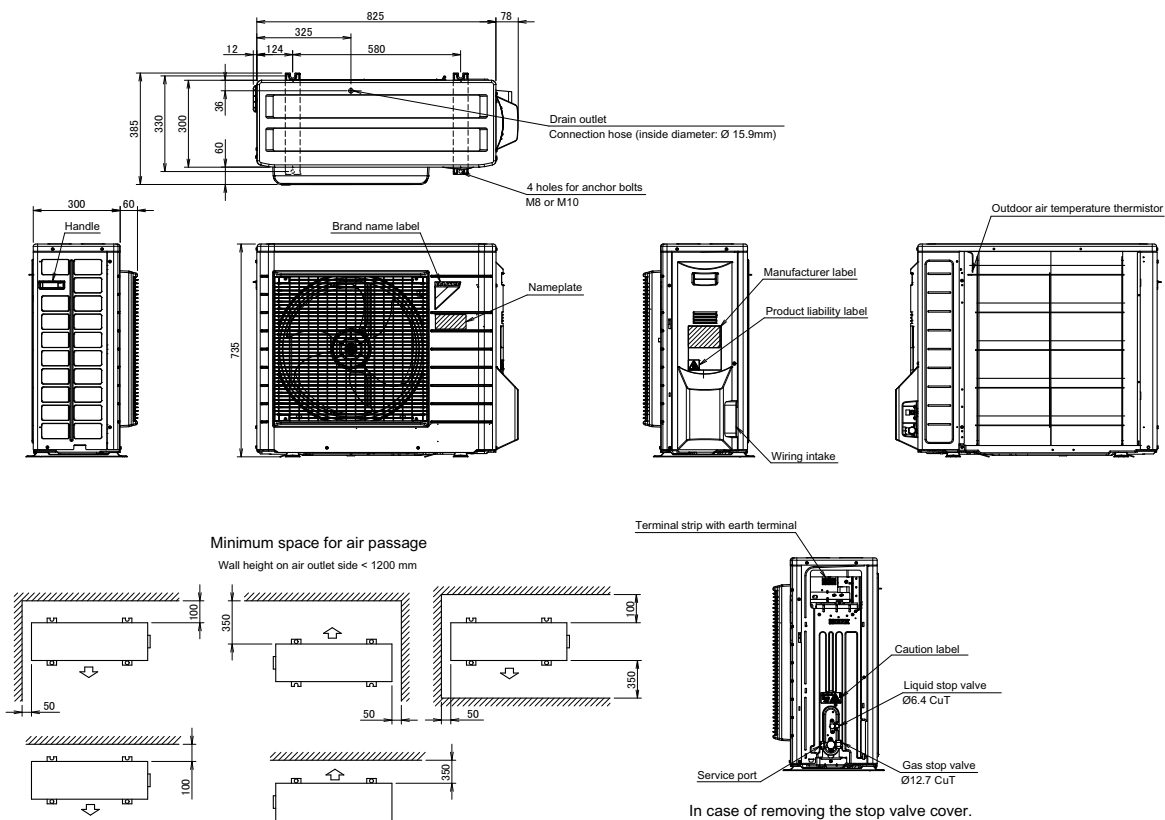
5 - 1 Dimensional Drawings

ARXM25-35M9



3D099636A

ARXM50M9

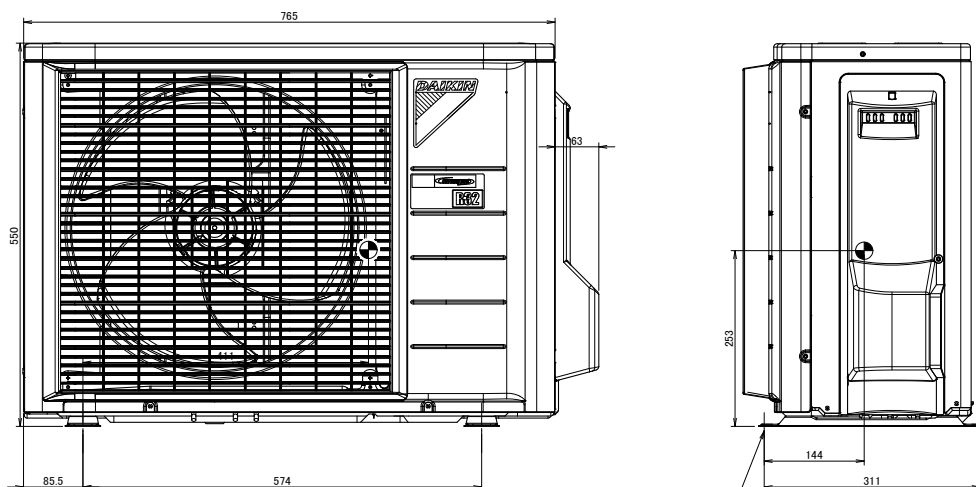


3D101541C

6 Centre of gravity

6 - 1 Centre of Gravity

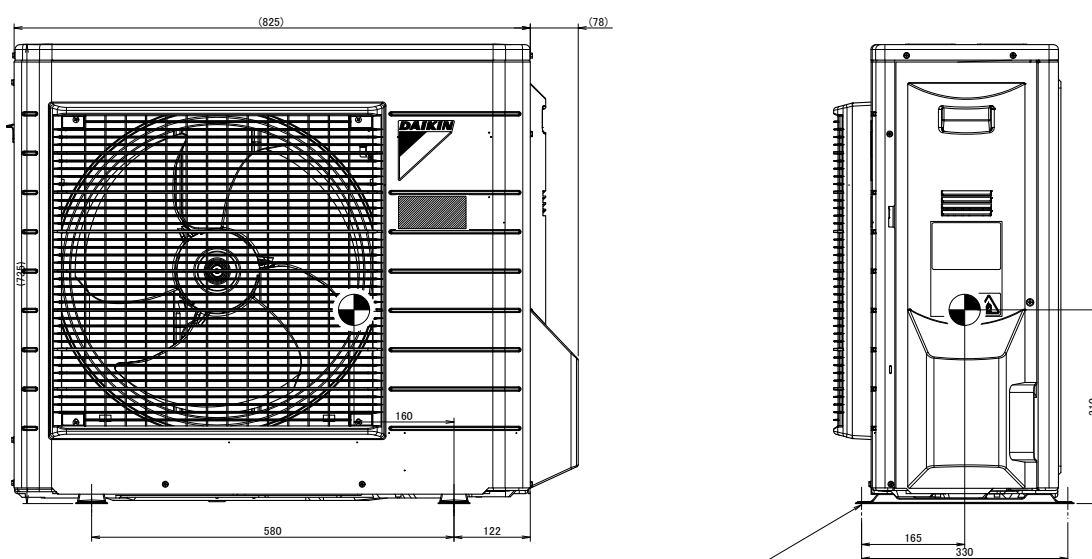
ARXM25-35M9



Foundation bolt hole

4D099652

ARXM50M9



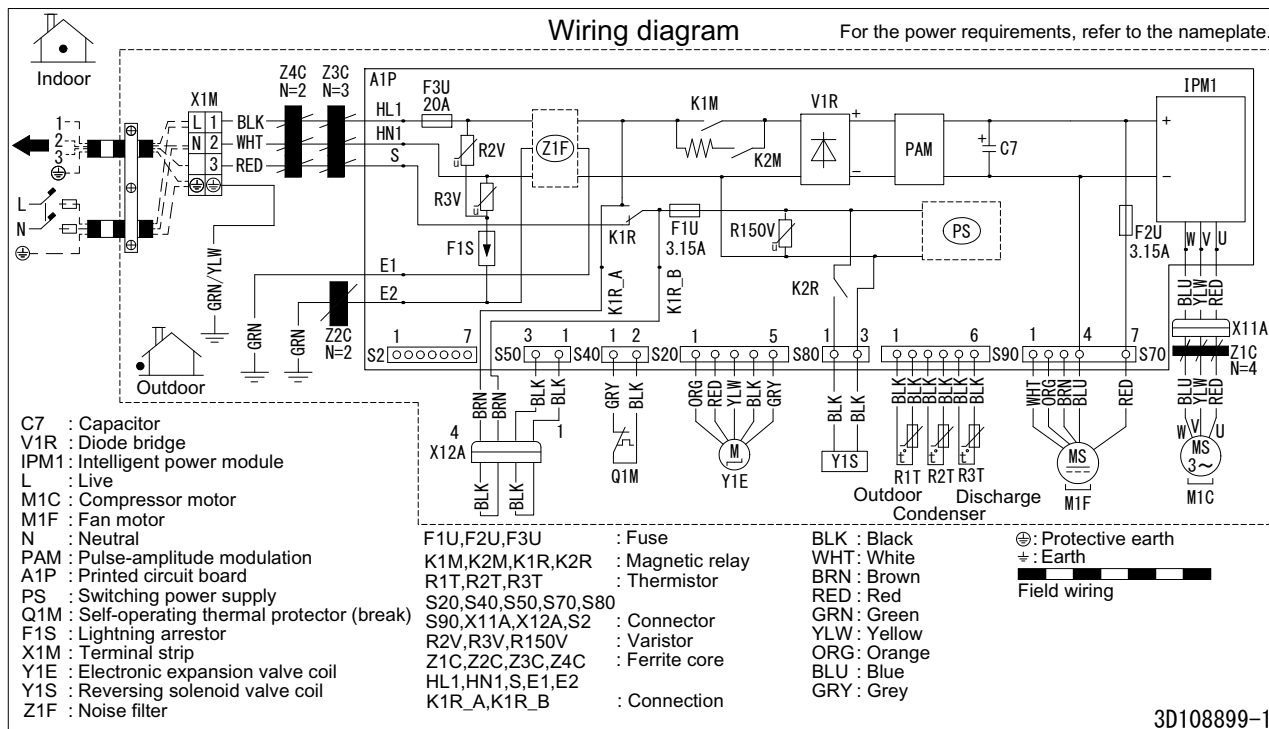
Foundation bolt hole

4D102113A

8 Wiring diagrams

8 - 1 Wiring Diagrams - Single Phase

ARXM25-35M9

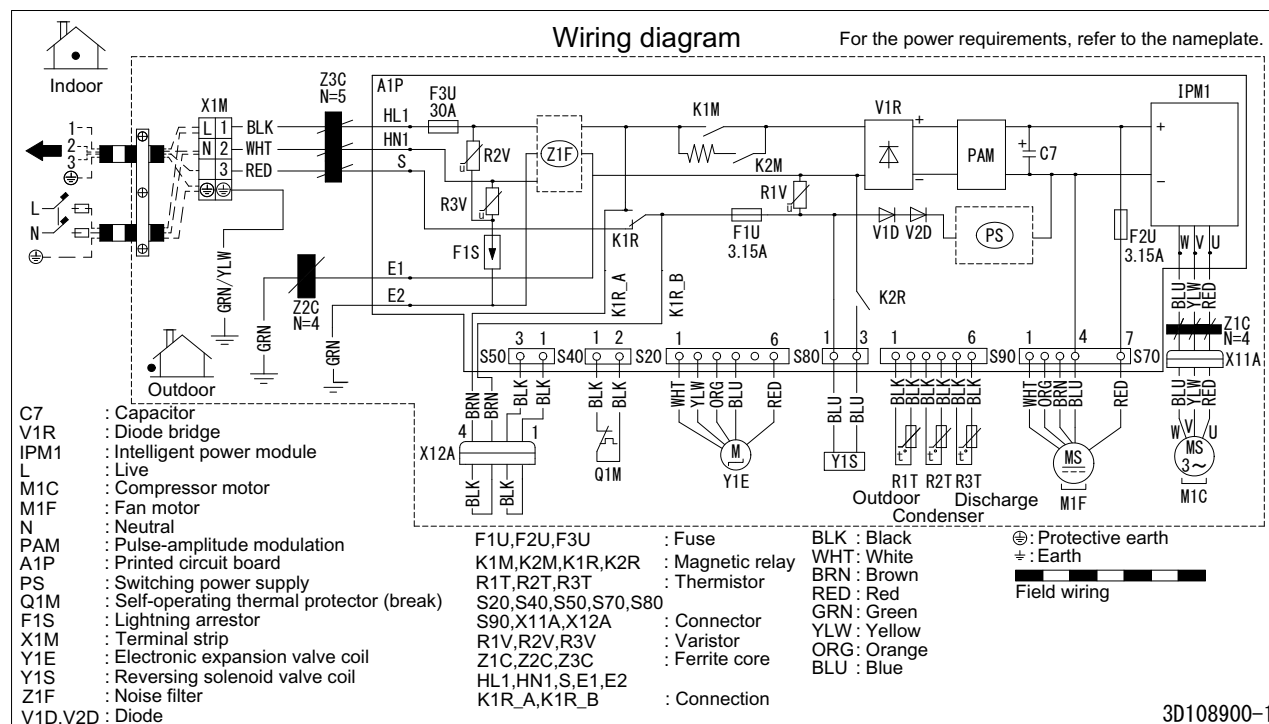


NOTES:

- Size: 140 x 80
- Refer to purchasing specification AS303002, unless otherwise specified.

3D108899

ARXM50M9



NOTES:

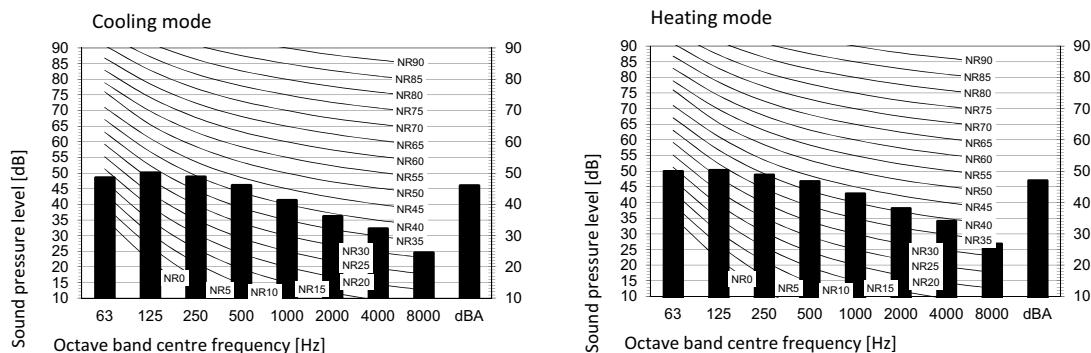
- Size: length 105x width 185.
- Refer to purchasing specification AS303002 unless otherwise specified.

3D108900

9 Sound data

9 - 1 Sound Pressure Spectrum

ARXM25M9



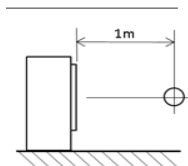
Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

Location of microphone



Cooling

Total dB

A	B
dBA	46

Heating

Total dB

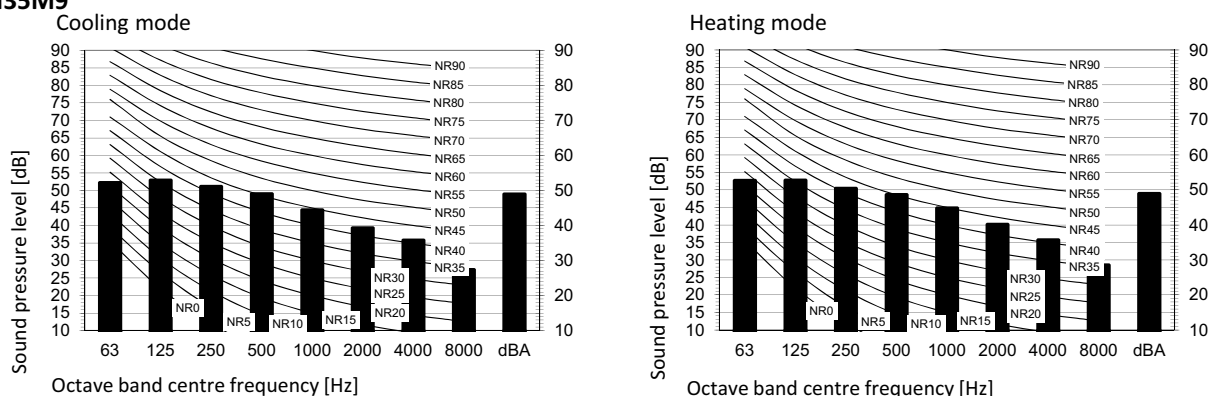
A	B
dBA	47

Notes

- 1 Background noise already taken into account.
- 2 Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 3 Operating noise varies depending on operation and ambient conditions.
- 4 The operation noise measuring method is in accordance with JISC9612.
- 5 Measuring location: anechoic chamber

3D110122

ARXM35M9



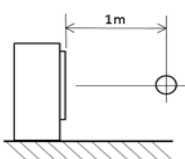
Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

Location of microphone



Cooling

Total dB

A	B
dBA	49

Heating

Total dB

A	B
dBA	49

Notes

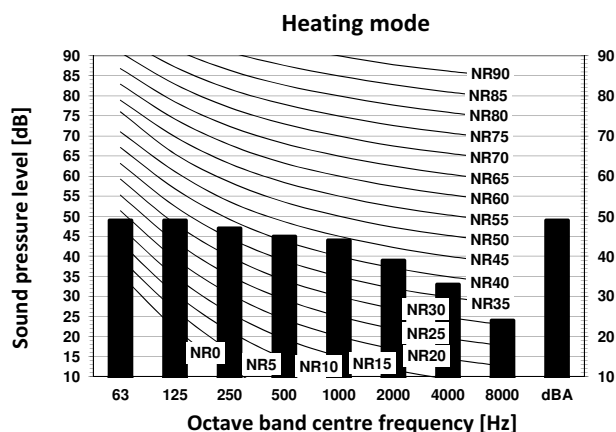
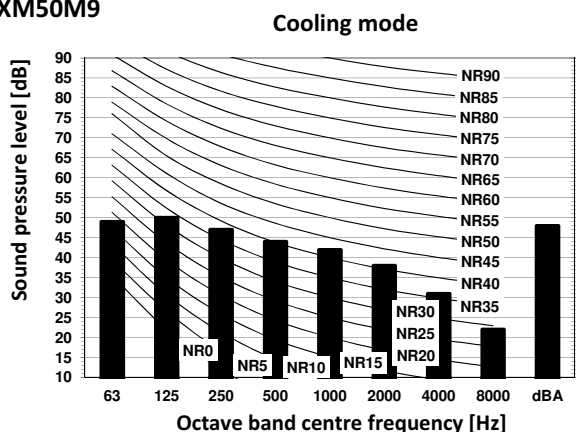
- 1 Background noise already taken into account.
- 2 Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 3 Operating noise varies depending on operation and ambient conditions.
- 4 The operation noise measuring method is in accordance with JISC9612.
- 5 Measuring location: anechoic chamber

3D110123

9 Sound data

9 - 1 Sound Pressure Spectrum

ARXM50M9



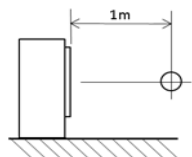
Legend

dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

Location of microphone



Cooling	Total dB
A	B
dBA	48

Heating	Total dB
A	B
dBA	49

Notes

- 1 Background noise already taken into account.
- 2 Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 3 Operating noise varies depending on operation and ambient conditions.
- 4 The operation noise measuring method is in accordance with JISC9612.
- 5 Measuring location: anechoic chamber

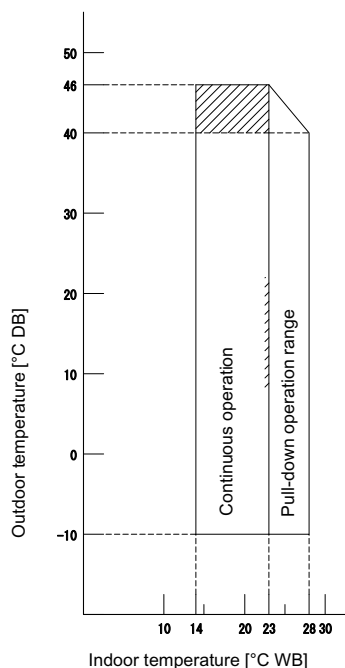
3D110125

10 Operation range

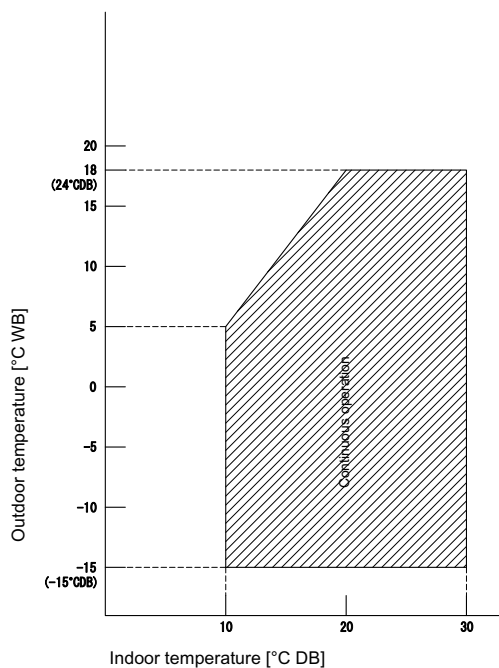
10 - 1 Operation Range

ARXM50M9

Cooling



Heating



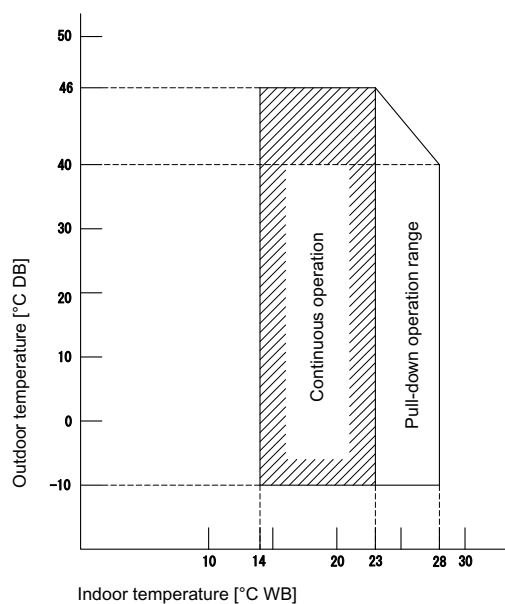
Notes

- The graph is based on the following conditions.
Corresponding refrigerant piping length: 5 m
Level difference: 0m
Air flow rate High

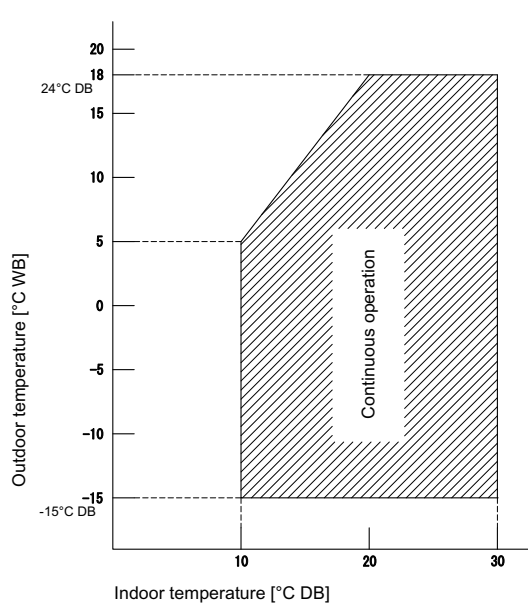
3D092127C

ARXM50M9

Cooling



Heating



Notes

- The graphs is based on the following conditions.
Corresponding refrigerant piping length: 5 m
Level difference: 0m
Air flow rate High

3D100846C

Daikin Europe N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende



EEEN17

09/17



Daikin Europe N.V. participates in the Eurovent Certified Performance programme for Liquid Chilling Packages and Hydronic Heat Pumps, Fan Coil Units and Variable Refrigerant Flow systems. Check ongoing validity of certificate: www.eurovent-certification.com

The present leaflet is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V.. Daikin Europe N.V. has compiled the content of this leaflet to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Daikin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this leaflet. All content is copyrighted by Daikin Europe N.V.