

Air Conditioning
Technical Data

2MXM-M9



> 2MXM50M2V1B9

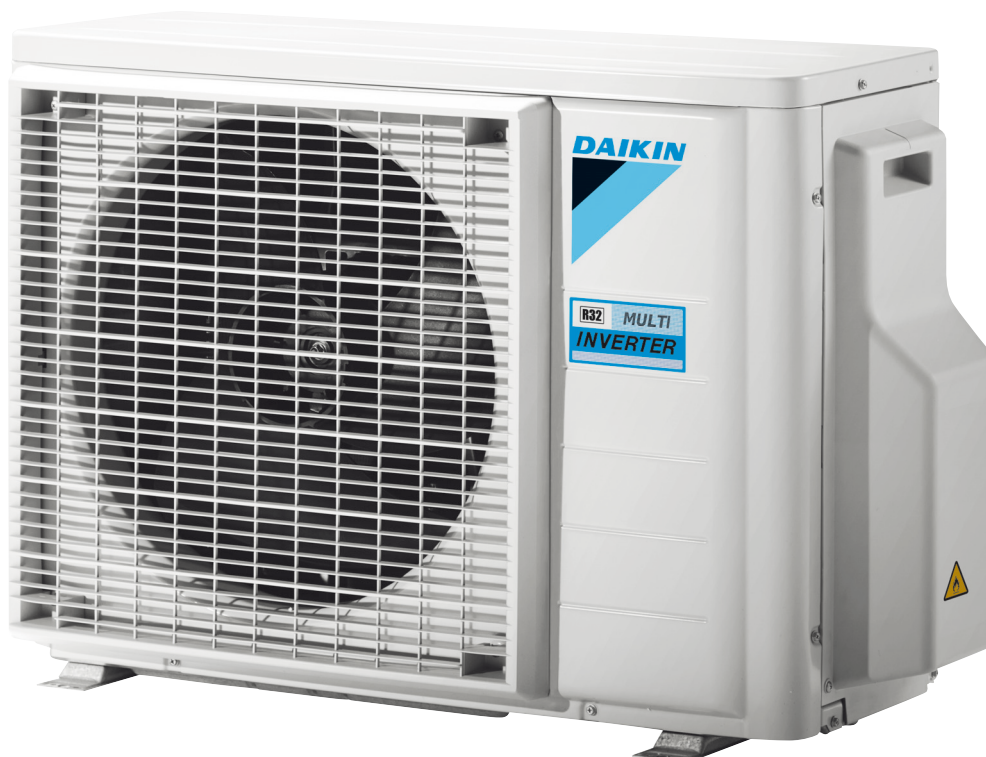
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2MXM-M9

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1 Features

- Seasonal efficiency values up to A+++ in cooling and A++ in heating thanks to its up-to-date technology and built-in intelligence
- Up to 2 indoor units can be connected to 1 multi outdoor unit; all indoor units are individually controllable and do not need to be installed in the same room or at the same time. They operate simultaneously within the same heating or cooling mode.
- 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
- Different types of indoor units can be connected: e.g. wall mounted, ceiling mounted cassette corner, concealed ceiling unit
- Outdoor units are fitted with a swing compressor, renowned for its low noise and high energy efficiency



Inverter

2 Specifications

2-1 Technical Specifications				2MXM50M9	
Capacity control	Method			Variable (inverter)	
Casing	Colour			Ivory white	
Dimensions	Unit	Height	mm	550	
		Width	mm	765	
		Depth	mm	285	
	Packed unit	Height	mm	614	
		Width	mm	900	
Depth		mm	357		
Weight	Unit		kg	41	
	Packed unit		kg	43	
Heat exchanger	Length		mm	810	
	Rows	Quantity		2	
	Fin pitch		mm	1.5	
	Stages	Quantity		24	
	Passes	Quantity		3.2	
	Tube type		8.1 Hi-XA		
	Tube diameter		mm	8.1	
	Fin	Type		WF fin	
		Treatment		Anti-corrosion treatment	
	Compressor	Quantity			1
Model			2YC40JXD#C		
Oil Amount		cm ³		650	
Type			Hermetically sealed swing compressor		
Output		W		1,300	
Oil Type			FW68DA		
Fan	Type			Propeller fan	
	Discharge direction			Horizontal	
	Quantity			1	
	Air flow rate	Cooling	High	m ³ /min	37
				cfm	1,306
		Heating	High	m ³ /min	34
			cfm	1,200	
Fan motor	Quantity			1	
	Model			D50M-28	
	Output		W	50	
	Speed	Cooling	High	rpm	950
			Super low	rpm	500
		Heating	High	rpm	890
			Super low	rpm	500
Sound power level	Cooling		dBA	60	
	Heating		dBA	62	
Sound pressure level	Cooling	High	dBA	48	
	Heating	High	dBA	50	
Refrigerant	Type			R-32	
	Charge		kg	1.15	

2 Specifications

2

2-1 Technical Specifications				2MXM50M9	
Piping connections	Liquid	Quantity		2	
		Type		Flare connection	
		OD	mm	6,4	
	Gas	Quantity		1	
		Type		Flare connection	
		OD	mm	9.5	
	Drain	Quantity		1	
		Type		Drain Joint	
		OD		mm	16 (inner diameter of connecting hose)
	Gas 2	Quantity		1	
		Type		Flare connection	
		OD	mm	12.7	
	Piping length	OU - IU	Max.	m	20 (1)
	Additional refrigerant charge				kg/m
Level difference	IU - OU	Max.	m	15.0	
	IU - IU	Max.	m	7.5	
Heat insulation				Both liquid and gas pipes	
Total piping length	System	Actual	m	30.0	

Standard Accessories : Installation manual; Quantity : 1;

Standard Accessories : Screw bag; Quantity : 1;

Standard Accessories : Drain plug; Quantity : 1;

Standard Accessories : Reducer assembly; Quantity : 1;

2-2 Electrical Specifications				2MXM50M9
Power supply	Phase		1~	
	Frequency		Hz	50
	Voltage		V	220-230-240
Wiring connections	For power supply		Quantity	3
			Remark	Earth wire included
	For connection with indoor		Quantity	4
			Remark	Earth wire included

Notes

(1) Every D-AHU Professional can be designed to your needs. Select your AHU on tools.daikinapplied.eu

See separate drawing for operation range

See separate drawing for electrical data

Contains fluorinated greenhouse gases

3 Electrical data

3 - 1 Electrical Data

2MXM-M9

Outdoor unit Model name	Power supply				COMP		OFM		
	Hz	Voltage	Voltage range	MCA	MFA	MSC	RLA	kW	FLA
2MXM40M3V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	12,21	16	-	5,1	0,040	0,17
	50	230					5,3		
	50	240					5,6		
2MXM50M2V1B9	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	14,93	16	-	5,9	0,042	0,18
	50	230					6,2		
	50	240					6,5		
2AMXM40M3V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	12,21	16	-	5,1	0,040	0,17
	50	230					5,3		
	50	240					5,6		
2AMXM50M3V1B	50	220	MAX. 50Hz 264V MIN. 50Hz 198V	14,93	16	-	5,9	0,042	0,18
	50	230					6,2		
	50	240					6,5		

Notes

- 1) The RLA is based on the following conditions.
Outdoor temperature 35°C DB
- 2) Indoor temperature 27°C DB / 19°C WB
- 3) Select the wire size according to the MCA.
- 4) The maximum allowable voltage that is unbalanced between phases is 2%.
- 5) 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
MSC: Maximum starting current
FLA: Full Load Ampere [A]
kW: Fan motor rated output [kW]

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4 Combination table

4 - 1 Combination Table

2MXM-M9

Cooling (50Hz 230V)

Outdoor unit	Indoor unit	Cooling capacity [kW]		Total capacity [kW]			Power input [kW]			Total current [A]			Power factor [%]
		Room A	Room B	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	
2MXM50M2V1B 2MXM50M2V1B9	1,5	2,00	---	1,4	1,50	2,20	0,31	0,32	0,52	1,53	1,55	2,53	89,00
	2	1,50	---	1,4	2,00	2,60	0,31	0,47	0,69	1,53	2,25	3,37	89,00
	2,5	2,50	---	1,4	2,50	3,10	0,31	0,67	0,92	1,53	3,27	4,50	89,00
	3,5	3,50	---	1,4	3,50	4,00	0,31	1,09	1,42	1,53	5,32	6,95	89,00
	4,2	4,20	---	1,4	4,20	4,70	0,31	1,59	1,75	1,53	7,73	8,57	89,00
	5	5,00	---	1,6	5,00	5,30	0,33	1,30	1,44	1,64	6,33	7,01	89,00
	1.5+1.5	1,50	1,50	1,6	3,00	3,20	0,33	0,62	0,66	1,64	3,03	3,24	89,00
	1.5+2.0	1,50	2,00	1,6	3,50	3,70	0,33	0,76	0,80	1,64	3,71	3,93	89,00
	1.5+2.5	1,50	2,50	1,6	4,00	4,20	0,33	0,94	0,99	1,64	4,60	4,83	89,00
	1.5+3.5	1,50	3,50	1,6	5,00	5,00	0,33	1,25	1,25	1,64	6,10	6,10	89,00
	1.5+4.2	1,32	3,68	1,6	5,00	5,40	0,33	1,23	1,54	1,64	6,04	6,53	89,00
	1.5+5.0	1,15	3,85	1,8	5,00	5,50	0,33	1,23	1,68	1,64	5,99	6,59	89,00
	2.0+2.0	2,00	2,00	1,8	4,00	5,00	0,33	0,94	1,28	1,64	4,60	5,75	89,00
	2.0+2.5	2,00	2,50	1,8	4,50	5,10	0,33	1,07	1,31	1,64	5,23	5,93	89,00
	2.0+3.5	1,82	3,18	1,8	5,00	5,40	0,33	1,24	1,49	1,64	6,05	6,54	89,00
	2.0+4.2	1,61	3,39	1,8	5,00	5,50	0,33	1,23	1,51	1,64	6,01	6,62	89,00
	2.0+5.0	1,43	3,57	1,8	5,00	5,50	0,33	1,22	1,44	1,64	5,95	6,55	89,00
	2.5+2.5	2,50	2,50	1,8	5,00	5,30	0,33	1,25	1,42	1,64	6,10	6,47	89,00
	2.5+3.5	2,08	2,92	1,8	5,00	5,40	0,33	1,23	1,43	1,64	6,02	6,51	89,00
	2.5+4.2	1,87	3,13	1,8	5,00	5,50	0,33	1,22	1,45	1,64	5,98	6,58	89,00
	2.5+5.0	1,67	3,33	1,8	5,00	5,50	0,33	1,21	1,38	1,64	5,92	6,52	89,00
	3.5+3.5	2,50	2,50	1,8	5,00	5,40	0,33	1,22	1,42	1,64	5,95	6,43	89,00
	3.5+4.2	2,27	2,73	1,8	5,00	5,50	0,33	1,21	1,40	1,64	5,90	6,49	89,00
	3.5+5.0	2,06	2,94	1,8	5,00	5,50	0,33	1,20	1,34	1,64	5,85	6,44	89,00
	4.2+4.2	2,50	2,50	1,8	5,00	5,50	0,33	1,20	1,38	1,64	5,88	6,47	89,00

Heating (50Hz 230V)

Outdoor unit	Indoor unit	Heating capacity [kW]		Total capacity [kW]			Power input [kW]			Total current [A]			Power factor [%]
		Room A	Room B	Min.	Nom.	Max.	Min.	Nom.	Max.	Min.	Nom.	Max.	
2MXM50M2V1B 2MXM50M2V1B9	1,5	2,00	---	1,10	2,00	3,45	0,29	0,68	1,01	1,44	3,31	4,66	89,00
	2	3,00	---	1,10	3,00	3,70	0,27	0,82	1,11	1,33	3,99	5,52	89,00
	2,5	3,40	---	1,10	3,40	4,10	0,25	0,99	1,29	1,23	4,81	6,54	89,00
	3,5	4,00	---	1,10	4,00	4,60	0,25	1,24	1,51	1,23	6,03	7,46	89,00
	4,2	4,60	---	1,10	4,60	5,10	0,23	1,49	1,72	1,12	7,27	8,85	89,00
	5	5,50	---	1,20	5,50	5,60	0,23	1,35	1,84	1,12	6,56	9,01	89,00
	1.5+1.5	2,00	2,00	1,20	4,00	4,54	0,23	0,87	0,99	1,12	4,27	4,85	89,00
	1.5+2.0	1,89	2,51	1,20	4,40	4,89	0,23	1,02	1,13	1,12	4,97	5,53	89,00
	1.5+2.5	1,80	3,00	1,20	4,80	5,19	0,23	1,18	1,27	1,12	5,75	6,22	89,00
	1.5+3.5	1,56	3,64	1,20	5,20	5,70	0,25	1,28	1,40	1,23	6,25	6,86	89,00
	1.5+4.2	1,47	4,13	1,20	5,60	5,96	0,25	1,37	1,46	1,23	6,71	7,15	89,00
	1.5+5.0	1,29	4,31	1,20	5,60	6,16	0,25	1,37	1,50	1,23	6,68	7,35	89,00
	2.0+2.0	2,60	2,60	1,20	5,20	5,70	0,23	1,27	1,40	1,12	6,22	6,82	89,00
	2.0+2.5	2,49	3,11	1,20	5,60	5,80	0,23	1,37	1,42	1,12	6,68	6,92	89,00
	2.0+3.5	2,04	3,56	1,20	5,60	5,90	0,25	1,36	1,43	1,23	6,65	7,01	89,00
	2.0+4.2	1,81	3,79	1,20	5,60	6,00	0,25	1,36	1,46	1,23	6,63	7,11	89,00
	2.0+5.0	1,60	4,00	1,20	5,60	6,20	0,25	1,35	1,50	1,23	6,60	7,31	89,00
	2.5+2.5	2,80	2,80	1,20	5,60	5,80	0,23	1,37	1,42	1,12	6,71	6,95	89,00
	2.5+3.5	2,33	3,27	1,20	5,60	6,00	0,25	1,38	1,48	1,23	6,76	7,25	89,00
	2.5+4.2	2,09	3,51	1,20	5,60	6,10	0,25	1,39	1,49	1,23	6,79	7,40	89,00
	2.5+5.0	1,87	3,73	1,30	5,60	6,30	0,25	1,41	1,54	1,23	6,88	7,74	89,00
	3.5+3.5	2,80	2,80	1,30	5,60	6,10	0,25	1,40	1,52	1,23	6,83	7,44	89,00
	3.5+4.2	2,55	3,05	1,30	5,60	6,20	0,25	1,40	1,49	1,23	6,84	7,58	89,00
	3.5+5.0	2,31	3,29	1,30	5,60	6,40	0,25	1,42	1,53	1,23	6,95	7,95	89,00
	4.2+4.2	2,80	2,80	1,30	5,60	6,30	0,25	1,41	1,48	1,23	6,88	7,74	89,00

Notes

- The total capacity of each connected indoor unit is up to 8.5kW.
- The values above are for connecting with the following indoor unit types:
1.5,2.0,2.5,3.5,4.2,5.0 kW class
Wall-mounted CTXM-M,FTXM-M series
- These indoor units can only be used in a multi-unit setup.
- Heating capacity conditions
Indoor temperature 20°C DB
Outdoor temperature 7°C DB / 6°C WB
- Cooling capacity conditions
Indoor temperature 27°C DB / 19°C WB
Outdoor temperature 35°C DB

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5 Capacity tables

5 - 1 Cooling Capacity Tables

2MXM-M9

Cooling 50Hz 230V

①	②	Indoor air temperature [°C WB]											
		14°C		16°C		18°C		19°C		22°C		24°C	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
4.2 + 4.2	10,0	6,15	1,00	6,40	1,01	6,65	1,04	6,78	1,05	7,16	1,08	7,41	1,12
	12,0	6,04	1,01	6,30	1,04	6,55	1,06	6,68	1,07	7,06	1,10	7,31	1,12
	15,0	5,89	1,05	6,14	1,07	6,40	1,09	6,52	1,10	6,90	1,13	7,16	1,16
	18,0	5,74	1,08	5,99	1,11	6,24	1,12	6,37	1,14	6,75	1,18	7,00	1,19
	20,0	5,63	1,11	5,89	1,13	6,14	1,15	6,27	1,17	6,65	1,19	6,90	1,22
	22,0	5,53	1,13	5,79	1,16	6,04	1,18	6,17	1,19	6,55	1,23	6,80	1,24
	25,0	5,38	1,18	5,63	1,20	5,89	1,22	6,01	1,23	6,39	1,26	6,65	1,29
	28,0	5,23	1,22	5,48	1,24	5,73	1,26	5,86	1,27	6,24	1,30	6,49	1,33
	32,0	5,02	1,28	5,27	1,30	5,53	1,32	5,65	1,34	6,03	1,36	6,29	1,39
	35,0	4,87	1,33	5,12	1,35	5,37	1,37	5,50	1,38	5,88	1,41	6,13	1,44
	40,0	4,61	1,41	4,86	1,43	5,12	1,46	5,24	1,47	5,62	1,50	5,88	1,52
	43,0	4,46	1,47	4,71	1,49	4,96	1,51	5,09	1,52	5,47	1,55	5,72	1,58
	46,0	4,30	1,52	4,56	1,54	4,81	1,57	4,94	1,58	5,32	1,61	5,57	1,63

Symbols

- TC: Total capacity [kW]
 PI: Power input [kW]
 ① Indoor unit combinations
 ② Outdoor air temperature [°C DB]

Notes

- The capacities are based on the following conditions:
 Corresponding refrigerant piping length: 5 m
 Level difference: 0m
- The bold cells indicate the standard conditions.
- The values above are for connecting with the following indoor unit types:
 4.2 kW class
 Wall-mounted FTXM-M series

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5 Capacity tables

5 - 2 Heating Capacity Tables

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2MXM-M9

Heating ·50Hz 230V·

①	②	Indoor air temperature [°C DB]											
		16°C		18°C		20°C		21°C		22°C		24°C	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
4.2+4.2	-15,0	3,49	1,20	3,40	1,22	3,31	1,23	3,27	1,24	3,23	1,25	3,14	1,26
	-11,0	4,06	1,24	3,97	1,26	3,88	1,27	3,84	1,28	3,79	1,28	3,71	1,30
	-6,0	4,77	1,30	4,68	1,32	4,59	1,33	4,55	1,34	4,51	1,35	4,42	1,36
	0,0	5,62	1,38	5,53	1,39	5,44	1,41	5,40	1,41	5,36	1,42	5,27	1,44
	6,0	6,47	1,45	6,39	1,47	6,30	1,48	6,26	1,49	6,21	1,49	6,13	1,51
	10,0	7,04	1,50	6,96	1,52	6,87	1,53	6,83	1,54	6,78	1,54	6,70	1,56
	15,0	7,75	1,56	7,67	1,58	7,58	1,59	7,54	1,60	7,49	1,60	7,41	1,62

Notes

- The capacities are based on the following conditions:
Corresponding refrigerant piping length: 5 m
Level difference: 0m
- The bold cells indicate the standard conditions.
- The values above are for connecting with the following indoor unit types:
2.0,2.5,3.5,5.0 kW class
Wall-mounted ATXM-M series
- The heating capacity does not include the capacity drop that occurs during a frosting period and defrost operation.

Symbols

TC: Total capacity [kW]

PI: Power input [kW]

① Indoor unit combinations

② Outdoor air temperature

[°C WB]

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6 Dimensional drawings

6 - 1 Dimensional Drawings

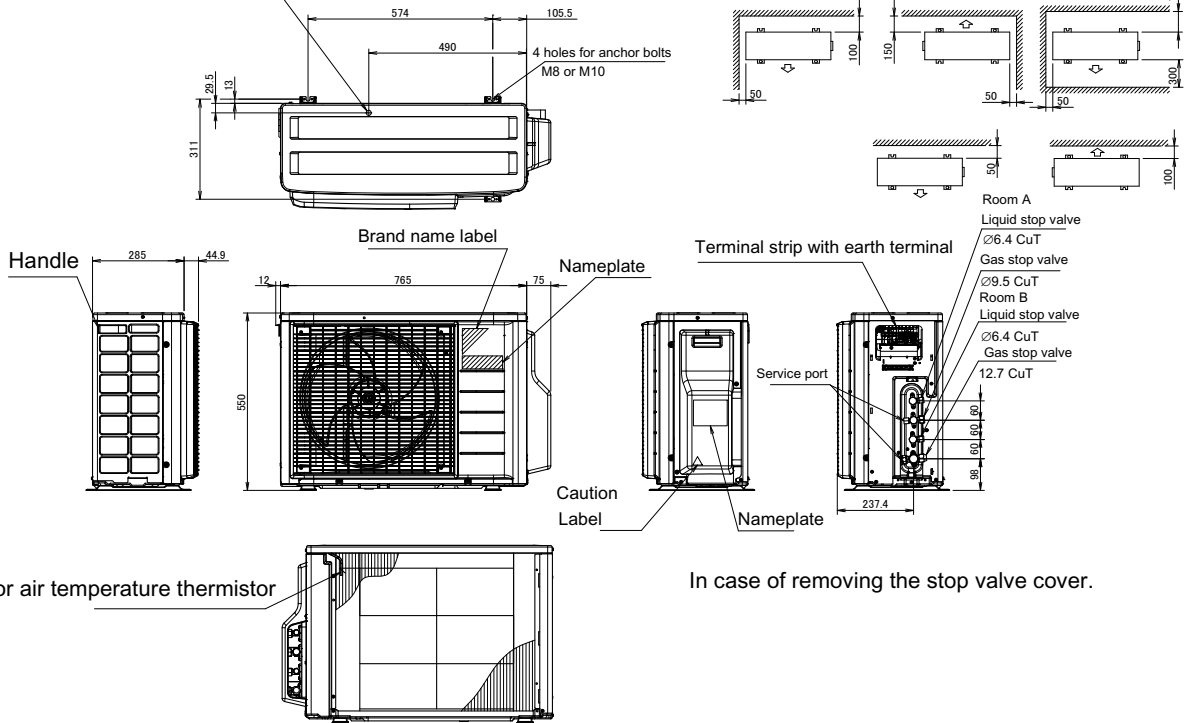
2MXM-M9

Drain outlet

Connection hose (inside diameter: 15.9mm)

Minimum space for air passage

Wall height on air outlet side < 1200 mm



In case of removing the stop valve cover.

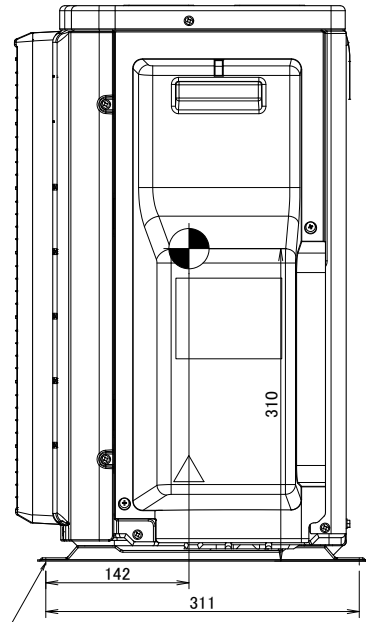
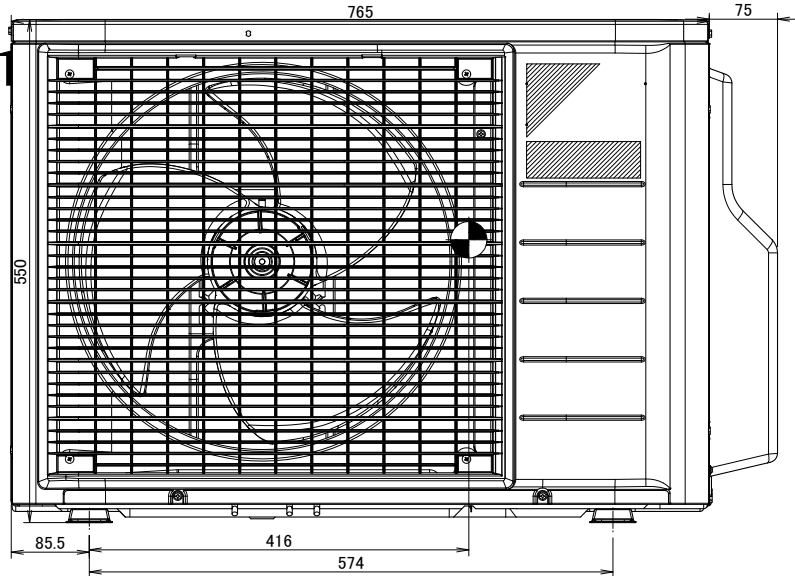
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7 Centre of gravity

7 - 1 Centre of Gravity

2MXM-M9

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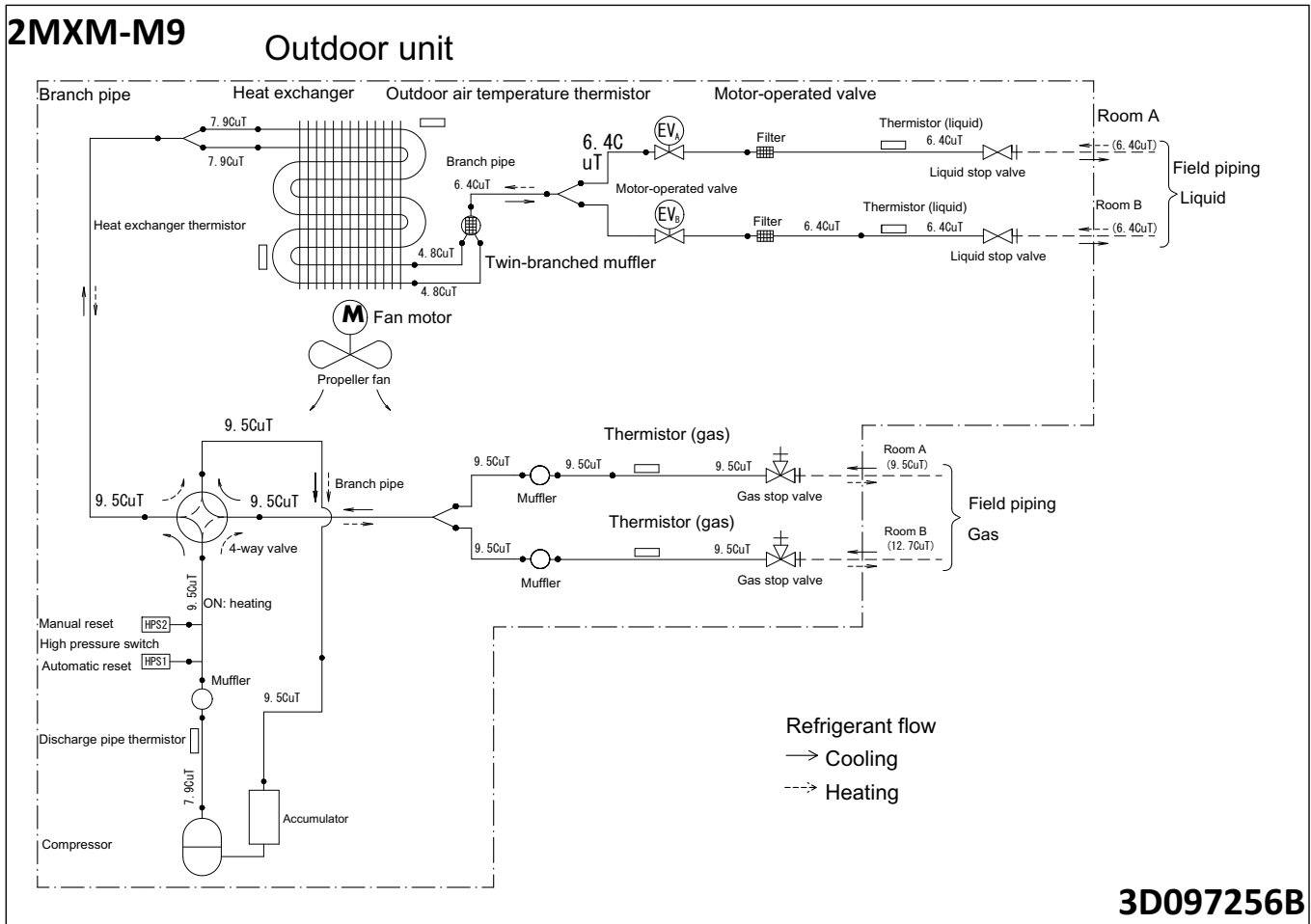


Foundation bolt hole

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8 Piping diagrams

8 - 1 Piping Diagrams



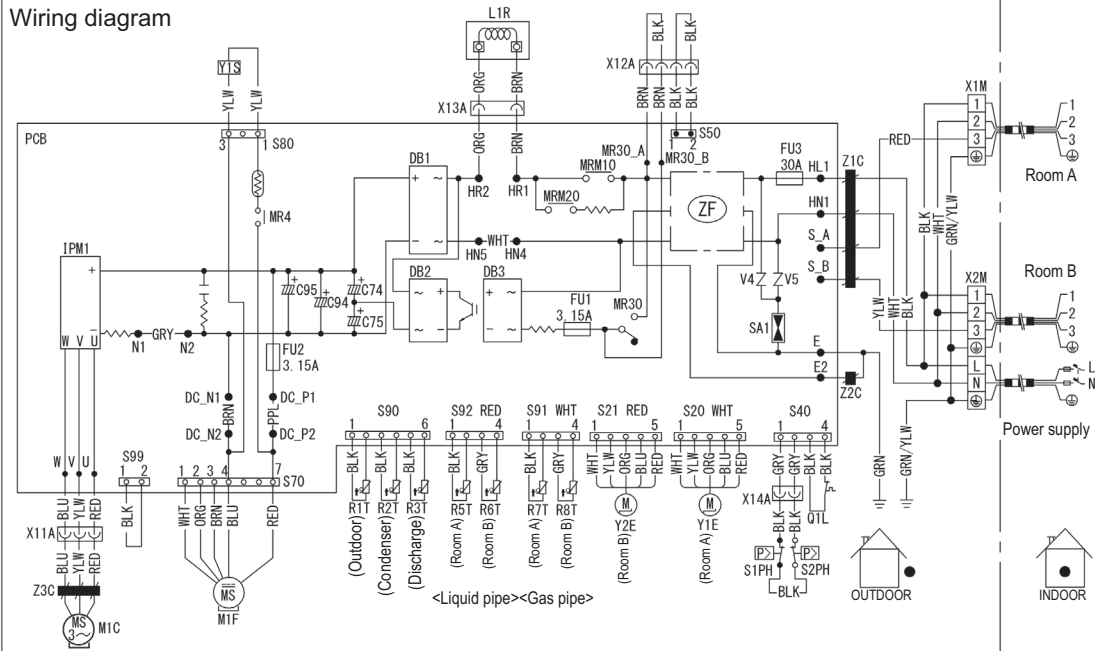
9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

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2MXM50M9

Wiring diagram



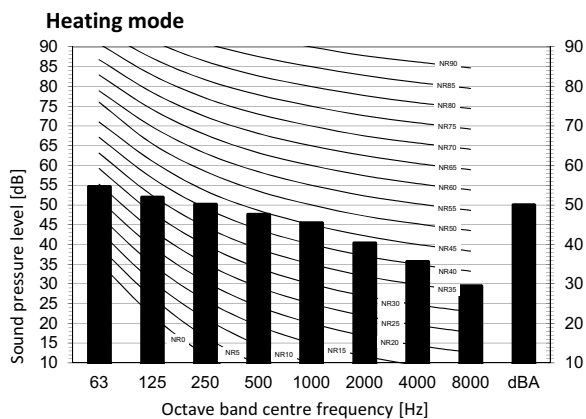
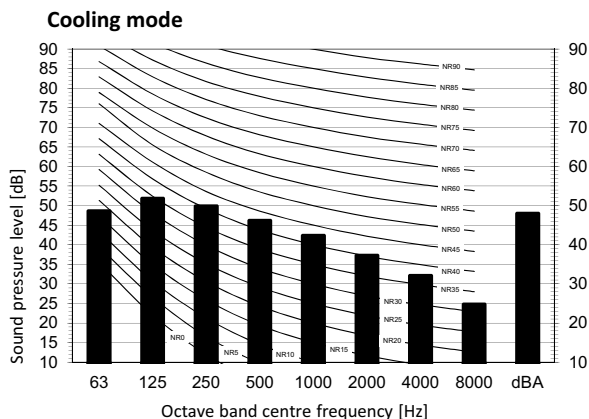
C74, C75, C94, C95	Capacitor	SA1	Surge arrester	
DB1, DB2, DB3	Diode bridge	S1PH, S2PH	High pressure switch	
FU1, FU2, FU3	Fuse	V4, V5	Varistor	
IPM1	Intelligent power module	X1M-X2M	Terminal strip with earth terminal	≡≡≡ Field wiring
L1R	Reactor	Y1E-Y2E	Electronic expansion valve coil	□□□ Screw terminal
M1C	Compressor motor	Y1S	Reversing solenoid valve coil	⊗⊗⊗ Connector
M1F	Fan motor	ZF	Noise filter	WHT: white
MRM10, MRM20	Magnetic relay	Z1C-Z3C	Ferrite core	BLK: black
MR4, MR30	Magnetic relay	S2-S502	Connector	ORG: orange
PCB	Printed circuit board	U, V, W	Connector	BLU: blue
Q1L	Overload protector	X11A-X13A	Connector	BRN: brown
R1T-R8T	Thermistor	S99	Heating-to-cooling changeover	RED: red
				GRN: green
				YLV: yellow

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10 Sound data

10 - 1 Sound Pressure Spectrum

2MXM-M9



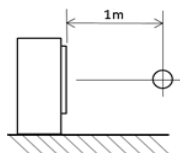
Legend

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	50

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

3D102208A

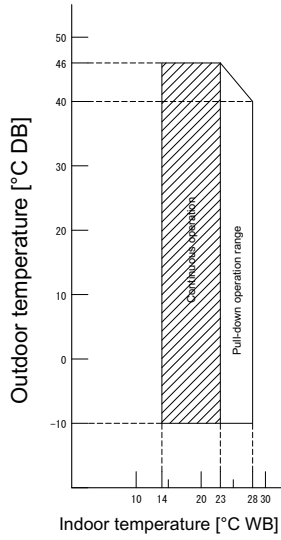
11 Operation range

11 - 1 Operation Range

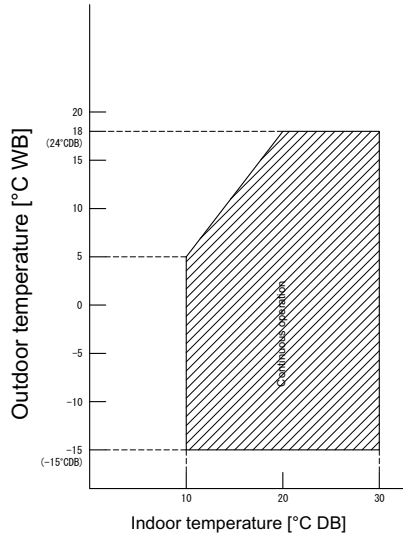
11

2MXM-M9

Cooling



Heating



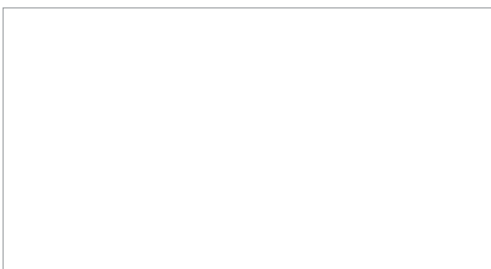
Notes

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

3D101376B



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