



technical data

R-410a
FMDQ-A7V3B

air conditioning systems

R-410A



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air conditioning systems

R-410A

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FMDQ-A7V3B

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1 Features

- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Blends unobtrusively with any interior décor
- Drain pump fitted as standard
- Long life filter fitted as standard
- The air suction direction can be altered from rear to bottom suction
- High external static pressure facilitates unit use with flexible ducts of varying lengths

1



heat pump



2 steps



via wired remote control



optional

2 Specifications

2-1 FOR INDOOR UNITS ONLY			FMDQ50A7V3B	FMDQ60A7V3B	FMDQ71A7V3B	FMDQ100A7V3B	FMDQ125A7V3B
Nominal input (Indoor only)	Cooling	kW	5.0	6.0	7.1	10.0	12.5
	Heating	kW	5.6	6.7	8.0	11.2	14.0
Nominal Total Input Power	Cooling	kW	0.143	0.189	0.234	0.242	0.321
	Heating	kW	0.123	0.169	0.214	0.222	0.301

2-2 TECHNICAL SPECIFICATIONS				FMDQ50A7V3B	FMDQ60A7V3B	FMDQ71A7V3B	FMDQ100A7V3B	FMDQ125A7V3B	
Casing	Material			Unpainted galvanised steel					
Dimensions	Packing	Height	mm	355	355	355	355	355	
		Width	mm	892	1,192	1,592	1,592	1,592	
		Depth	mm	936	936	936	936	936	
	Unit	Height	mm	300	300	300	300	300	
		Width	mm	700	1,000	1,400	1,400	1,400	
		Depth	mm	800	800	800	800	800	
Weight	Unit	kg	31	41	51	51	52		
	Packed Unit	kg	37	48	59	59	60		
Required Ceiling Void			mm	>350					
Heat Exchanger	Dimensions	Length	mm	450	750	1,150	1,150	1,150	
		Nr of Rows			3	3	3	3	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75	1.75	
		Nr of Passes			4	7	10	10	10
		Face Area	m ²	0.123	0.221	0.338	0.338	0.338	
		Nr of Stages			14	14	14	14	14
	Tube type			Hi-XSS (7)					
	Fin	Type	Symmetric waffle louvre						
Treatment		Hydrophilic							
Fan	Type		Sirocco fan						
	Quantity		1	2	3	3	3		
Air Flow Rate	Cooling	High	m ³ /min	15	21	27	28	38	
		Low	m ³ /min	11	15.5	20	20.5	28	
	Heating	High	m ³ /min	15	21	27	28	38	
		Low	m ³ /min	11	15.5	20	20.5	28	
Fan	Max	High	Pa	136	123	141	141	109	
		Standard	Pa	114	111	125	125	93	
		Low	Pa	99	98				
	Motor	Quantity		1	1	1	1	1	
		Model		D18H2AB1V1	2D18H2AB1V1	3D18H2AH1V1	3D18H2AH1V1	3D18H2AG1V1	
		Number of steps		Step motor					
		Output (high)	W	85	125	135	135	225	
Drive		Direct drive							
Cooling	Sound Power	Medium	dBA	58	56	55	56	65	
		Sound Pressure	High	dBA	35	35	37	38	40
	Low		dBA	31	30	31	33	35	
Heating	Sound Pressure	High	dBA	35	35	37	38	40	
		Low	dBA	31	30	31	33	35	
Refrigerant	Type		R-410A						
Piping connections	Liquid (OD)	Type	Flare connection						
		Diameter (OD)	mm	6.35	9.52	9.52	9.52	9.52	
	Gas	Type	Flare connection						
		Diameter (OD)	mm	12.7	15.9	15.9	15.9	15.9	
	Drain	Diameter (OD)	mm	VP25 (O.D. 32 / I.D. 25)					
Heat Insulation			Both liquid and gas pipes						
Drain-up Height			mm	600	600	600	600	600	
Decoration Panel	Model		BYBS45DJW1	BYBS71DJW1	BYBS125DJW1	BYBS125DJW1	BYBS125DJW1		
	Colour		White (10Y9/0,5)						
	Dimensions	H	mm	55	55	55	55	55	
		W	mm	800	1,100	1,500	1,500	1,500	
		D	mm	500	500	500	500	500	
Weight		kg	3.5	4.5	6.5	6.5	6.5		

2 Specifications

2

2-2 TECHNICAL SPECIFICATIONS		FMDQ50A7V3B	FMDQ60A7V3B	FMDQ71A7V3B	FMDQ100A7V3B	FMDQ125A7V3B
Air Filter	Resin net with mold resistance					
Air direction control	Up and downwards					
Temperature control	Microprocessor thermostat for cooling and heating					
Safety Devices	PC board fuse					
	Drain pump fuse					
	Fan motor thermal protector					
Notes	Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 5m, level difference : 0m.					
	Nominal heating capacities are based on : indoor temperature : 20°CDB, outdoor temperature : 7°CDB, 6°CWB, equivalent refrigerant piping : 5m, level difference : 0m					
	The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure - standard - low static pressure					
	The external static pressure is changeable : change the connectors inside the electrical box, this pressure means : High static pressure - standard					
	Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat. The sound pressure values are mentioned for a unit installed with rear suction					

2-3 ELECTRICAL SPECIFICATIONS		FMDQ50A7V3B	FMDQ60A7V3B	FMDQ71A7V3B	FMDQ100A7V3B	FMDQ125A7V3B	
Power Supply	Name	V3					
	Phase	1~					
	Frequency	Hz	50	50	50	50	50
	Voltage	V	230	230	230	230	230

3 Electrical data

FMDQ-A									
Model	Type	Hz	Units			Power supply		IFM	
			Volts	Lower	Max.	MCA	MFA	kW	FLA
FMDQ50A	V1	50	230	207	253	0.9	16	0.085	0.7
FMDQ60A						1.1	16	0.125	0.9
FMDQ71A						1.4	16	0.225	1.1
FMDQ100A						1.5	16	0.225	1.2
FMDQ125A						2.0	16	0.225	1.6

Symbols:
MCA: Min. Circuit Amps (A);
MFA: Max. Fuse Amps (A) (see note 5);
kW: Full Load Amps (A);
IFM: Indoor Fan Motor

NOTES

- 1 Voltage range
The units are suitable for use on electrical systems where the voltage supplied to the unit terminals is not below or above listed range limits.
- 2 The maximum allowable voltage variation between phases is 2%.
- 3 MCA/MFA
 $MCA = 12.5 \times FLA$
 $MFA < 4 \times FLA$
(next lower standard fuse rating min 16A)
- 4 Select a wire size based on the MCA.
- 5 Instead of a fuse, use a circuit breaker.

3TW29112-1A

4 Safety device settings

4

		FMDQ50A	FMDQ60A	FMDQ71A	FMDQ100A	FMDQ125A
PC BOARD FUSE		250V 10A				
FAN MOTOR THERMAL FUSE	°C	152 ^{±2}			-	
FAN MOTOR THERMAL PROTECTOR	°C	-			OFF:130 ^{±5} , (ON: 80 ^{±20})	OFF:130 ^{±5} , (ON: 80 ^{±20})
DRAIN PUMP FUSE	°C	169				

3TW25511-3

5 Options

	FMDQ50A7	FMDQ60A7	FMDQ71A7	FMDQ100A7	FMDQ125A7
DECORATION PANEL	BYBS45D	BYBS71D	BYBS125D		
SERVICE ACCESS PANEL	KTBJ25K56W	KTBJ25K80W	KTBJ25K160W		
HIGH EFFICIENCY FILTER 65% (1)	KAFJ252L56	KAFJ252L80	KAFJ252L160		
HIGH EFFICIENCY FILTER 90% (1)	KAFJ253L56	KAFJ253L80	KAFJ253L160		
FILTER CHAMBER FOR BOTTOM SUCTION	KAJ25L56D	KAJ25L80D	KAJ25L160D		
FILTER CHAMBER FOR REAR SUCTION	KAJ25L56B	KAJ25L80B	KAJ25L160B		
AIR SUCTION CANVAS	KSA-25K56	KSA-25KA80	KSA-25K160		
SCREENING DOOR / BLIND BOARD	KBBJ25K56	KBBJ25K80	KBBJ25K160		
AIR DISCHARGE ADAPTER FOR ROUND DUCT	KDAJ25K56	KDAJ25K71	KDAJ25K140		

3TW25689-1E

NOTES

- 1 If installing a high efficiency filter in the unit, an assembly chamber for either bottom or rear suction is required.

6

6 Capacity tables

6 - 1 Cooling capacity tables

FMDQ-A															
Unit size	Out door °CDB	Indoor air temp.													
		14.0WB 20.0DB		16.0WB 23.0DB		18.0WB 26.0DB		19.0WB 27.0DB		20.0WB 28.0DB		22.0WB 30.0DB		24.0WB 32.0DB	
		TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC	TC	SHC
50	10.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.6	3.9
	12.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.5	3.9
	14.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.4	3.9
	16.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.3	3.8
	18.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.2	3.8
	20.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.1	3.8
	21.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	6.0	3.6	6.1	3.8
	23.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.9	3.6	6.0	3.7
	25.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.8	3.5	5.9	3.7
	27.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.7	3.5	5.9	3.6
	29.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.6	3.5	5.8	3.6
	31.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.6	3.4	5.7	3.6
	33.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.5	3.4	5.6	3.5
	35.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.3	3.9	5.4	3.4	5.5	3.5
	37.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.2	3.8	5.3	3.3	5.4	3.5
	39.0	3.4	2.8	4.0	3.3	4.7	3.5	5.0	3.6	5.1	3.8	5.2	3.3	5.3	3.4
60	10.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.9	4.8
	12.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.8	4.7
	14.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.7	4.6
	16.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.6	4.6
	18.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.5	4.5
	20.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.4	4.5
	21.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.2	4.7	7.3	4.4
	23.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.1	4.7	7.2	4.4
	25.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	7.0	4.6	7.1	4.3
	27.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	6.9	4.5	7.0	4.3
	29.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	6.8	4.5	6.9	4.3
	31.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	6.7	4.5	6.8	4.2
	33.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.4	4.6	6.6	4.4	6.7	4.2
	35.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.3	4.6	6.5	4.4	6.6	4.2
	37.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.2	4.6	6.4	4.4	6.5	4.2
	39.0	4.1	3.5	4.8	4.0	5.6	4.1	6.0	4.4	6.1	4.5	6.3	4.3	6.4	4.1
71	10.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	9.3	5.4
	12.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	9.2	5.4
	14.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	9.1	5.3
	16.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	9.0	5.2
	18.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	8.9	5.1
	20.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	8.7	5.0
	21.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.5	5.4	8.7	5.0
	23.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.4	5.3	8.5	5.0
	25.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.3	5.2	8.4	4.9
	27.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.1	5.1	8.3	4.9
	29.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	8.0	5.2	8.2	4.8
	31.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	7.9	5.0	8.1	4.8
	33.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.6	5.2	7.8	5.0	7.9	4.8
	35.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.5	5.2	7.7	5.0	7.8	4.7
	37.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.4	5.1	7.5	4.9	7.7	4.8
	39.0	4.8	3.9	5.7	4.5	6.6	4.8	7.1	5.0	7.2	5.1	7.4	4.9	7.6	4.7
100	10.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	13.1	7.6
	12.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	13.0	7.5
	14.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	12.8	7.4
	16.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	12.6	7.3
	18.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	12.5	7.2
	20.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	12.3	7.1
	21.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	12.0	7.6	12.2	7.1
	23.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	11.8	7.5	12.0	7.0
	25.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	11.6	7.4	11.9	6.9
	27.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	11.5	7.3	11.7	6.9
	29.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	11.3	7.2	11.5	6.8
	31.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	11.1	7.1	11.4	6.7
	33.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.6	7.4	10.9	7.0	11.2	6.7
	35.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.5	7.3	10.8	7.0	11.0	6.7
	37.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.0	10.4	7.3	10.6	6.9	10.9	6.6
	39.0	6.8	5.6	8.0	6.4	9.4	6.8	10.0	7.1	10.2	7.2	10.4	6.9	10.7	6.6
125	10.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	16.4	9.8
	12.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	16.2	9.7
	14.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	16.0	9.6
	16.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	15.8	9.5
	18.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	15.6	9.3
	20.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	15.4	9.2
	21.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	15.0	9.6	15.3	9.1
	23.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	14.7	9.4	15.0	9.0
	25.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	14.6	9.3	14.8	8.9
	27.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	14.3	9.2	14.6	8.8
	29.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	14.1	9.1	14.4	8.7
	31.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	13.9	9.0	14.2	8.6
	33.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.3	9.2	13.7	8.9	14.0	8.5
	35.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	13.2	9.1	13.5	8.8	13.8	8.4
	37.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	12.9	9.0	13.3	8.7	13.6	8.3
	39.0	8.4	7.0	10.0	8.0	11.7	8.6	12.5	8.9	12.7	8.9	13.0	8.5	13.3	8.2

3TW31412-1

6 Capacity tables

6 - 2 Heating capacity tables

6

FMDQ-A

Unit size	Outdoor air temp		Indoor air temp. °CDB					
			16.0	18.0	20.0	21.0	22.0	24.0
	°CDB	°CDB	KW	KW	KW	KW	KW	KW
50	-19.8	-20.0	3.3	3.3	3.3	3.3	3.3	3.3
	-18.8	-19.0	3.4	3.4	3.4	3.4	3.4	3.4
	-16.7	-17.0	3.6	3.6	3.6	3.6	3.6	3.6
	-14.7	-15.0	3.8	3.8	3.8	3.8	3.8	3.8
	-12.6	-13.0	4.0	4.0	4.0	4.0	4.0	4.0
	-10.5	-11.0	4.2	4.2	4.2	4.2	4.2	4.2
	-9.5	-10.0	4.3	4.3	4.3	4.3	4.3	4.3
	-8.5	-9.1	4.4	4.4	4.4	4.4	4.4	4.4
	-7.0	-7.6	4.5	4.5	4.5	4.5	4.5	4.5
	-5.0	-5.6	4.7	4.7	4.7	4.7	4.7	4.7
	-3.0	-3.7	4.9	4.9	4.9	4.9	4.9	4.9
	0.0	-0.7	5.2	5.2	5.2	5.2	5.2	4.9
	3.0	2.2	5.5	5.5	5.5	5.4	5.2	4.9
	5.0	4.1	5.7	5.7	5.6	5.4	5.2	4.9
	7.0	6.0	5.9	5.9	5.6	5.4	5.2	4.9
	9.0	7.9	6.1	6.0	5.6	5.4	5.2	4.9
	11.0	9.8	6.3	6.0	5.6	5.4	5.2	4.9
13.0	11.8	6.3	6.0	5.6	5.4	5.2	4.9	
15.0	13.7	6.3	6.0	5.6	5.4	5.2	4.9	
60	-19.8	-20.0	4.0	3.9	3.9	3.9	3.9	3.9
	-18.8	-19.0	4.1	4.1	4.1	4.0	4.0	4.0
	-16.7	-17.0	4.3	4.3	4.3	4.3	4.3	4.3
	-14.7	-15.0	4.5	4.5	4.5	4.5	4.5	4.5
	-12.6	-13.0	4.8	4.8	4.8	4.8	4.8	4.7
	-10.5	-11.0	5.0	5.0	5.0	5.0	5.0	5.0
	-9.5	-10.0	5.1	5.1	5.1	5.1	5.1	5.1
	-8.5	-9.1	5.2	5.2	5.2	5.2	5.2	5.2
	-7.0	-7.6	5.4	5.4	5.4	5.4	5.4	5.4
	-5.0	-5.6	5.7	5.7	5.6	5.6	5.6	5.6
	-3.0	-3.7	5.9	5.9	5.9	5.9	5.9	5.8
	0.0	-0.7	6.2	6.2	6.2	6.2	6.2	5.8
	3.0	2.2	6.6	6.6	6.6	6.5	6.3	5.8
	5.0	4.1	6.8	6.8	6.7	6.5	6.3	5.8
	7.0	6.0	7.0	7.0	6.7	6.5	6.3	5.8
	9.0	7.9	7.3	7.1	6.7	6.5	6.3	5.8
	11.0	9.8	7.5	7.1	6.7	6.5	6.3	5.8
13.0	11.8	7.6	7.1	6.7	6.5	6.3	5.8	
15.0	13.7	7.6	7.1	6.7	6.5	6.3	5.8	
71	-19.8	-20.0	4.7	4.7	4.7	4.7	4.7	4.7
	-18.8	-19.0	4.9	4.9	4.8	4.8	4.8	4.8
	-16.7	-17.0	5.1	5.1	5.1	5.1	5.1	5.1
	-14.7	-15.0	5.4	5.4	5.4	5.4	5.4	5.4
	-12.6	-13.0	5.7	5.7	5.7	5.7	5.7	5.7
	-10.5	-11.0	6.0	6.0	6.0	6.0	6.0	5.9
	-9.5	-10.0	6.1	6.1	6.1	6.1	6.1	6.1
	-8.5	-9.1	6.3	6.3	6.2	6.2	6.2	6.2
	-7.0	-7.6	6.5	6.5	6.4	6.4	6.4	6.4
	-5.0	-5.6	6.8	6.7	6.7	6.7	6.7	6.7
	-3.0	-3.7	7.0	7.0	7.0	7.0	7.0	7.0
	0.0	-0.7	7.5	7.4	7.4	7.4	7.4	7.0
	3.0	2.2	7.9	7.8	7.8	7.7	7.5	7.0
	5.0	4.1	8.1	8.1	8.0	7.7	7.5	7.0
	7.0	6.0	8.4	8.4	8.0	7.7	7.5	7.0
	9.0	7.9	8.7	8.5	8.0	7.7	7.5	7.0
	11.0	9.8	8.9	8.5	8.0	7.7	7.5	7.0
13.0	11.8	9.0	8.5	8.0	7.7	7.5	7.0	
15.0	13.7	9.0	8.5	8.0	7.7	7.5	7.0	
100	-19.8	-20.0	6.6	6.6	6.6	6.6	6.6	6.5
	-18.8	-19.0	6.8	6.8	6.8	6.8	6.8	6.7
	-16.7	-17.0	7.2	7.2	7.2	7.2	7.1	7.1
	-14.7	-15.0	7.6	7.6	7.6	7.6	7.5	7.5
	-12.6	-13.0	8.0	8.0	8.0	8.0	7.9	7.9
	-10.5	-11.0	8.4	8.4	8.4	8.3	8.3	8.3
	-9.5	-10.0	8.6	8.6	8.6	8.5	8.5	8.5
	-8.5	-9.1	8.8	8.8	8.7	8.7	8.7	8.7
	-7.0	-7.6	9.1	9.0	9.0	9.0	9.0	9.0
	-5.0	-5.6	9.5	9.4	9.4	9.4	9.4	9.4
	-3.0	-3.7	9.8	9.8	9.8	9.8	9.8	9.8
	0.0	-0.7	10.4	10.4	10.4	10.4	10.4	9.8
	3.0	2.2	11.0	11.0	11.0	10.8	10.5	9.8
	5.0	4.1	11.4	11.4	11.2	10.8	10.5	9.8
	7.0	6.0	11.8	11.7	11.2	10.8	10.5	9.8
	9.0	7.9	12.1	11.9	11.2	10.8	10.5	9.8
	11.0	9.8	12.5	11.9	11.2	10.8	10.5	9.8
13.0	11.8	12.6	11.9	11.2	10.8	10.5	9.8	
15.0	13.7	12.6	11.9	11.2	10.8	10.5	9.8	
125	-19.8	-20.0	8.3	8.2	8.2	8.2	8.2	8.2
	-18.8	-19.0	8.5	8.5	8.5	8.5	8.4	8.4
	-16.7	-17.0	9.0	9.0	9.0	8.9	8.9	8.9
	-14.7	-15.0	9.5	9.5	9.5	9.4	9.4	9.4
	-12.6	-13.0	10.0	10.0	10.0	9.9	9.9	9.9
	-10.5	-11.0	10.5	10.5	10.4	10.4	10.4	10.4
	-9.5	-10.0	10.7	10.7	10.7	10.7	10.7	10.6
	-8.5	-9.1	11.0	10.9	10.9	10.9	10.9	10.9
	-7.0	-7.6	11.3	11.3	11.3	11.3	11.3	11.2
	-5.0	-5.6	11.8	11.8	11.8	11.8	11.8	11.7
	-3.0	-3.7	12.3	12.3	12.3	12.2	12.2	12.2
	0.0	-0.7	13.0	13.0	13.0	13.0	13.0	12.2
	3.0	2.2	13.8	13.7	13.7	13.6	13.1	12.2
	5.0	4.1	14.2	14.2	14.0	13.6	13.1	12.2
	7.0	6.0	14.7	14.7	14.0	13.6	13.1	12.2
	9.0	7.9	15.2	14.9	14.0	13.6	13.1	12.2
	11.0	9.8	15.6	14.9	14.0	13.6	13.1	12.2
13.0	11.8	15.8	14.9	14.0	13.6	13.1	12.2	
15.0	13.7	15.8	14.9	14.0	13.6	13.1	12.2	

3TW31362-2

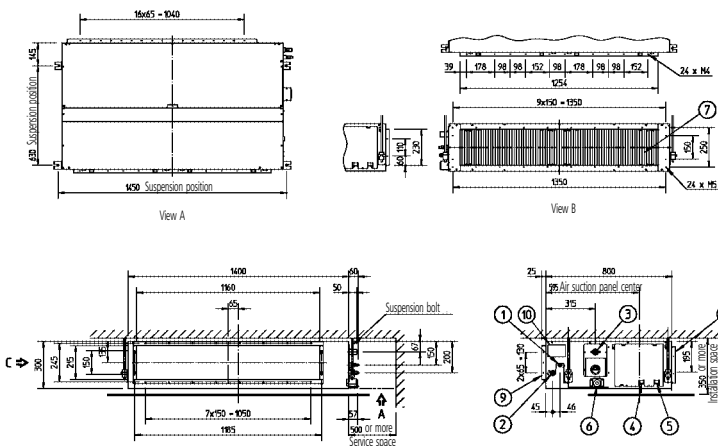
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7 Dimensional drawing & centre of gravity

7 - 1 Dimensional drawing

7

FMDQ71-125A



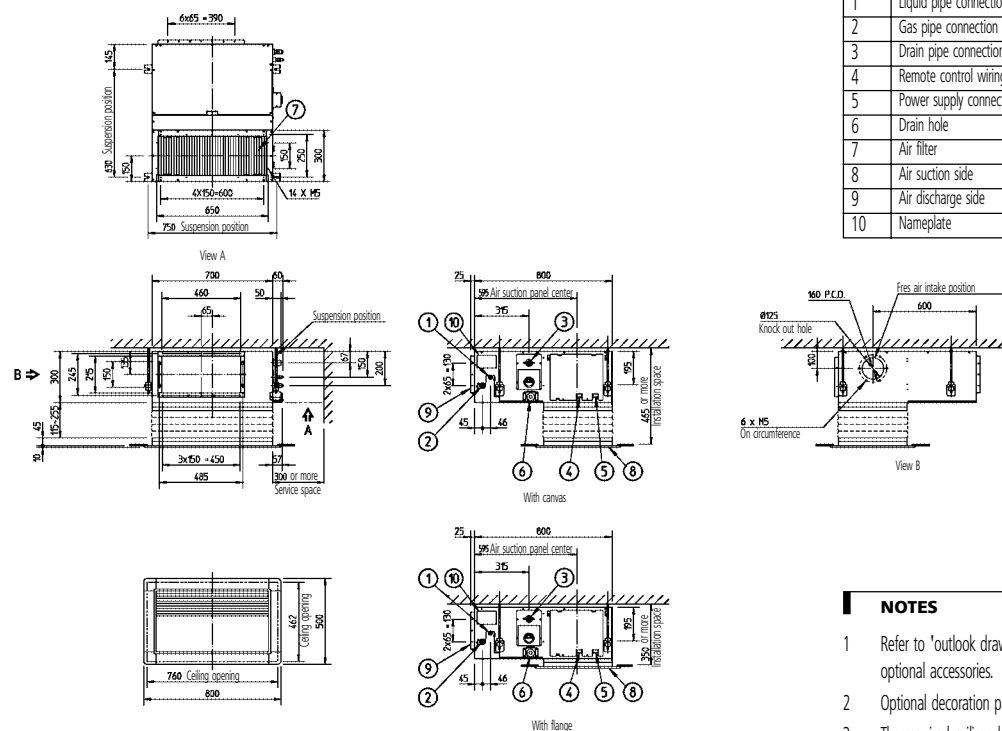
Nr.	Name	Description
1	Liquid pipe connection	ø9.5 flare connection
2	Gas pipe connection	ø15.9 flare connection
3	Drain pipe connection	VP25 (O.D. ø32, I.D. ø25)
4	Remote control wiring connection	
5	Power supply connection	
6	Drain hole	VP25 (O.D. ø32, I.D. ø25)
7	Air filter	
8	Air suction side	
9	Air discharge side	
10	Nameplate	

NOTES

- 1 Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
- 2 The required ceiling depth varies according to the configuration of the specific system.
- 3 For maintenance of the air filter it is necessary to provide a service access panel according to the installation method. Refer to the 'filter installation method' drawing).

3TW25744-1

FMDQ50A



Nr.	Name	Description
1	Liquid pipe connection	ø6.4 flare connection
2	Gas pipe connection	ø12.7 flare connection
3	Drain pipe connection	VP25 (O.D. ø32, I.D. ø25)
4	Remote control wiring connection	
5	Power supply connection	
6	Drain hole	VP25 (O.D. ø32, I.D. ø25)
7	Air filter	
8	Air suction side	
9	Air discharge side	
10	Nameplate	

NOTES

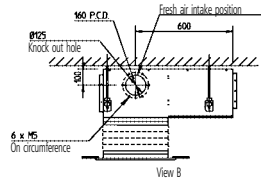
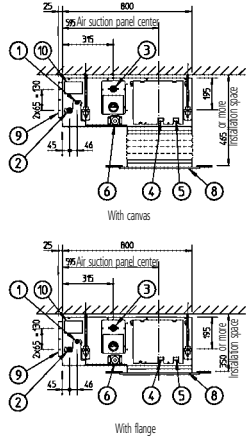
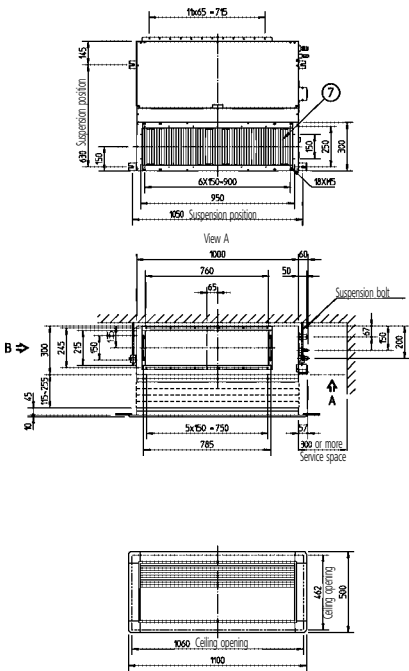
- 1 Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
- 2 Optional decoration panel: BYBS45DJW1 (light ivory white 10Y9/0.5).
- 3 The required ceiling depth varies according to the configuration of specific system.

3TW25714-2

7 Dimensional drawing & centre of gravity

7 - 1 Dimensional drawing

FMDQ60A



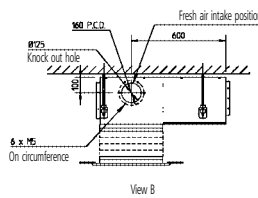
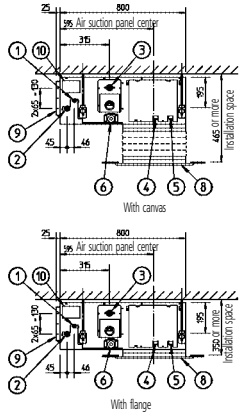
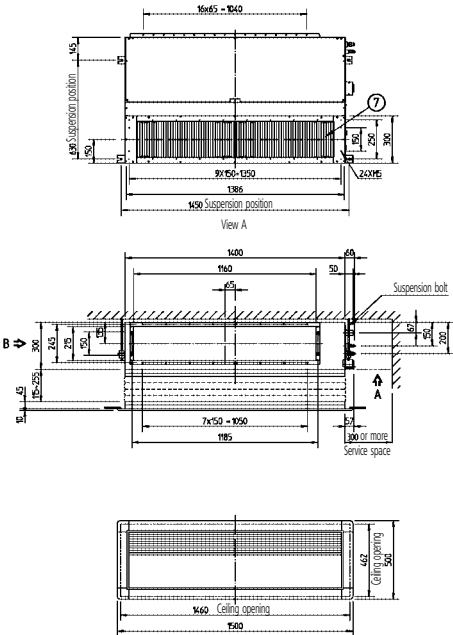
Nr.	Name	Description
1	Liquid pipe connection	ø9.5 flare connection
2	Gas pipe connection	ø15.9 flare connection
3	Drain pipe connection	VP25 (O.D. ø32, I.D. ø25)
4	Remote control wiring connection	
5	Power supply connection	
6	Drain hole	VP25 (O.D. ø32, I.D. ø25)
7	Air filter	
8	Air suction side	
9	Air discharge side	
10	Nameplate	

NOTES

- 1 Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
- 2 Optional decoration panel: BYBS71DJW1 (light ivory white 10Y9/0.5).
- 3 The required ceiling depth varies according to the configuration of specific system.

3TW25734-2

FMDQ71-125A



Nr.	Name	Description
1	Liquid pipe connection	ø9.5 flare connection
2	Gas pipe connection	ø15.9 flare connection
3	Drain pipe connection	VP25 (O.D. ø32, I.D. ø25)
4	Remote control wiring connection	
5	Power supply connection	
6	Drain hole	VP25 (O.D. ø32, I.D. ø25)
7	Air filter	
8	Air suction side	
9	Air discharge side	
10	Nameplate	

NOTES

- 1 Refer to 'outlook drawing for installing optional accessories' when installing optional accessories.
- 2 Optional decoration panel: BYBS125JW1 (light ivory white 10Y9/0.5).
- 3 The required ceiling depth varies according to the configuration of specific system.

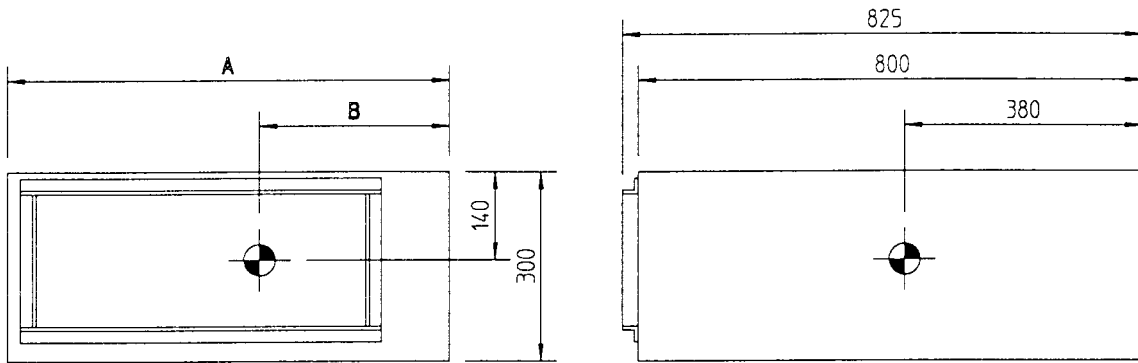
3TW25744-2

7 Dimensional drawing & centre of gravity

7 - 2 Centre of gravity

7

FMDQ50-125A

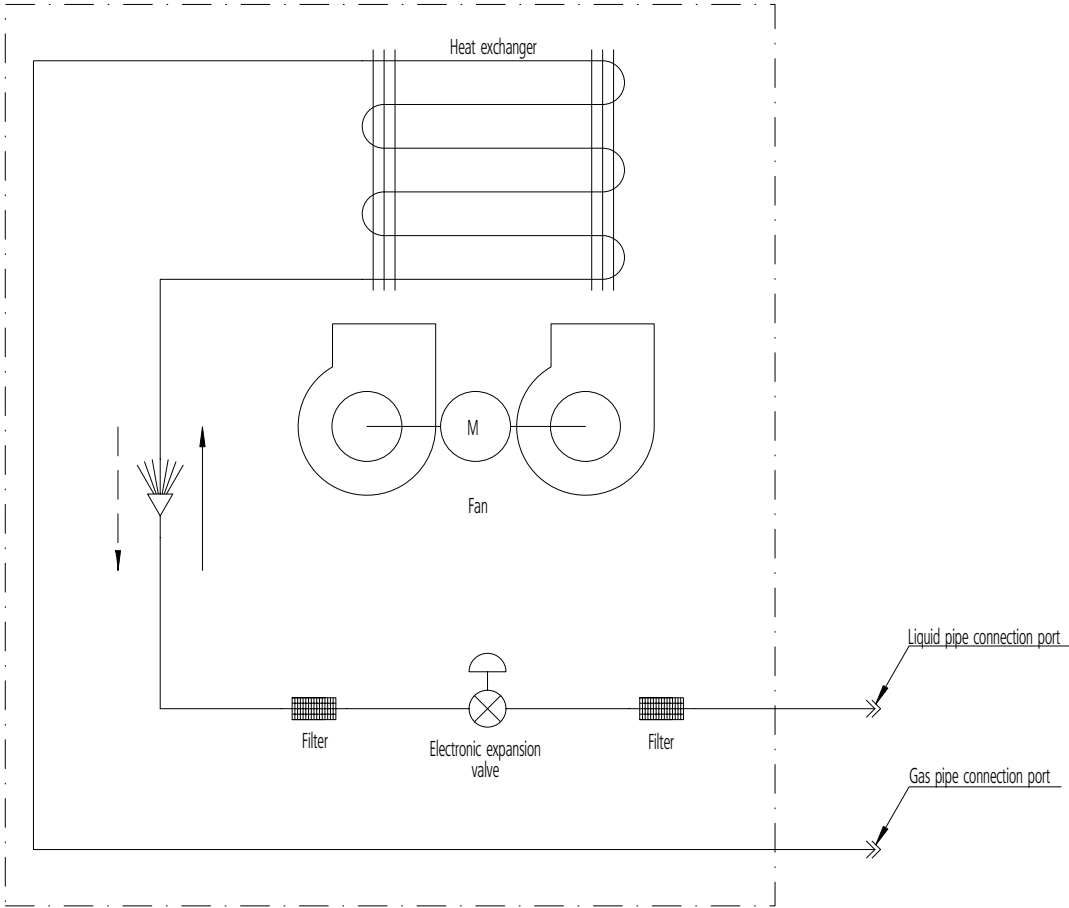


Model	A	B
FMDQ50A7	700	300
FMDQ60A7	1,000	460
FMDQ71-125A7	1,400	640

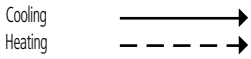
4TW25689-2

8 Piping diagram

FMDQ50-125A



Refrigerant flow



Piping connection diameters

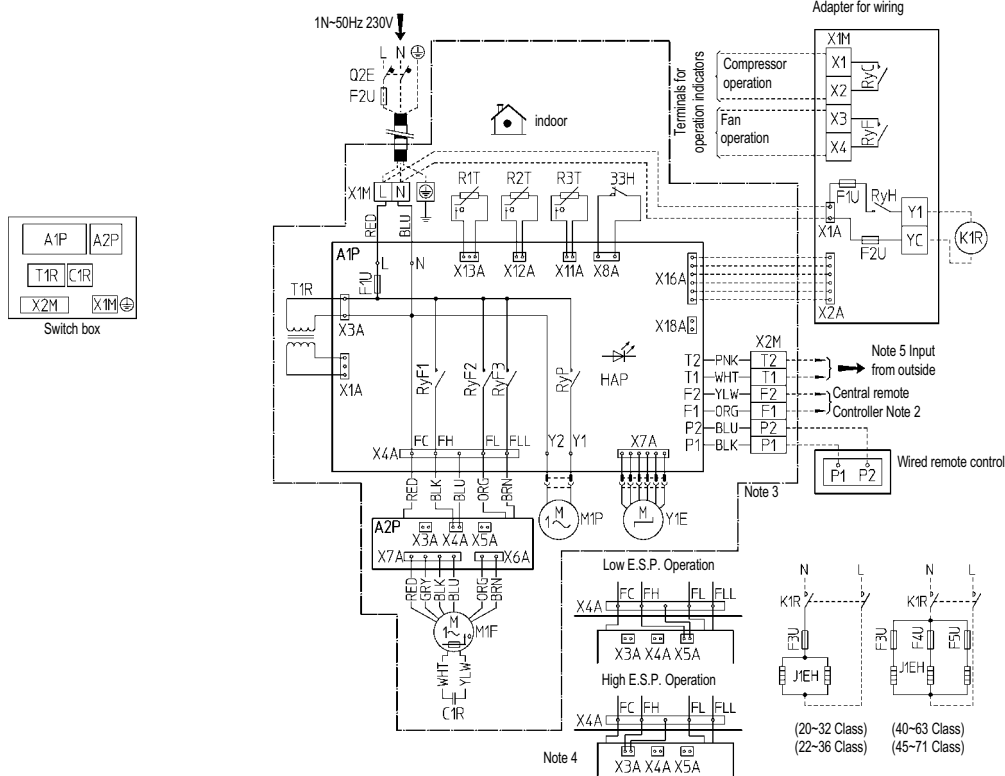
Models	Gas	Liquid
FMDQ50A7	ø12.7	ø6.35
FMDQ60,71,100,125A7	ø15.9	ø9.5

3TW25515-1

9 Wiring diagram

9 - 1 Wiring diagram

FMDQ50-60A



33H	Float switch	R2T,R3T	Thermistor (Refrigerant)	K1R	Magnetic Relay (J1EH)
A1P	Printed circuit board	RyF1-3	Magnetic relay (M1F)	Adapter for wiring	
A2P	Terminal board	RyP	Magnetic relay (Drain pump)	RyC,RyF	Magnetic relay
C1R	Capacitor (M1F)	Q2E	Earth leak detector	RyH	Magnetic relay (J1EH)
F1U	Fuse (250V, 5A)	RyA	Magnetic relay (M1S)	F1U, F2U	Fuse (250V, 5A)
F2U	Field fuse	T1R	Transformer (220-240V/22V)	X1A, X2A	Connector (Wiring adapter)
HAP	Light emitting diode (Service monitor-green)	X1M	Terminal strip (Power)	X1M	Terminal strip
M1F	Motor (Fan)	X2M	Terminal strip (Control)	Connector for optional parts	
M1P	Motor (Drain pump)	Y1E	Electronic expansion valve	X16A	Connector (Wiring adapter)
Q2E	Earth leak detector	Optional parts		X18A	Connector (Wiring adapter for electrical appendices)
R1T	Thermistor (Air)	F3-5U	Fuse (250V, 16A)		
		J1EH	Electric heater		

- : Field wiring
- L : Live
- N : Neutral
- : Connector
- : Wire clamp
- : Protective earth (screw)

- Colors:
- BLK: Black
 - BLU: Blue
 - BRN: Brown
 - ORG: Orange
 - PNK: Pink
 - RED: Red
 - WHT: White
 - YLW: Yellow

2TW23686-1C

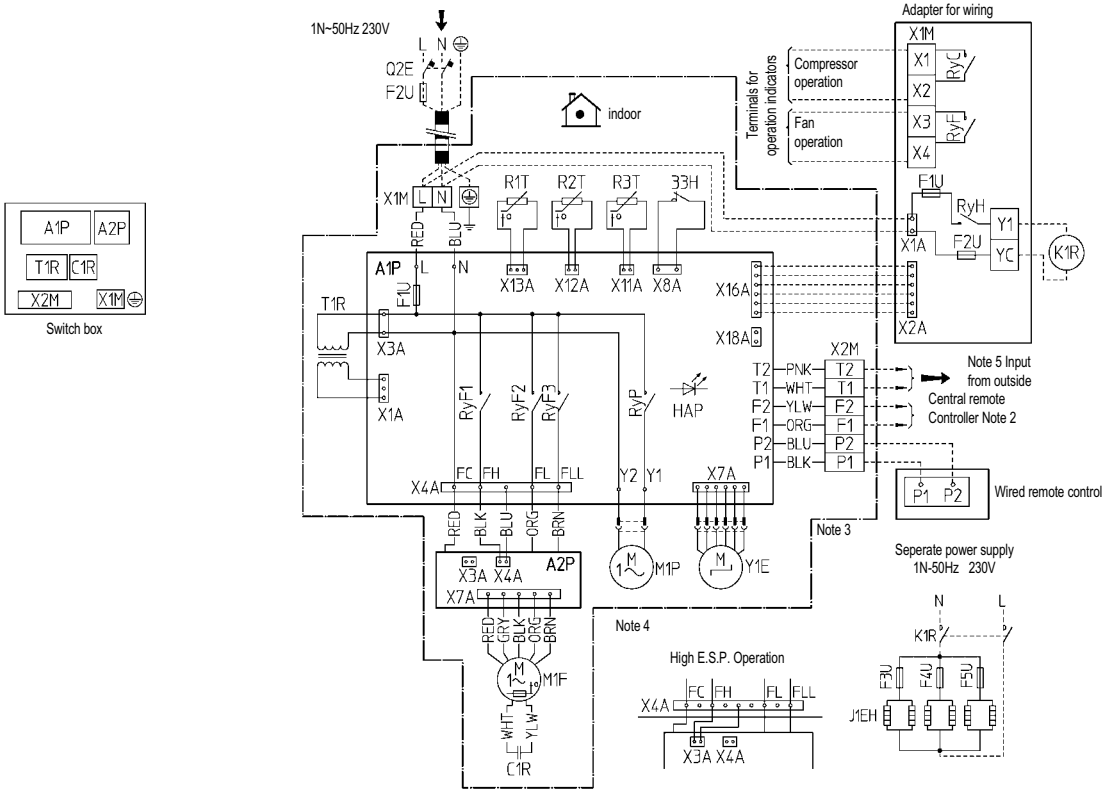
NOTES

- Use copper conductors only.
- When using the central remote control, see manual for connection to the unit.
- When installing the electric heater, change the wiring for the heater circuit. The main powersupply has to be supplied independently.
- For high or low E.S.P. operation, change the wiring connection of X4A as shown on the wiring diagram.
- When connecting the input wires from outside, "forced off" or on/off" operation can be selected by remote controller. See installation manual for more details.

9 Wiring diagram

9 - 1 Wiring diagram

FMDQ71-125A



33H	Float switch	R2T,R3T	Thermistor (Refrigerant)	K1R	Magnetic Relay (J1EH)
A1P	Printed circuit board	RyF1-3	Magnetic relay (M1F)	RyC, RyF	Adapter for wiring
A2P	Terminal board	RyP	Magnetic relay (M1P)	RyH	Magnetic relay (J1EH)
C1R	Capacitor (M1F)	Q2E	Earth leak detector	F1U, F2U	Fuse (250V, 5A)
F1U	Fuse (250V, 5A)	RyA	Magnetic relay (M1S)	X1A, X2A	Connector (Wiring adaptor)
F2U	Field fuse	T1R	Transformer (220-240V/22V)	X1M	Terminal strip
HAP	Light emitting diode (Service monitor-green)	X1M	Terminal strip (Power)	Connector for optional parts	
M1F	Motor (Fan)	X2M	Terminal strip (Control)	X16A	Connector (Wiring adaptor)
M1P	Motor (Drain pump)	Y1E	Electronic expansion valve	X18A	Connector (Wiring adaptor for electrical appendices)
Q2E	Earth leak detector	Optional parts			
R1T	Thermistor (Air)	F3-5U	Fuse (250V, 16A)		
		J1EH	Electric heater		

- : Field wiring
- L : Live
- N : Neutral
- : Connector
- : Wire clamp
- : Protective earth (screw)

- Colors:
- BLK: Black
 - BLU: Blue
 - BRN: Brown
 - ORG: Orange
 - PNK: Pink
 - RED: Red
 - WHT: White
 - YLW: Yellow

2TW23736-1C

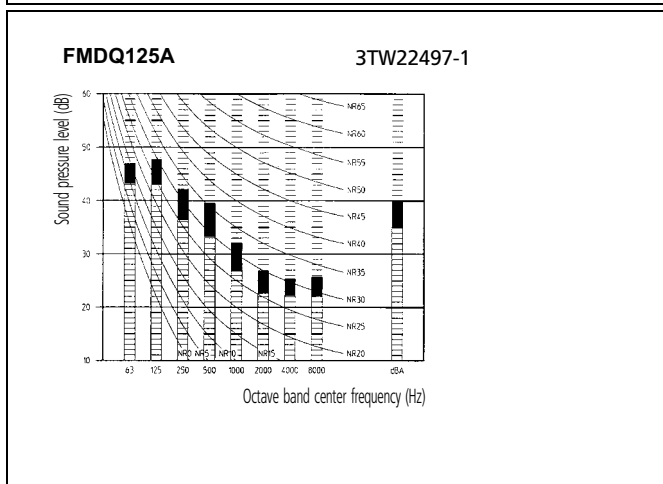
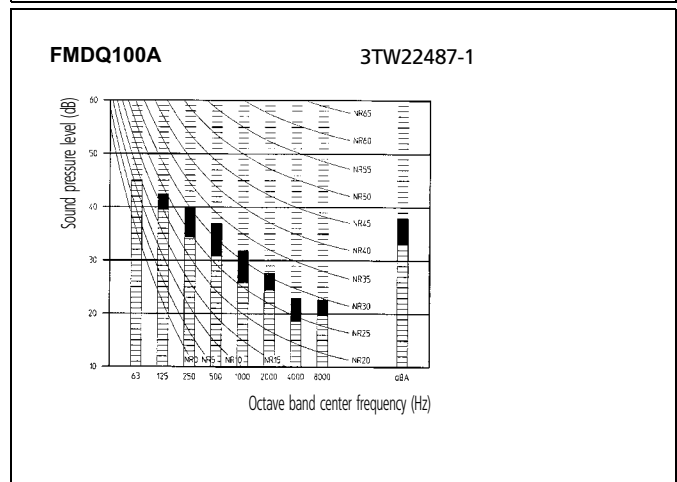
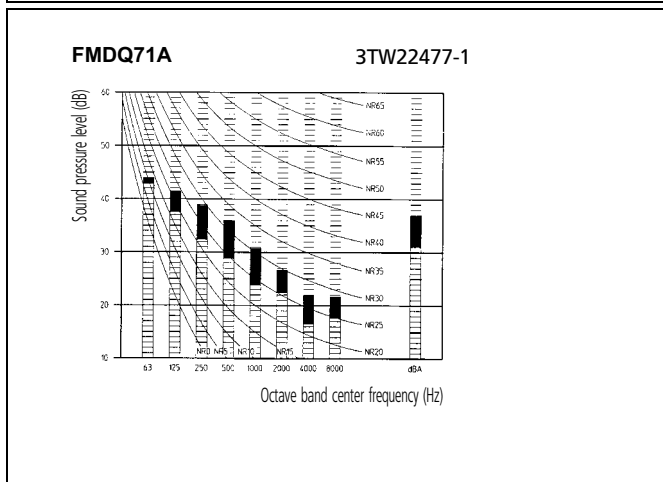
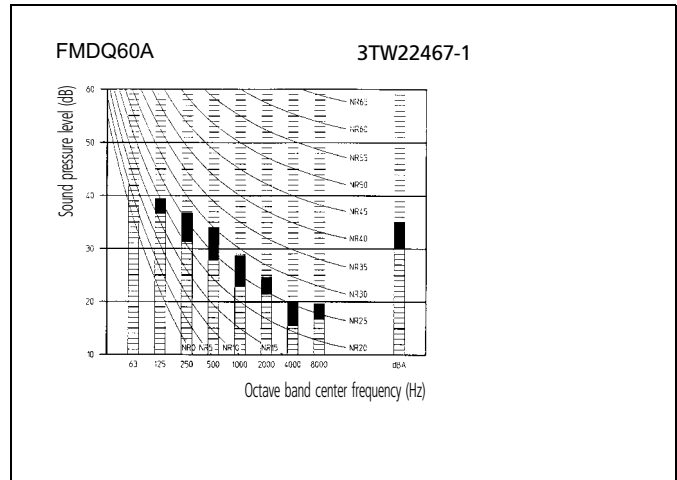
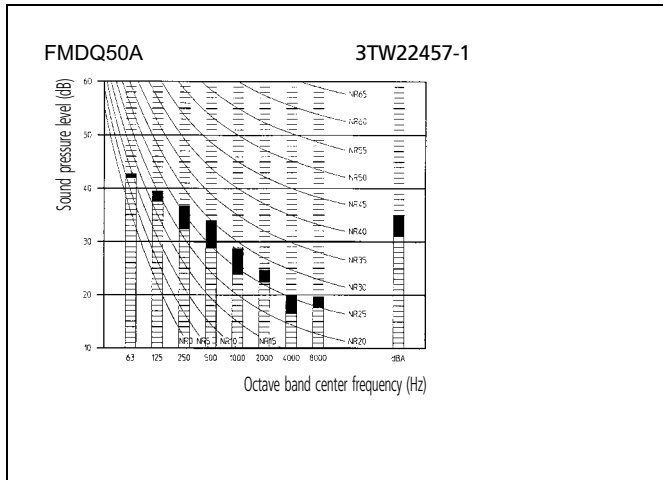
NOTES

- 1 Use copper conductors only.
- 2 When using the central remote control, see manual for connection to the unit.
- 3 When installing the electric heater, change the wiring for the heater circuit. The main powersupply has to be supplied independently.
- 4 For high or low E.S.P. operation, change the wiring connection of X4A as shown on the wiring diagram.
- 5 When connecting the input wires from outside, "forced off" or on/off" operation can be selected by remote controller. See installation manual for more details.

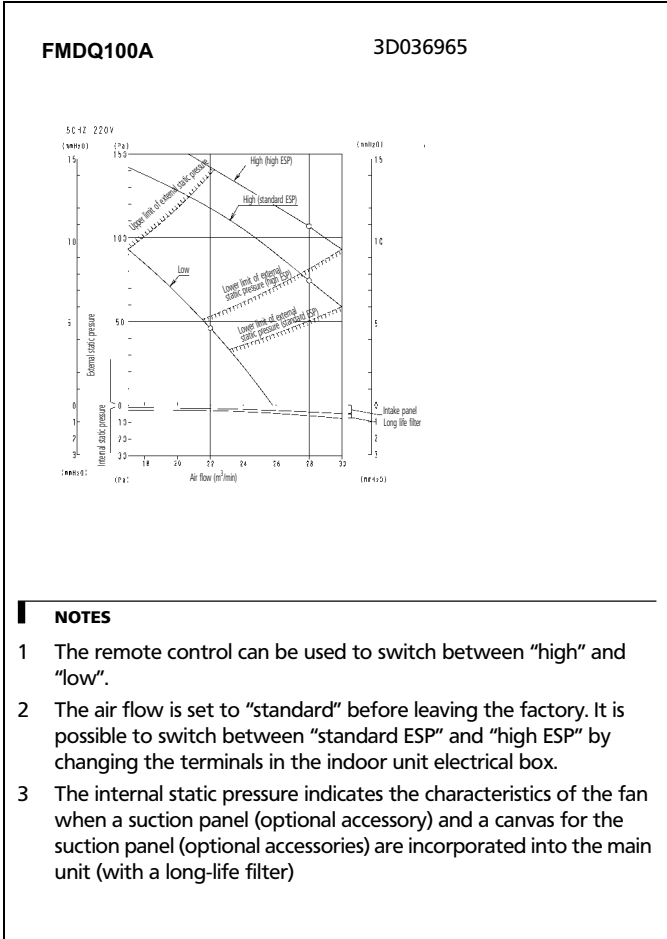
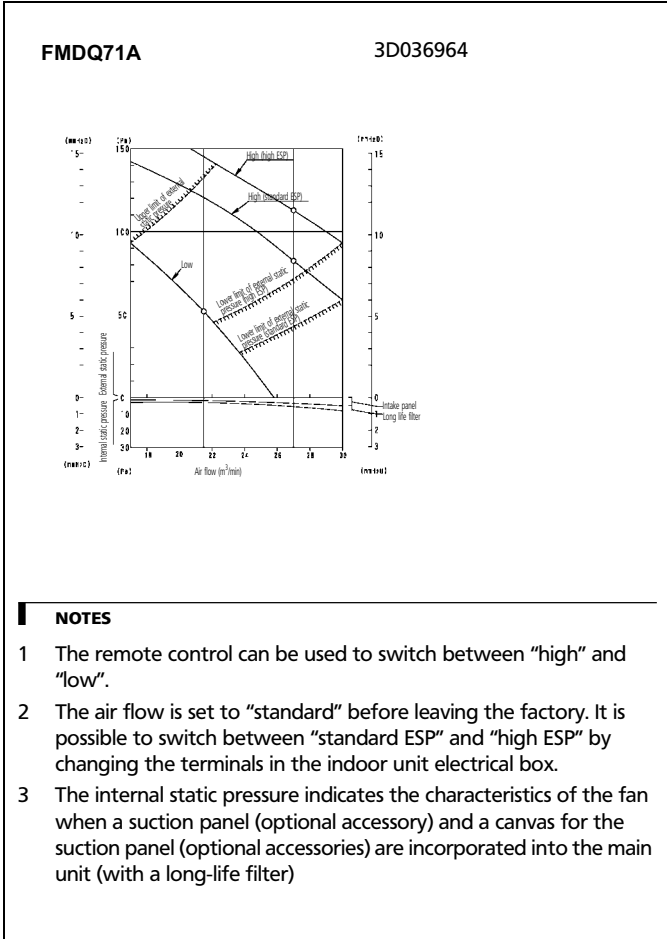
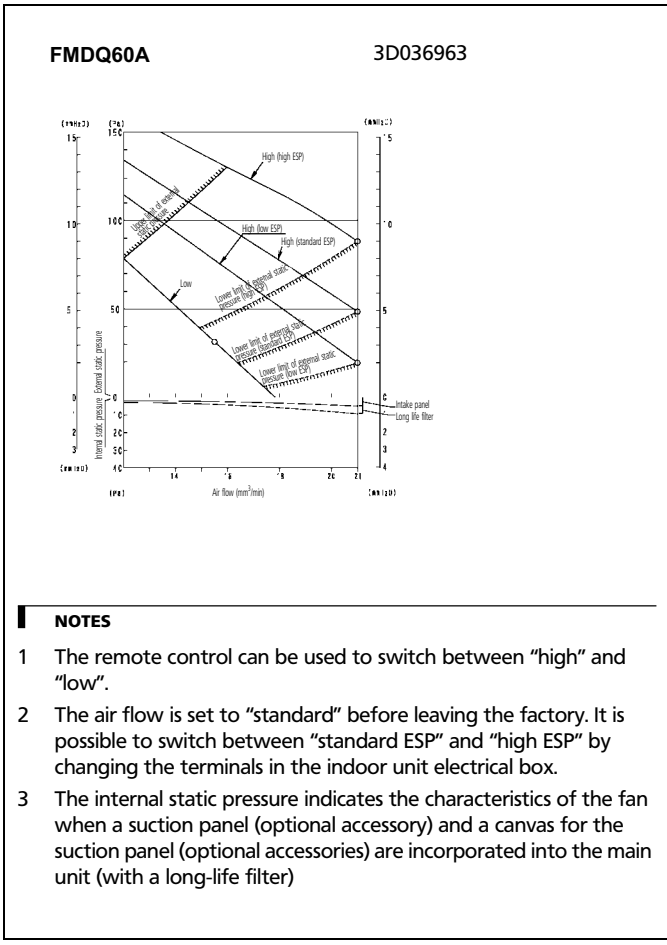
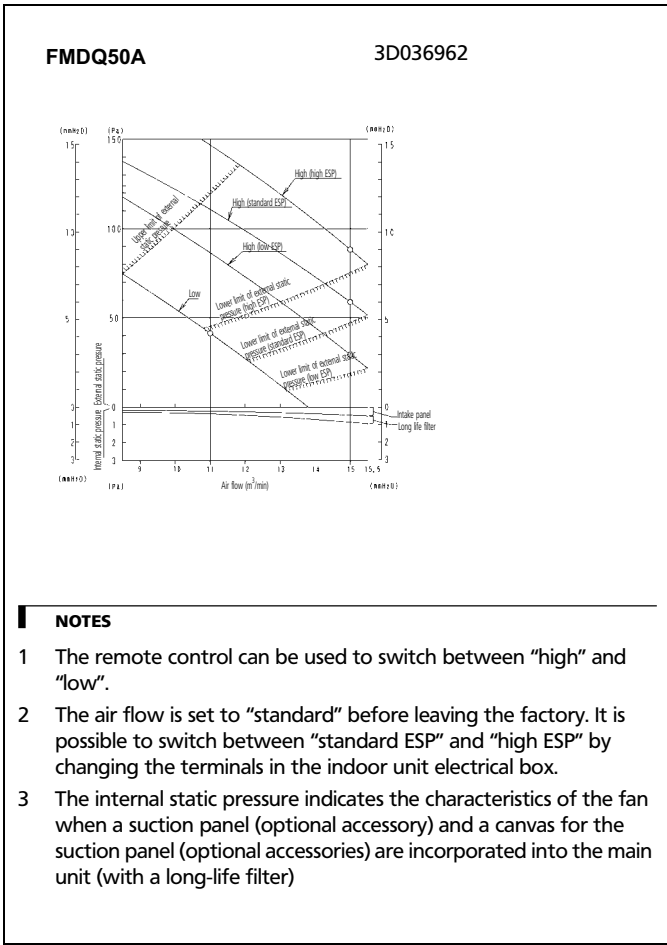
10 Sound data

10 - 1 Sound pressure spectrum

10

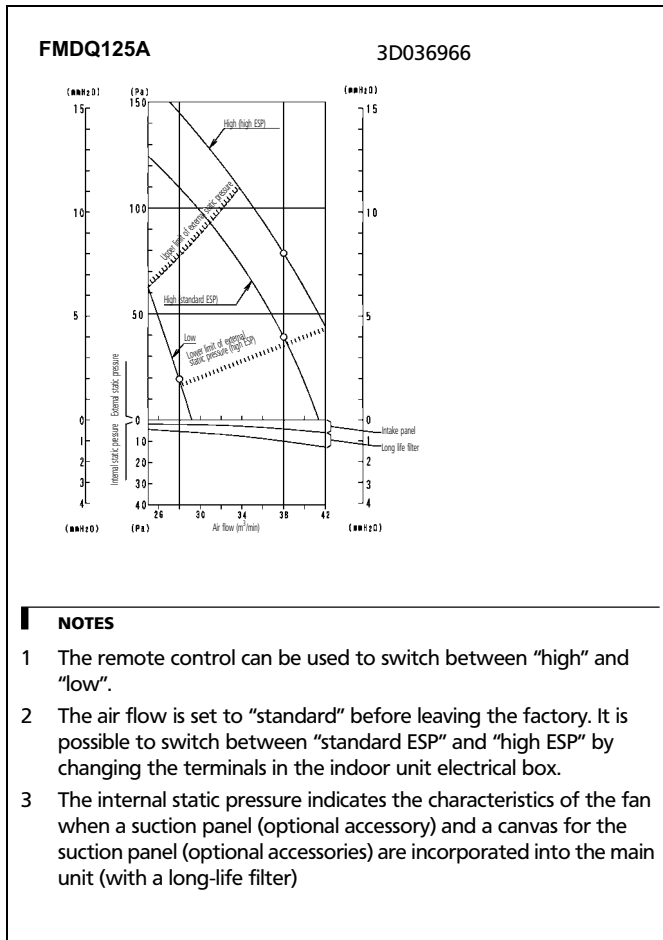


11 Fan characteristics



11 Fan characteristics

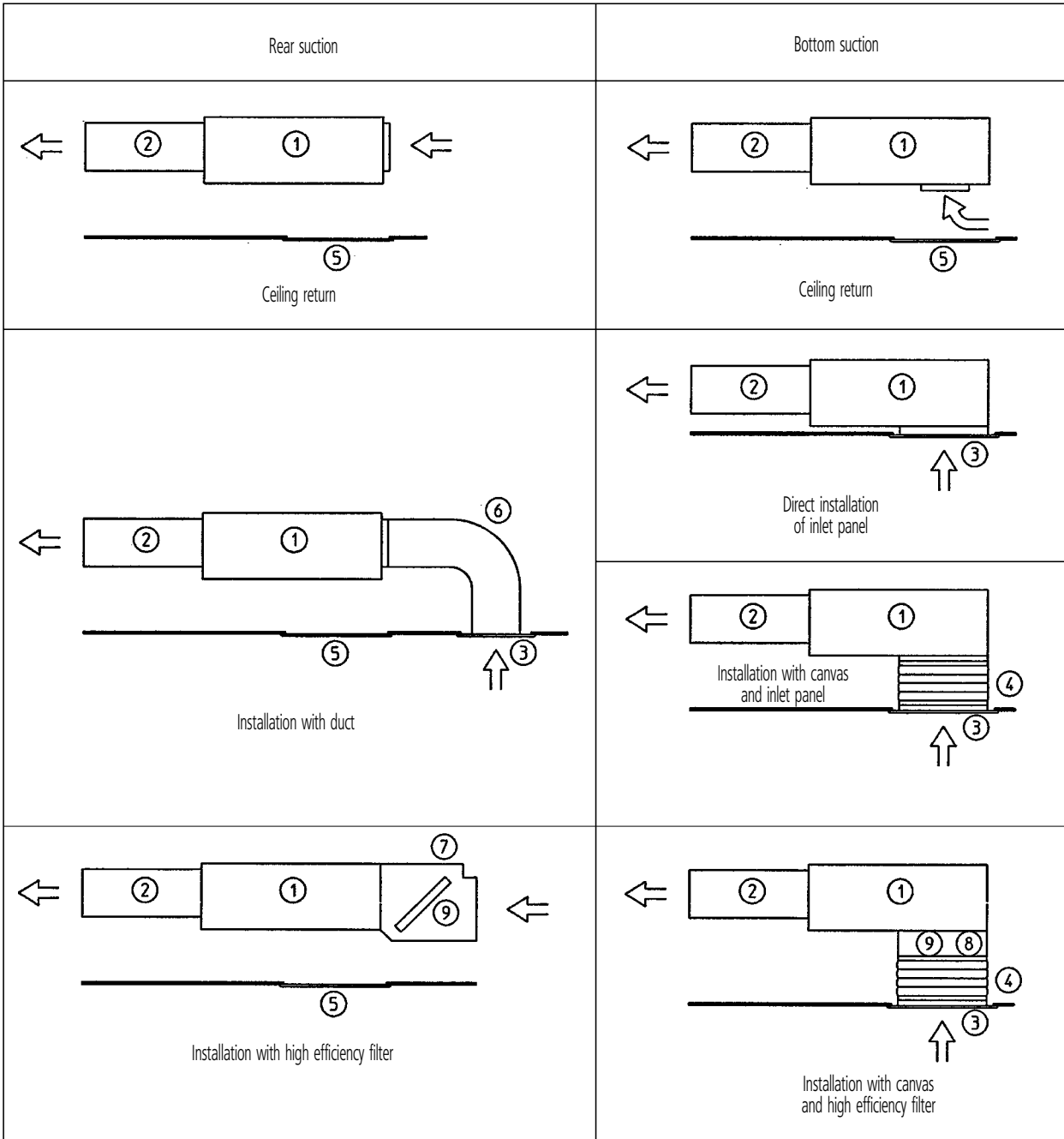
11



12 Installation

12 - 1 Installation method

FMDQ50-125A



Nr.	Name	Description
1	Main body	
2	Air outlet duct	Field supply
3	Inlet panel	Optional accessory
4	Air suction canvas	Optional accessory
5	Access panel	Optional accessory
6	Air inlet duct	Field supply
7	Filter chamber for rear suction	Optional accessory
8	Filter chamber for bottom suction	Optional accessory
9	High efficiency filter	Optional accessory

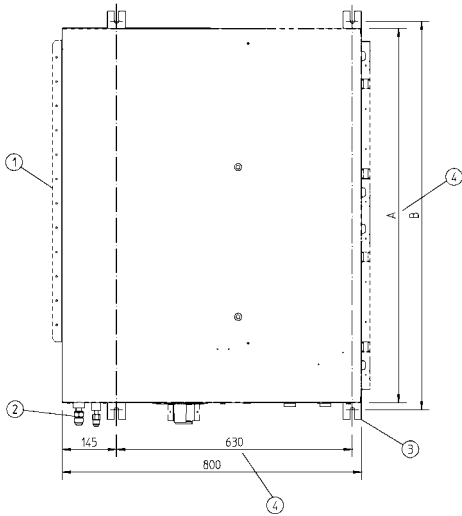
3TW22043-4A

12 Installation

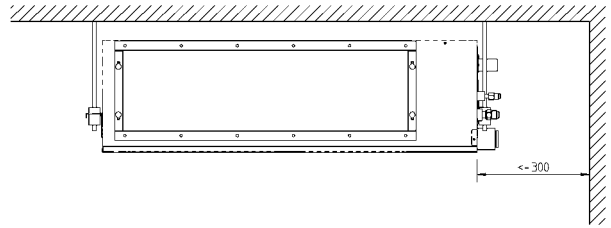
12 - 2 Filter installation method

12

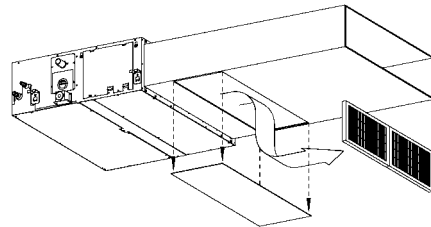
FMDQ50-125A



Suspension bolt pitch



Service space



Number	Description
1	Indoor unit
2	Pipe connections
3	Suspension bolt pitch (4x)
4	Suspension bolt pitch distance

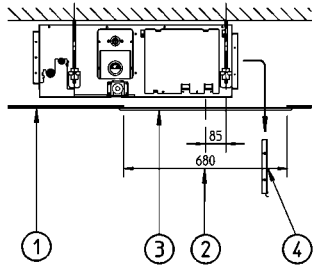
Unit	A	B
FMDQ50A7	700	750
FMDQ60A7	1000	1050
FMDQ71A7	1000	1050
FMDQ100,125A7	1400	1450

3TW22043-6D

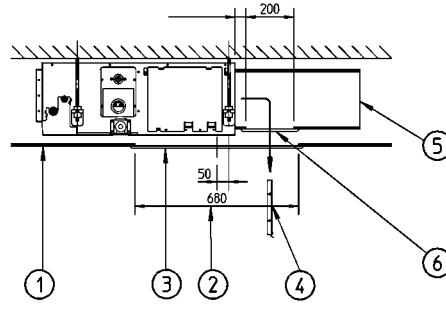
12 Installation

12 - 2 Filter installation method

FMDQ50-125A

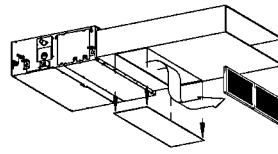


Installation without duct



Installation with duct

Number	Description
1	False ceiling
2	Ceiling opening
3	Service access panel (optional)
4	Air filter
5	Air inlet duct
6	Duct service opening



NOTES

- When installing the unit with rear suction, a service opening is necessary for the maintenance of the air filters.
- When installing the unit with a suction duct, a service opening must be provided in the duct.
- An optional service access panel is available.

Model	Service access panel
FMDQ50A7	KTBJ25K56W
FMDQ60A7	KTBJ25K80W
FMDQ71-125A7	KTBJ25K160W

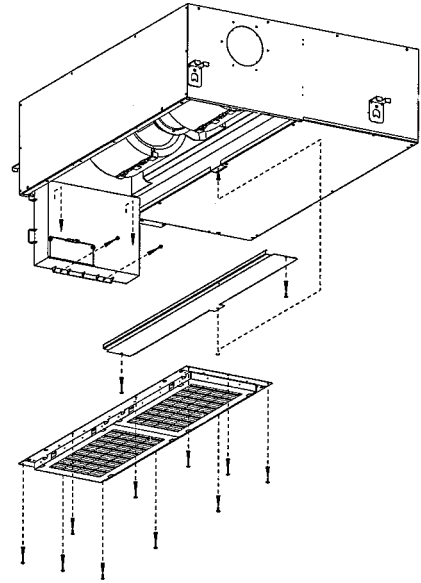
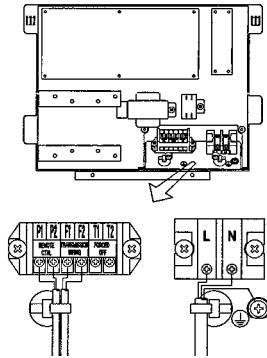
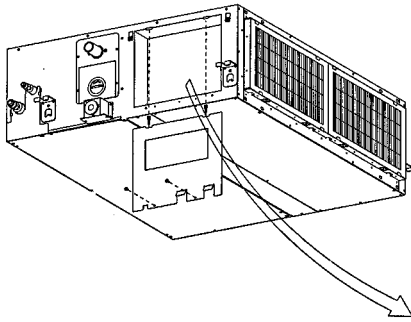
3TW25684-3

12 Installation

12 - 3 Switch box connection

12

FMDQ50-125A



3TW22043-5B



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.



Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.



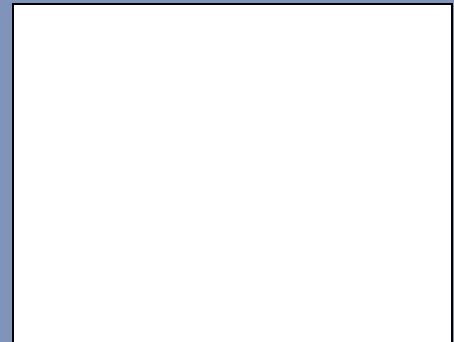
ISO14001 assures an effective environmental management system in order to help protect human health and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the environment.



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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