DAIKIN

Air Conditioning Technical Data

FXAQ-P

> FXAQ15PAV1
> FXAQ20PAV1
> FXAQ25PAV1
> FXAQ32PAV1
> FXAQ40PAV1
> FXAQ50PAV1
> FXAQ63PAV1

TABLE OF CONTENTS

FXAQ-P

1 Features

For rooms with no false ceilings nor free floor space

- Flat, stylish front panel blends easily within any interior décor and is easier to clean
- Can easily be installed in both new and refurbishment projects
- 15 class unit especially developed for small or well-insulated rooms, such as hotel bedrooms, small offices, etc.
- Reduced energy consumption thanks to specially developed DC fan motor
- The air is comfortably spread up- and downwards thanks to 5 different discharge angles that can be programmed via the remote control
- Maintenance operations can be performed easily from the front of the unit

Inverter


Home leave operation


Fan only

Auto cooling-heating changeover


Whisper quiet


Vertical auto swing


Fan speed steps

Dry programme


Air filter

Weekly timer


Infrared remote control


Wired remote control


Centralised control

Auto-restart


Self diagnosis


Multi tenant


Drain pump kit

2 Specifications

2-1 Technical Specifications					FXAQ15P	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
Cooling capacity	Sensible capacity	Nom.		kW	1.5	1.9	2.2	2.7	3.5	4.2	5.3
	Latent capacity	Nom.		kW	0.2	0.3	0.6	0.9	1.0	1.4	1.8
	Total capacity	Nom.		kW	1.7 (1)	2.2 (1)	2.8 (1)	3.6 (1)	4.5 (1)	5.6 (1)	7.1 (1)
Heating capacity	Total capacity	Nom.		kW	1.9 (2)	2.5 (2)	3.2 (2)	4.0 (2)	5.0 (2)	6.3 (2)	8.0 (2)
Power input - 50Hz	Cooling	Nom.		kW	0.025	0.029	0.034	0.035	0.020	0.039	0.060
	Heating	Nom.		kW	0.025	0.029	0.034	0.035	0.020	0.039	0.060
Dimensions	Unit	Height		mm	290						
		Width		mm	795				1,050		
		Depth		mm	238						
Weight	Unit			kg	11				14		
Casing	Colour				White (3.0Y8.5/0.5)						
Heat exchanger	Rows	Quantity			2						
	Fin pitch			mm	1.4						
	Face area			m²	0.161				0.213		
	Stages	Quantity			14						
Fan	Type				Cross flow fan						
	Air flow rate - 50Hz	Cooling	High	m³/min	7.0	7.5	8	8.5	12	15	19
			Low	m³/min	4.5		5	5.5	9	12	14
Fan motor	Model				QCL9661M				QCL9686M		
	Output	High		W	40				43		
	Drive				Direct drive						
Air filter	Type				Washable resin net						
Sound power level	Cooling	High		dBA	52.0	53.0	54.0	55.5	57.0	60.0	65.0
		Low		dBA	45				50	52	55
Sound pressure level	Cooling	Medium		dBA	-						
		High		dBA	34.0	35.0	36.0	37.5	39.0	42.0	47.0
		Low		dBA	29.0				34.0	36.0	39.0
Refrigerant	Type				R-410A						
	GWP				2,087.5						
	Control				Electronic expansion valve						
Piping connections	Liquid	Type			Flare connection						
		OD		mm	6.35						9.52
	Gas	Type			Flare connection						
		OD		mm	12.7						15.9
	Drain				VP13 (I.D. 13/O.D. 18)						
	Sound absorbing insulation				Foamed polystyrene / polyethylene						
Temperature control					Microprocessor thermostat for cooling and heating						
Safety devices	Item	01			Fuse						
Control systems	Infrared remote control				BRC7EB518						
	Wired remote control				BRC1E53A / BRC1E53B / BRC1E53C / BRC1D52						
	Simplified wired remote control for hotel applications				BRC2E52C (heat recovery type) / BRC3E52C (heat pump type)						

Standard Accessories : Installation and operation manual;

Standard Accessories : Installation panel;

Standard Accessories : Paper pattern for installation;

Standard Accessories : Insulation tape;

Standard Accessories : Clamps;

Standard Accessories : Screws;

2-2 Electrical Specifications			FXAQ15P	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
Power supply	Name		V1						
	Phase		1~						
	Frequency	Hz	50						
	Voltage	V	220-240						
Voltage range	Max.	%	10						
	Min.	%	-10						

2 Specifications

2-2 Electrical Specifications				FXAQ15P	FXAQ20P	FXAQ25P	FXAQ32P	FXAQ40P	FXAQ50P	FXAQ63P
Current - 50Hz	Minimum circuit amps (MCA)		A	0.3		0.4			0.5	0.6
	Maximum fuse amps (MFA)		A	16						
	Full load amps (FLA)	Total	A	0.2		0.3			0.4	0.5

2

Notes

(1) Cooling: indoor temp. 27°CDB, 19.0°CWB; outdoor temp. 35°CDB; equivalent piping length: 5m (horizontal)

(2) Heating: indoor temp. 20°CDB; outdoor temp. 7°CDB, 6°CWB; equivalent refrigerant piping: 5m (horizontal)

Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.

Sound levels are measured in an anechoic room.

Operation sound differs with operation and ambient conditions

The sound pressure level is measured via a microphone at 1m distance of the unit.

Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

Maximum allowable voltage range variation between phases is 2%.

MCA/MFA: MCA = 1.25 x FLA

MFA ≤ 4 x FLA

Next lower standard fuse rating minimum 16A

Select wire size based on the value of MCA

Instead of a fuse, use a circuit breaker

Contains fluorinated greenhouse gases

3 Electrical data

3 - 1 Electrical Data

FXAQ-P

Units				Power supply		IFM		Input (W)	
Model	Hz	Volts	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXAQ15P	50	220-240	Max. 264 Min. 198	0.3	16	0.040	0.2	17	25
FXAQ20P				0.3	16	0.040	0.2	19	29
FXAQ25P				0.4	16	0.040	0.3	28	34
FXAQ32P				0.4	16	0.040	0.3	30	35
FXAQ40P				0.4	16	0.043	0.3	20	20
FXAQ50P				0.5	16	0.043	0.4	33	39
FXAQ63P				0.6	16	0.043	0.5	50	60

SYMBOLS

MCA : Min. Circuit Amps (A)
MFA : Max. Fuse Amps (See note 5)
kW : Fan Motor Rated Output (kW)
FLA : Full Load Amps (A)
IFM : Indoor Fan Motor

NOTES

1. Voltage range
   Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
2. Maximum allowable voltage unbalance between phases is 2%.
3. MCA/MFA
   MCA = 1.25 x FLA
   MFA ≤ 4 x FLA
   (Next lower standard fuse rating. Min. 16A)
4. Select wire size based on the MCA.
5. Instead of fuse, use circuit breaker.

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4 Safety device settings

4 - 1 Safety Device Settings

FXAQ-P

	Safety devices		20	25	32	40	50	63
FXAQ-P	PC board fuse		250V 3.15A					
	Fan motor thermal fuse	°C	-					
	Fan motor thermal protector	°C	-					

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5 Options

5 - 1 Options

FXAQ-P

No.	Item	Type		FXAQ-P
1	Remote control	Infrared	H/P	BRC7EA618
			C/O	BRC7EA619
		Wired		BRC1C517 • BRC1D52 • BRC1E51A7
				-
2	Simplified remote control			-
3	Remote control for hotel use			-
4	Adapter for wiring			-
5-1	Wiring adapter for electrical appendices (1)			* KRP2A51
				* KRP2A61
5-1	Wiring adapter for electrical appendices (2)			*KRP4AA51
6	Remote sensor			KRCS01-1B
7	Installation box for adapter PCB.			Note 2,3 KRP4AA93
8	Central remote control			DCS302C51
				DCS302CA61
8-1	Electrical box with earth terminal (3 blocks)			KJB311AA
9	Unified on/off controller			DCS301B51
				DCS301BA61
9-1	Electrical box with earth terminal (2 blocks)			KJB212AA
9-2	Noise filter (for electromagnetic interface use only)			KEK26-1A
10	Schedule timer			DST301B51
				DST301BA61
11	External control adapter for outdoor unit (must be installed on indoor units)			*DTA104A51
				*DTA104A61
12	Adapter for multi tenant			*DTA114A61

NOTES

1. Installation box (No. 7) is necessary for each adapter marked *.
2. Up to 2 adapters can be fixed for each installation box.
3. Only one installation box can be installed for each indoor unit.
4. Up to 2 installation boxes can be installed for each indoor unit.
5. Installation box (No. 7) is necessary for second adapter.
6. Inslallation box (No. 7) is necessary for each adapter.

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6 Capacity tables

6 - 1 Cooling Capacity Tables

FXAQ-P

TC: Total Capacity; kW
SHC: Sensible heat capacity; kW

Unit Size	Outdoor °CDB	Indoor air temperature: °CDB													
		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
15	35.0	1.1	1.1	1.4	1.4	1.6	1.4	1.7	1.5	1.8	1.5	1.8	1.4	1.9	1.4
20	35.0	1.5	1.5	1.8	1.8	2.1	1.9	2.2	1.9	2.3	1.9	2.4	1.9	2.4	1.8
25	35.0	1.9	1.8	2.3	2.0	2.6	2.2	2.8	2.2	3.0	2.2	3.0	2.2	3.1	2.1
32	35.0	2.4	2.2	2.9	2.4	3.4	2.6	3.6	2.7	3.8	2.7	3.9	2.6	4.0	2.5
40	35.0	3.0	2.9	3.6	3.3	4.2	3.7	4.5	3.5	4.7	3.6	4.9	3.4	5.0	3.1
50	35.0	3.8	3.2	4.5	3.7	5.2	4.1	5.6	4.2	5.9	4.3	6.0	4.1	6.2	3.8
63	35.0	4.8	4.1	5.7	4.6	6.6	5.1	7.1	5.3	7.5	5.4	7.7	5.2	7.8	4.7

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6 Capacity tables

6 - 2 Heating Capacity Tables

FXAQ-P

Unit Size	Outdoor air temp.		INDOOR AIR TEMPERATURE: °CDB					
			16.0	18.0	20.0	21.0	22.0	24.0
	°CDB	°CWB	kW	kW	kW	kW	kW	kW
15	7.0	6.0	2.0	2.0	1.9	1.8	1.8	1.7
20	7.0	6.0	2.6	2.6	2.5	2.4	2.3	2.2
25	7.0	6.0	3.4	3.4	3.2	3.1	3.0	2.8
32	7.0	6.0	4.2	4.2	4.0	3.9	3.7	3.5
40	7.0	6.0	5.2	5.2	5.0	4.8	4.7	4.4
50	7.0	6.0	6.6	6.6	6.3	6.1	5.9	5.5
63	7.0	6.0	8.4	8.4	8.0	7.7	7.5	7.0

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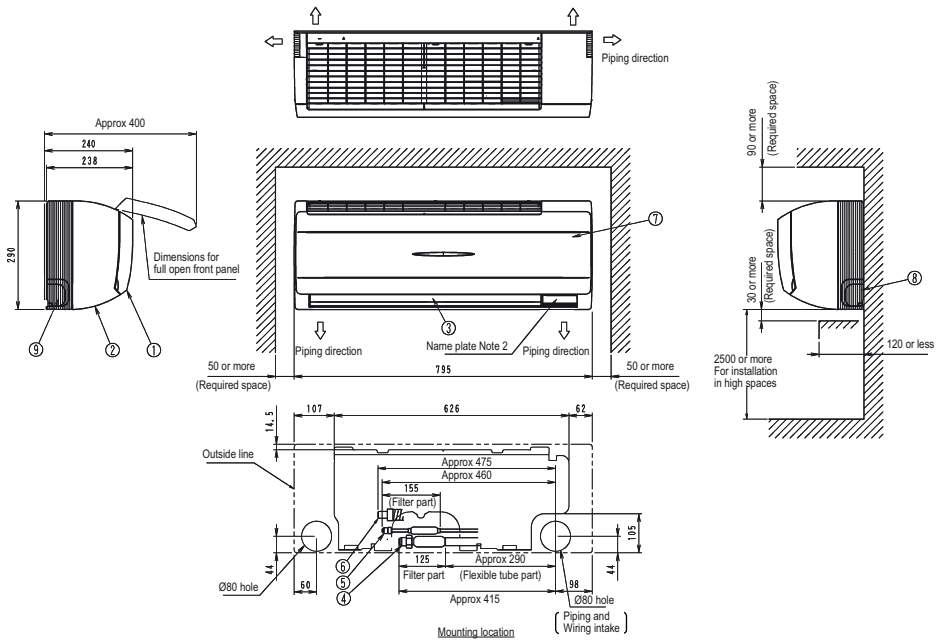
7 Dimensional drawings

7 - 1 Dimensional Drawings

FXAQ15-32P



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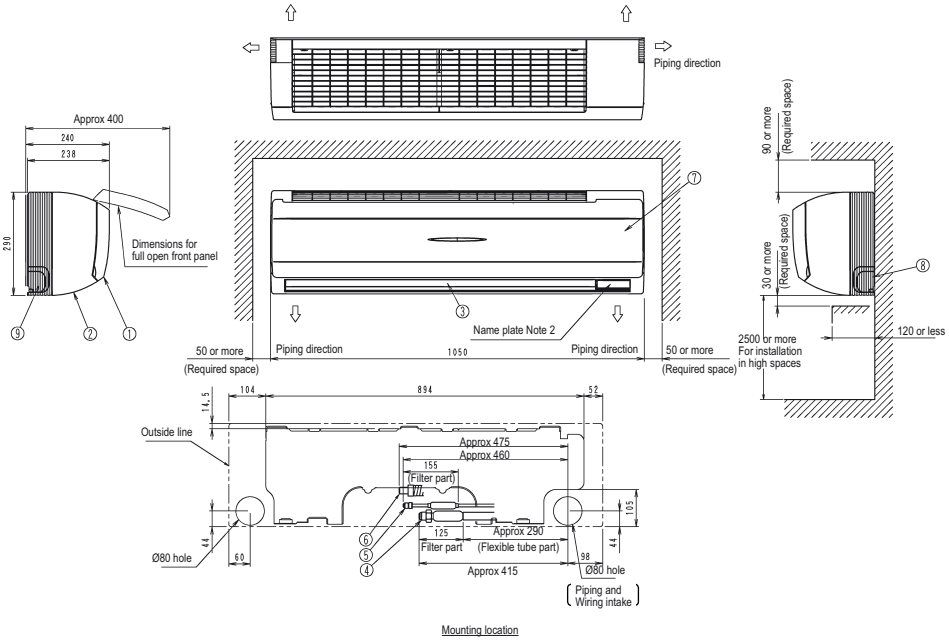
Nr	Name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	Ø12.7mm Flare connection
5	Liquid pipe	Ø6.4mm Flare connection
6	Drain hose	VP13 (External dia. Ø18)
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

NOTES

1 Location of unit's of Name Plate: Right side surface of casing.

2 In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.

FXAQ40-50P



3D065065A

Nr	Name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	Ø12.7mm Flare connection
5	Liquid pipe	Ø6.4mm Flare connection
6	Drain hose	VP13 (External dia. Ø18)
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

NOTES

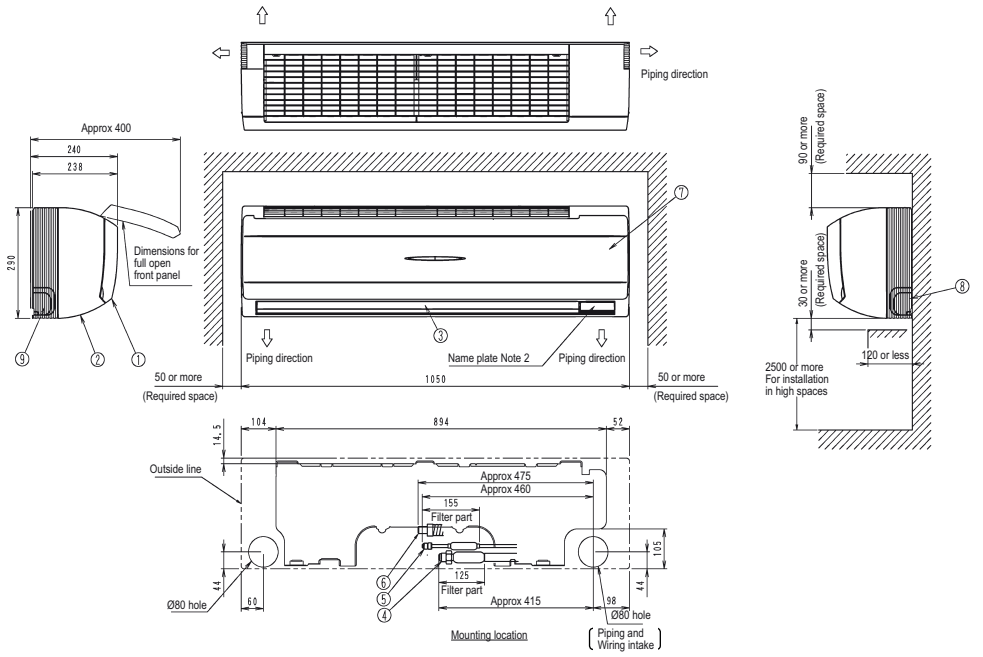
1 Location of unit's of Name Plate: Right side surface of casing.

2 In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.

7 Dimensional drawings

7 - 1 Dimensional Drawings

FXAQ63P



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Nr	Name	Description
1	Front panel	
2	Front grill	
3	Air outlet	
4	Gas pipe	Ø15.9mm Flare connection
5	Liquid pipe	Ø9.5mm Flare connection
6	Drain hose	VP13 (External dia. Ø18)
7	Grounding terminal	M4
8	Right side pipe connection hole	
9	Left side pipe connection hole	

NOTES

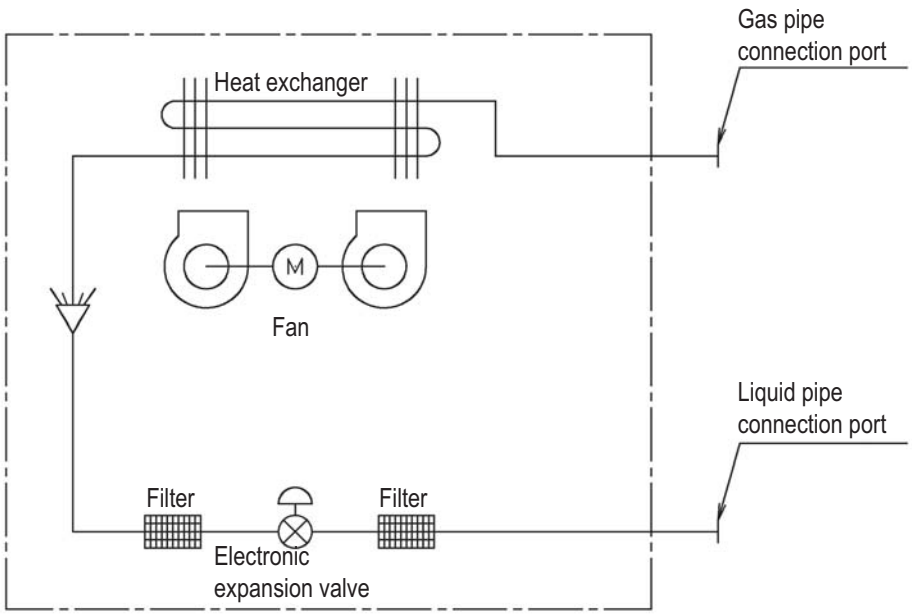
1 Location of unit's of Name Plate: Right side surface of casing.

2 In case of using infrared remote control, this position will be a signal receiver. Refer to the drawing of infrared remote control in detail.

8 Piping diagrams

8 - 1 Piping Diagrams

FXAQ-P



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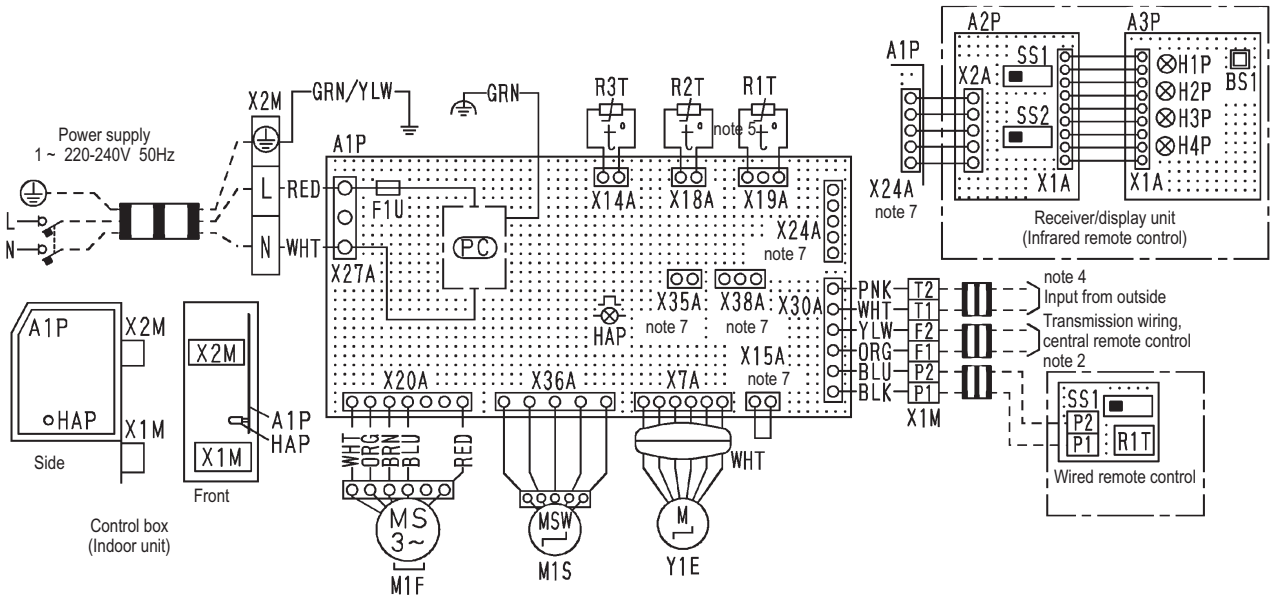
9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

FXAQ-P



Indoor unit		Receiver/display unit (attached to infrared remote control)		Connector for optional parts	
A1P	Printed circuit board	A2P	Printed circuit board	X15A	Connector (float switch)
F1U	Fuse (T, 3.15AH, 250V)	A3P	Printed circuit board	X24A	Connector (infrared remote control)
HAP	Light emitting diode (service monitor green)	BS1	Push button (on/off)	X35A	Connector (group control adapter)
M1F	Motor (indoor fan)	H1P	Light emitting diode (on-red)	X38A	Connector (adapter for multi tenant)
M1S	Motor (swing flap)	H2P	Light emitting diode (timer-green)		
R1T	Thermistor (air)	H3P	Light emitting diode (filter sign-red)		
R2T	Thermistor (coil liquid pipe)	H4P	Light emitting diode (defrost-orange)		
R3T	Thermistor (coil gas pipe)	SS1	Selector switch (main/sub)		
X1M	Terminal block (control)	SS2	Selector switch (wireless address set)		
X2M	Terminal block (power)	Wired remote control			
Y1E	Electronic expansion valve	R1T	Thermistor (air)		
(PC)	Power circuit	SS1	Select switch (main/sub)		

	GRN: green
PNK: pink	WHT: white
YLW: yellow	ORG: orange
BLU: blue	BLK: black
RED: red	BRN: brown

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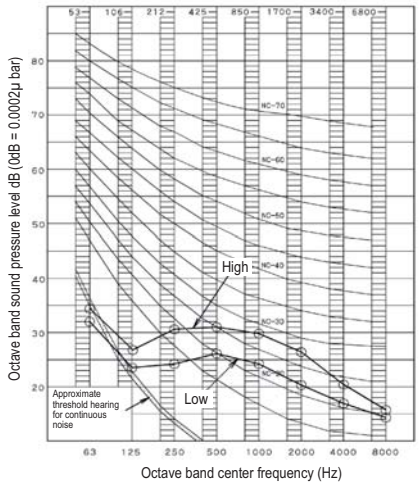
NOTES

1. □□□□: terminal, ⊡⊡: connector, ⏚: protective earth (screw), ▬▮▬: field wiring, ⫼: connector, ⏚: noiseless earth
2. In case using central remote control, connect it to the unit in accordance with the attached installation manual.
3. ⊡ shows short circuit connector.
4. When connecting the input wires from outside, forced off or on/off control operation can be selected by remote control. In details, refer to the installation manual attached to the unit.
5. Remote control model varies according to the combination system, confirm engineering data and catalogs, etc. before connecting.
6. Confirm the method of setting the selector switch (SS1, SS2) of wired remote control and infrared remote control by installation manual and engineering data, etc.
7. X15A, X24A, X35A and X38A are connected when the optional accessories are used.

10 Sound data

10 - 1 Sound Pressure Spectrum

FXAQ15P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	34.0	29.0
C	38.3	34.5

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
52.0	45.0

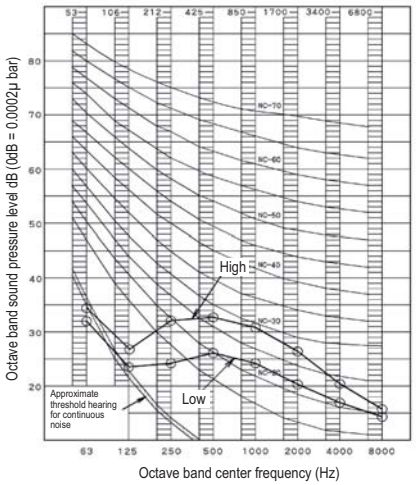
4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

FXAQ20P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	35.0	29.0
C	39.5	34.5

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
53.0	45.0

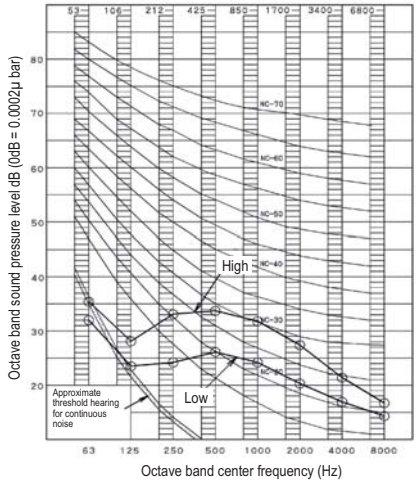
4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

FXAQ25P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	36.0	29.0
C	40.5	34.5

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
54.0	45.0

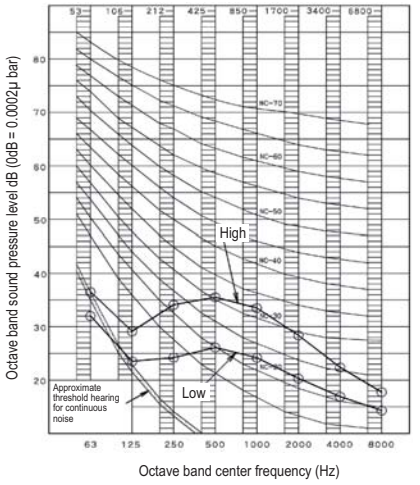
4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

FXAQ32P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	37.5	29.0
C	43.0	34.5

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
55.5	45.0

4 Measuring place: anechoic chamber

5 Location of microphone

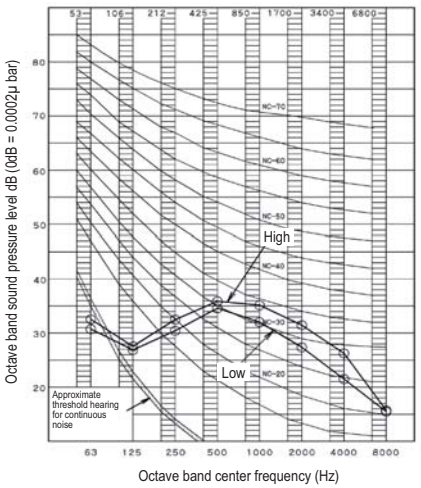
Microphone

Note: Operation noise differs with operation and ambient conditions.

10 Sound data

10 - 1 Sound Pressure Spectrum

FXAQ40P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	39.0	34.0
C	41.0	39.0

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
57.0	50.0

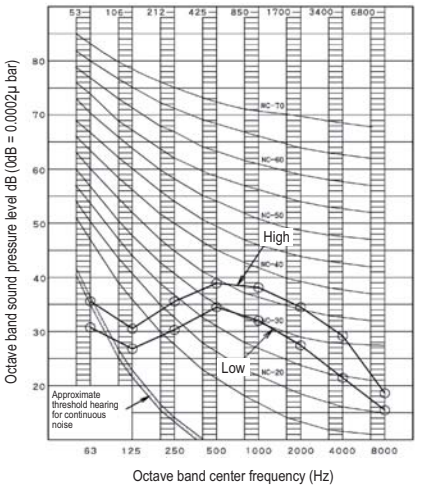
4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

FXAQ50P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	42.0	36.0
C	44.0	39.0

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
60.0	52.0

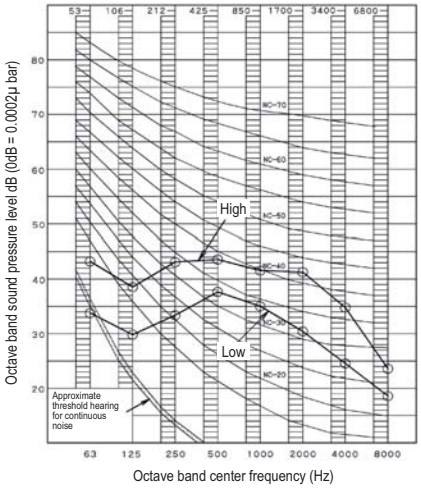
4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

FXAQ63P



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NOTES

1 Over All (dB):

Scale	Mode	
	High	Low
A	47.0	39.0
C	49.8	42.0

(B,G,N is already rectified)

2 Operating conditions:
Power source: 220-240V 50Hz
Cooling:
return air temperature: 27°C DB, 19°C WB
outdoor temperature: 35°C DB, 24°C WB
Heating:
return air temperature: 20°C DB, 15°C WB
outdoor temperature: 7°C DB, 6°C WB

3 Power level (dB)

Mode	
High	Low
65.0	55.0

4 Measuring place: anechoic chamber

5 Location of microphone

Microphone

Note: Operation noise differs with operation and ambient conditions.

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