

Air Conditioning Technical Data

FXAQ-A



> FXAQ15AUV1B
> FXAQ20AUV1B
> FXAQ25AUV1B
> FXAQ32AUV1B
> FXAQ40AUV1B
> FXAQ50AUV1B

> FXAQ63AUV1B

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FXAQ-A

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1 Features

For rooms with no false ceilings nor free floor space

- Å Flat, stylish front panel blends easily within any interior décor and is easier to clean
- Å Can easily be installed in both new and refurbishment projects
- Å Reduced energy consumption thanks to specially developed DC fan motor
- Å The air is comfortably spread up- and downwards thanks to 5 different discharge angles that can be programmed via the remote control
- Å Maintenance operations can be performed easily from the front of the unit

1



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					FXAQ15A	FXAQ20A	FXAQ25A	FXAQ32A	FXAQ40A	FXAQ50A	FXAQ63A
Power input - 50Hz	Cooling	Nom.	kW		0.02		0.03		0.02	0.03	0.05
	Heating	Nom.	kW		0.03			0.04	0.02	0.04	0.06
Dimensions	Unit	Height	mm		290						
		Width	mm		795				1,050		
		Depth	mm		266				269		
Weight	Unit	kg			12				15		
Casing	Colour				White						
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	8.4	9.1	9.4	9.8	12.2	14.4	18.3
			Low	m³/min	7.0				9.7	11.5	13.5
Fan motor	Model				KFD-280-40-8K				ARW30W8P43DK		
	Drive				Direct drive						
Air filter	Type				Washable resin net						
Sound power level	Cooling	High	dBA		51.0	52.0	53.0	55.0		58.0	63.0
Sound pressure level	Cooling	High	dBA		32.0	33.0	35.0	37.5	37.0	41.0	46.5
		Low	dBA		28.5				33.5	35.5	38.5
	Heating	High	dBA		33.0	34.0	36.0	38.5	38.0	42.0	47.0
		Low	dBA		28.5				33.5	35.5	38.5
Refrigerant	Type				R-410A						
	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. 15/O.D. 18)					
Sound absorbing insulation					Foamed polystyrene / polyethylene						
Control systems	Infrared remote control				BRC7EA628 / BRC7EA629						
	Wired remote control				BRC1E61						
	Simplified wired remote control for hotel applications				-						

Standard Accessories : Installation and operation manual; Quantity : 1;

Standard Accessories : Installation panel; Quantity : 1;

Standard Accessories : Paper pattern for installation; Quantity : 1;

Standard Accessories : Insulation tape; Quantity : 1;

Standard Accessories : Clamps; Quantity : 1;

Standard Accessories : Screws; Quantity : 1;

2-2 Electrical Specifications				FXAQ15A	FXAQ20A	FXAQ25A	FXAQ32A	FXAQ40A	FXAQ50A	FXAQ63A
Power supply	Name			V1						
	Phase			1~						
	Frequency		Hz	50						
	Voltage		V	220-240						
Current - 50Hz	Minimum circuit amps (MCA)		A	0.3		0.4			0.5	0.7
	Maximum fuse amps (MFA)		A	16						
	Full load amps (FLA)	Total	A	0.2		0.3			0.4	0.6

2 Specifications

Notes

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

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: $MCA = 1.25 \times FLA$

Contains fluorinated greenhouse gases

Instead of a fuse, use a circuit breaker

Select wire size based on the value of MCA

Next lower standard fuse rating minimum 16A

$MFA \leq 4 \times FLA$

3 Electrical data

3 - 1 Electrical Data

CAUTION!

Indoor unit				Power supply		IFM		Input (W)	
Model name	Hz	Voltage	Voltage range	MCA	MFA	kW	FLA	Cooling	Heating
FXAQ15AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,30	16	0,040	0,2	17	25
FXAQ20AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,30	16	0,040	0,2	19	29
FXAQ25AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,40	16	0,040	0,3	28	34
FXAQ32AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,40	16	0,040	0,3	30	35
FXAQ40AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,40	16	0,043	0,3	20	20
FXAQ50AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,50	16	0,043	0,4	33	39
FXAQ63AUV1B	50	220~240	MAX. 50Hz 264V MIN. 50Hz 198V	0,70	16	0,043	0,6	50	60

Notes

- 1) The units are suitable for use with electrical systems in which the voltage supplied to the unit terminals is not below or above the listed range limits.
- 2) The maximum allowable voltage that is unbalanced between phases is ·2·%.
- 3) MCA/MFA
MCA = 1.25 X FLA
MFA ≤ 4 X FLA
- 4) Select the wire size according to the MCA.
- 5) Use a circuit breaker instead of a fuse.

Symbols

- MCA: Minimum Circuit Ampere [A]
- MFA: Maximum Fuse Ampere [A]
- kW: Fan motor rated output [kW]
- FLA: Full Load Ampere [A]
- IFM: Indoor fan motor

05ММОНЛО

4 Safety device settings

4 - 1 Safety Device Settings

С-!v-!

4

Safety devices		15	20	25	32	40	50	60
FXAQ~AUV1B	PCB fuse	250V, 3.15A						

п5ммнумм

5 Options

5 - 1 Options

С-!v-!

	Option kit	Product name	Availability
			VRV
			FXAQ15AUV1B
			FXAQ20AUV1B
			FXAQ25AUV1B
			FXAQ32AUV1B
			FXAQ40AUV1B
			FXAQ50AUV1B
			FXAQ63AUV1B
Individual control systems	Wired remote control	BRC1H51W/S/K, BRC1E53A/B/C	✓
	Wireless remote control (H/P)	BRC7EA628, BRC7EA629	✓
Centralised control systems	Central remote control	DCS302C51/DCS302CA61	✓
	Unified ON/OFF controller	DCS301A51/DCS301BA61	✓
	Schedule timer	DST301B51/DST301BA61	✓
Other options	Adaptor for wiring	KRP1B56	✓
	Wiring adaptor for electrical appendices (1)	KRP2A51(3), KRP2A61(3)	✓
	Wiring adaptor for electrical appendices (2)	KRP4AA51(3)	✓
	Remote sensor	KRCS01-1B	✓
	Installation box for adaptor PCB	KRP4AA93(1)(2)	✓
	Electrical box with earth terminal (2 blocks)	KJB212AA	✓
	Electrical box with earth terminal (3 blocks)	KJB311AA	✓
	Noise filter (for electromagnetic interface only)	KEK26-1A	✓
	External control adaptor for outdoor unit	DTA104A51, DTA104A61	✓
	Must be installed on the outdoor unit		
	Adaptor for multi-tenant applications	DTA114A61	✓
	Must be installed on the outdoor unit		
	Wire harness	EKEWTSC (4)	✓
	On/OFF thermostat (wireless)	K.RSS (5)	✓

† Up to (2) adaptor PCBs can be installed per installation box.

† Only one installation box can be installed per indoor unit.

† This option needs to be installed together with installation box (KRP4AA93).

† Can only be used in combination with wireless room thermostat (K.RSS).

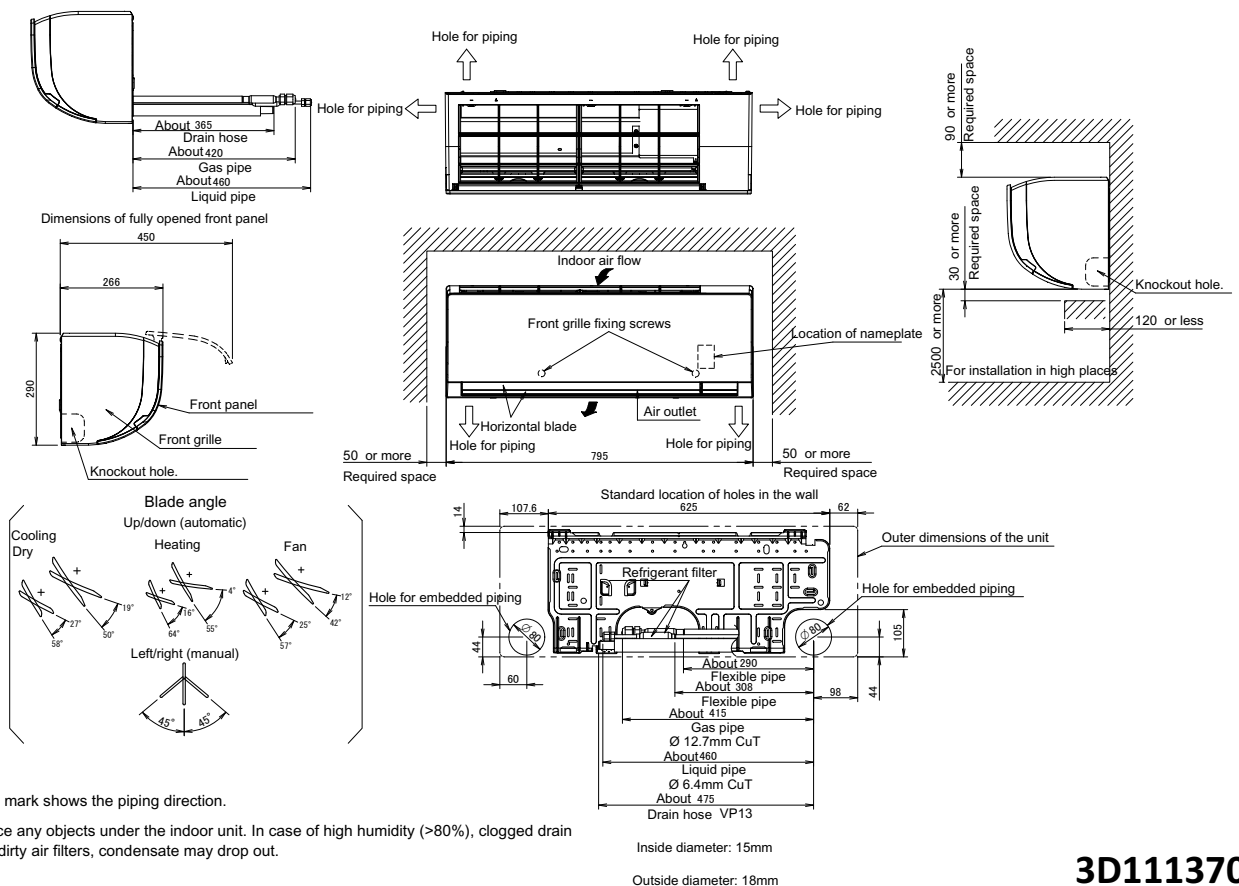
† This option needs to be ordered together with (EKEWTSC).

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6 Dimensional drawings

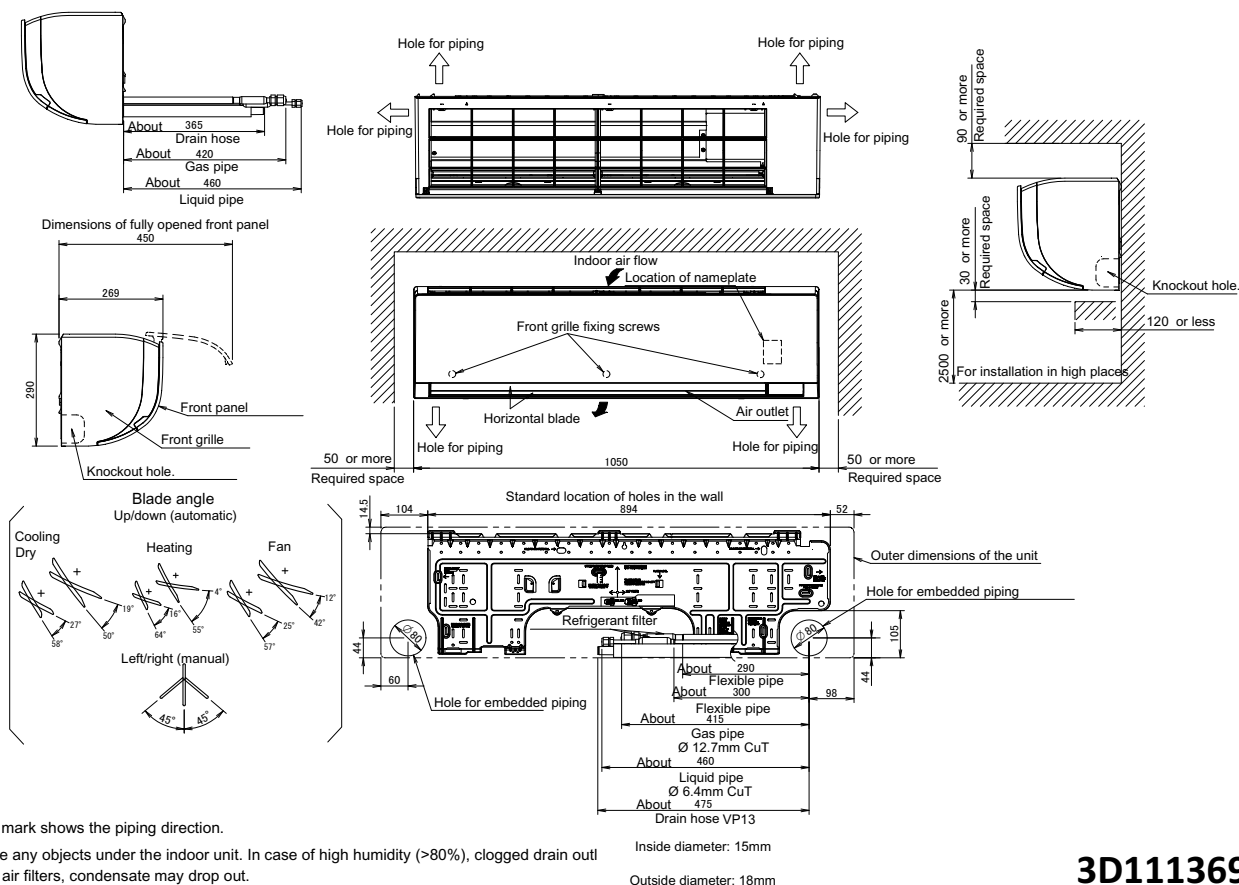
6 - 1 Dimensional Drawings

FXAQ15-32A



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FXAQ40-50A

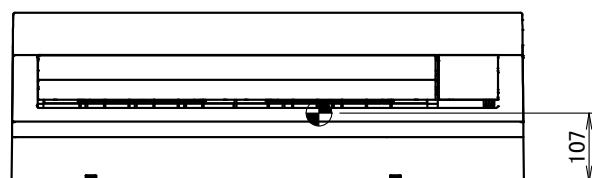
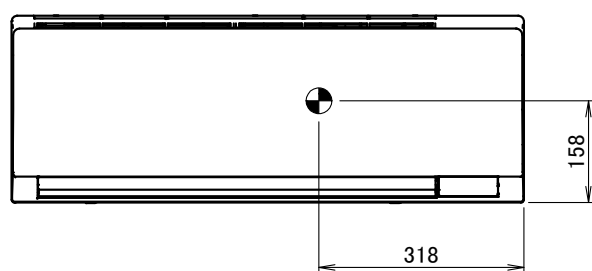


3D111369

7 Centre of gravity

7 - 1 Centre of Gravity

FXAQ15-32A

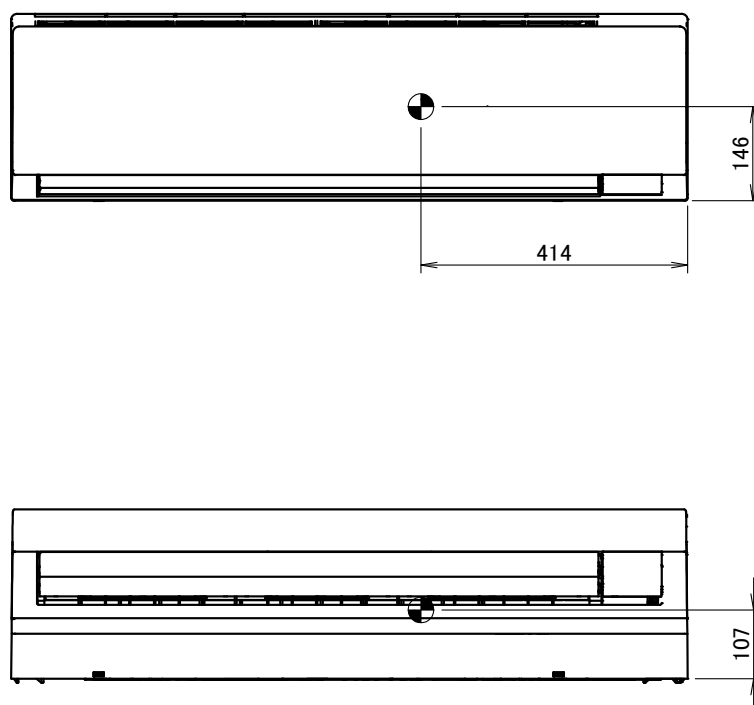


4D112526

7 Centre of gravity

7 - 1 Centre of Gravity

FXAQ40-63A



4D112525

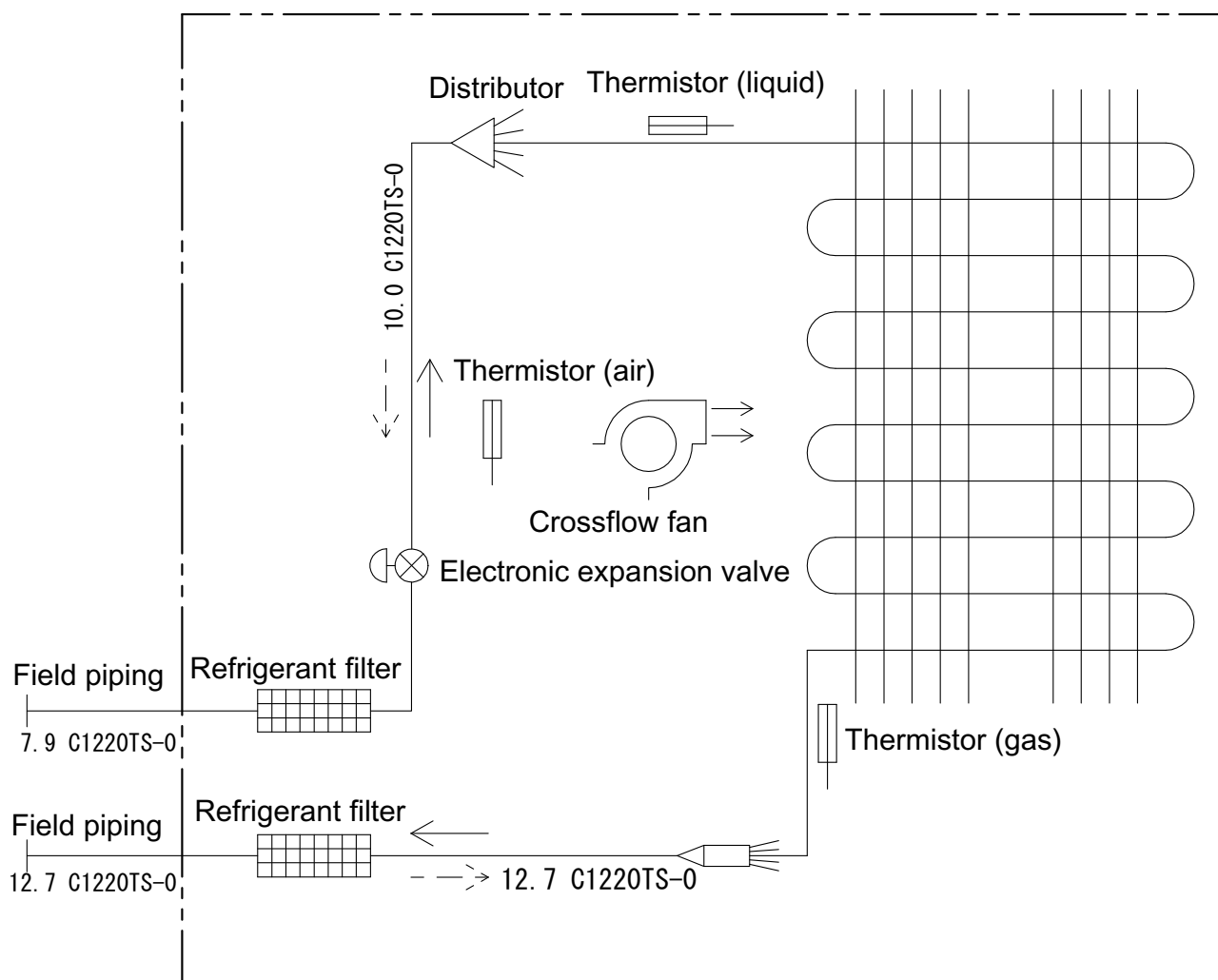
8 Piping diagrams

8 - 1 Piping Diagrams

FXAQ-A

8

Indoor unit



Refrigerant flow

—> Cooling

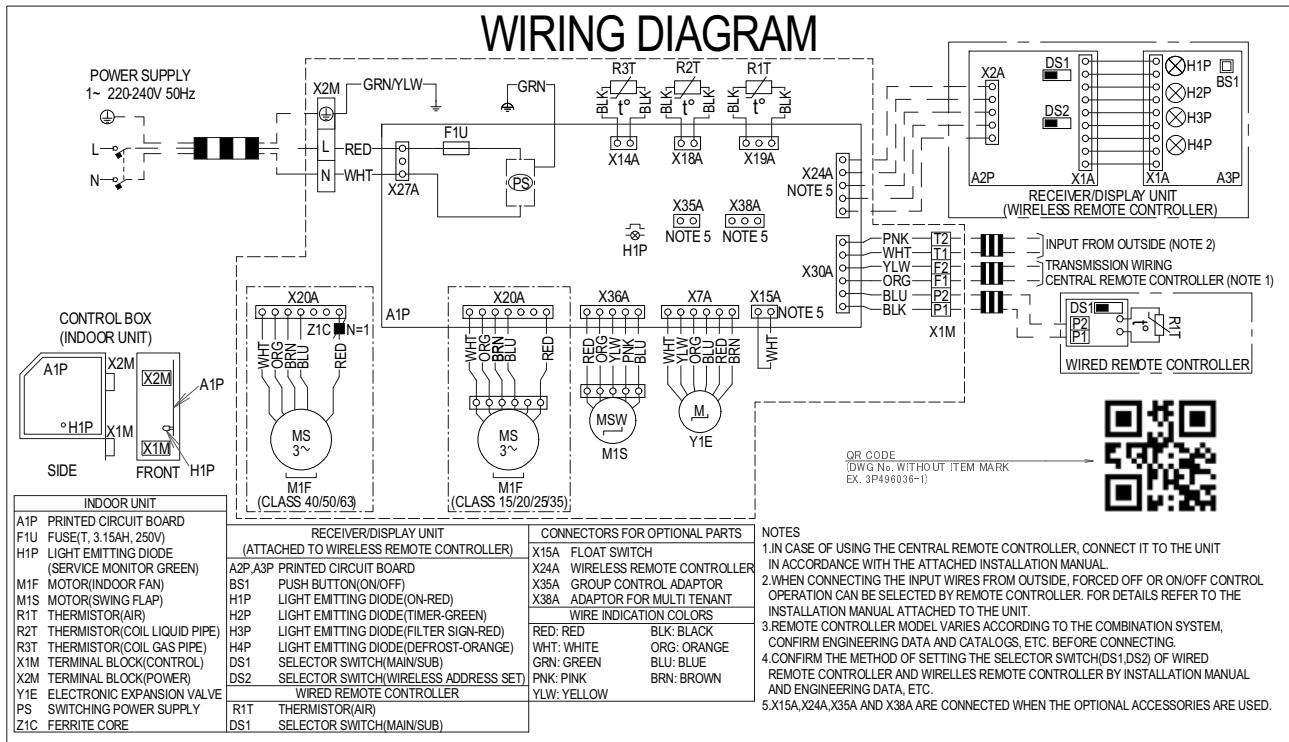
- -> Heating

4D112474

9 Wiring diagrams

9 - 1 Wiring Diagrams - Single Phase

FXAQ-A



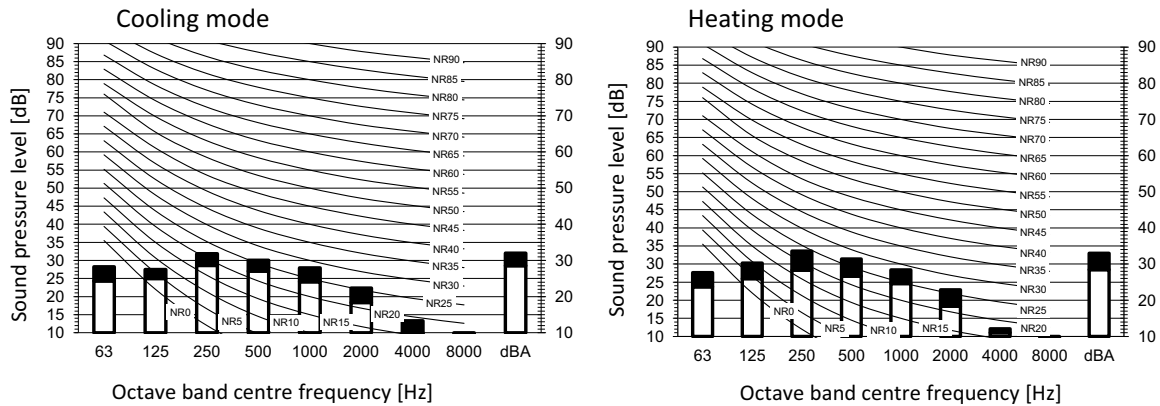
3D108400-1A

10 Sound data

10 - 1 Sound Pressure Spectrum

10

FXAQ15A



Legend

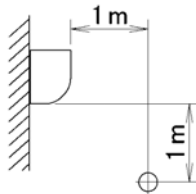
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling		
Total dB		
A	B	C
dBA	32	28,5

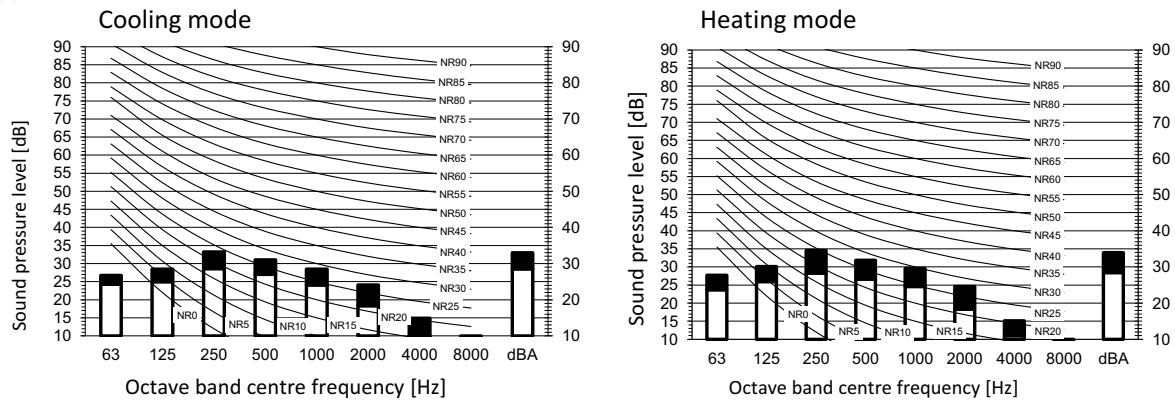
Heating		
Total dB		
A	B	C
dBA	33	28,5

Notes

- 1 . Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 2 . Background noise already taken into account.
- 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

3D112488

FXAQ20A



Legend

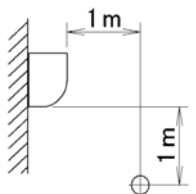
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling		
Total dB		
A	B	C
dBA	33	28,5

Heating		
Total dB		
A	B	C
dBA	34	28,5

Notes

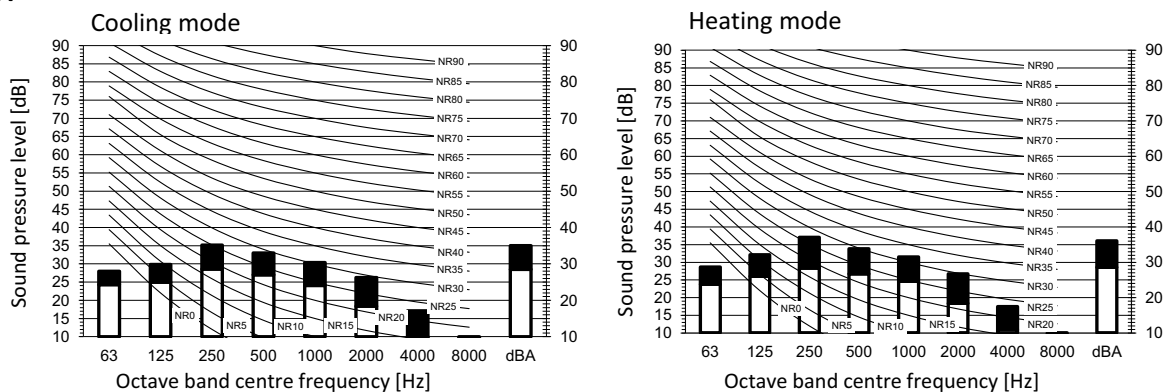
- 1 . Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 2 . Background noise already taken into account.
- 3 . Operating noise varies depending on operation and ambient conditions.
- 4 . The operation noise measuring method is in accordance with JISC9612.
- 5 . Measuring location: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

3D112489

10 Sound data

10 - 1 Sound Pressure Spectrum

FXAQ25A



Legend

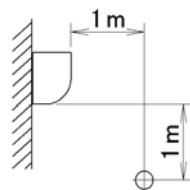
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling

Total dB

A	B	C
dBA	35	28,5

Heating

Total dB

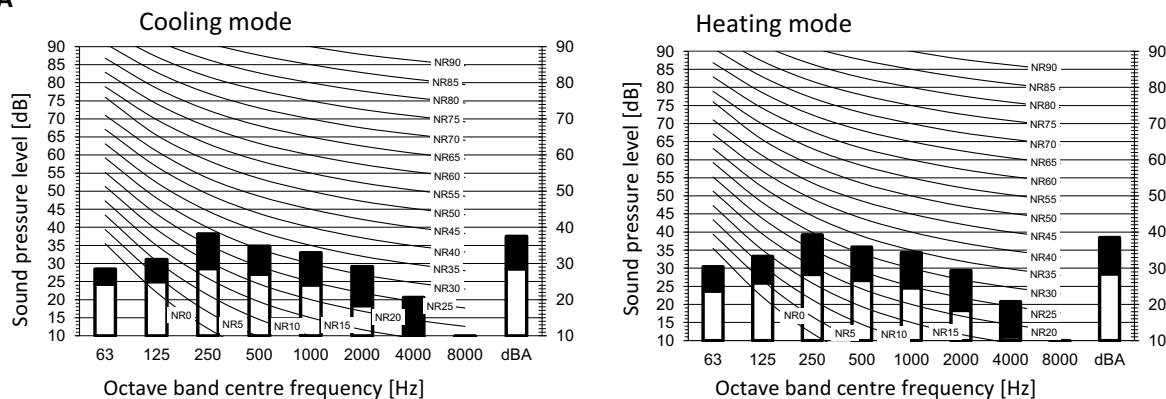
A	B	C
dBA	36	28,5

Notes

1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
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

3D112490

FXAQ32A



Legend

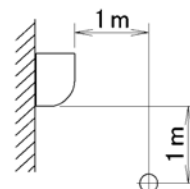
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling

Total dB

A	B	C
dBA	37,5	28,5

Heating

Total dB

A	B	C
dBA	38,5	28,5

Notes

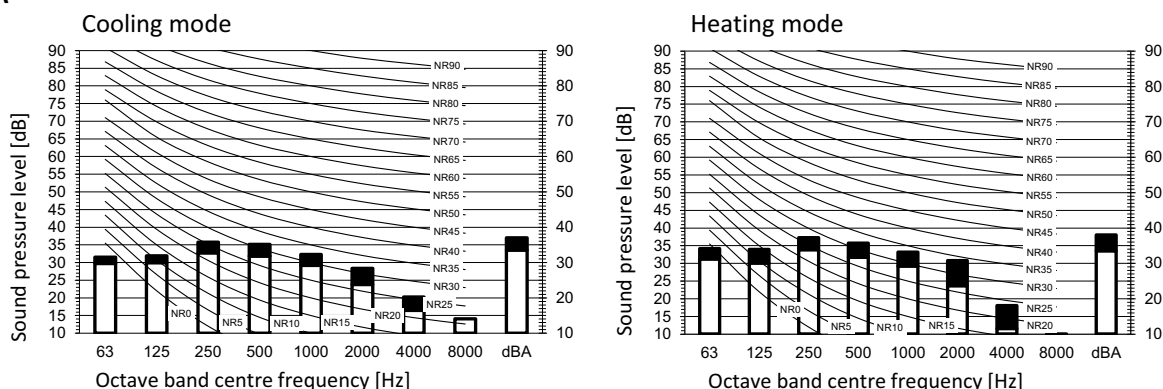
1. Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
2. Background noise already taken into account.
3. Operating noise varies depending on operation and ambient conditions.
4. The operation noise measuring method is in accordance with JISC9612.
5. Measuring location: anechoic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

3D112491

10 Sound data

10 - 1 Sound Pressure Spectrum

FXAQ40A



Legend

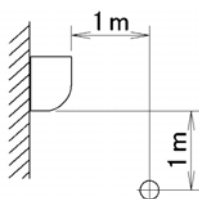
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling		
Total dB		
A	B	C
dBA	37	33,5

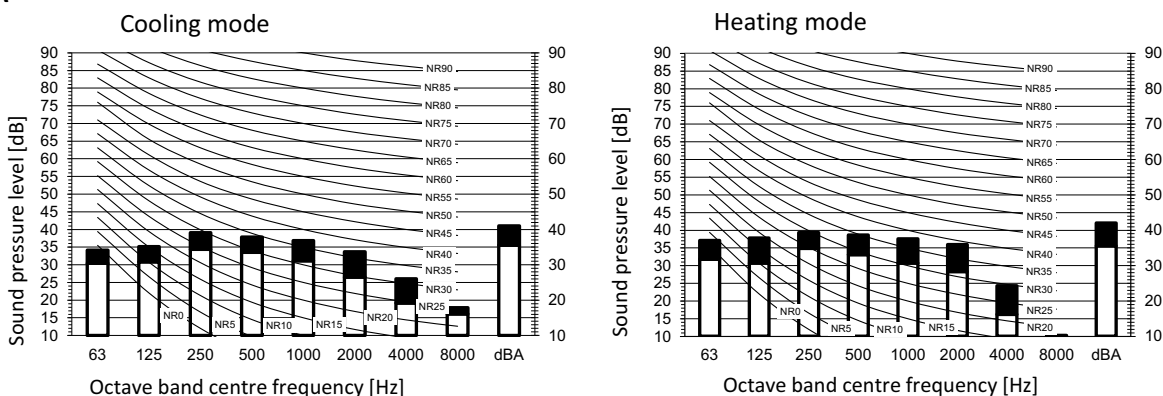
Heating		
Total dB		
A	B	C
dBA	38	33,5

Notes

- 1 . Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 2 . Background noise already taken into account.
- 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

3D112492

FXAQ50A



Legend

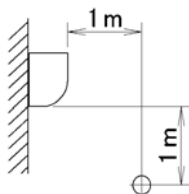
dBA = A-weighted sound pressure level (A scale according to IEC).

A Scale

B Fan speed: High

C Fan speed: Low

Location of microphone



Cooling		
Total dB		
A	B	C
dBA	41	35,5

Heating		
Total dB		
A	B	C
dBA	42	35,5

Notes

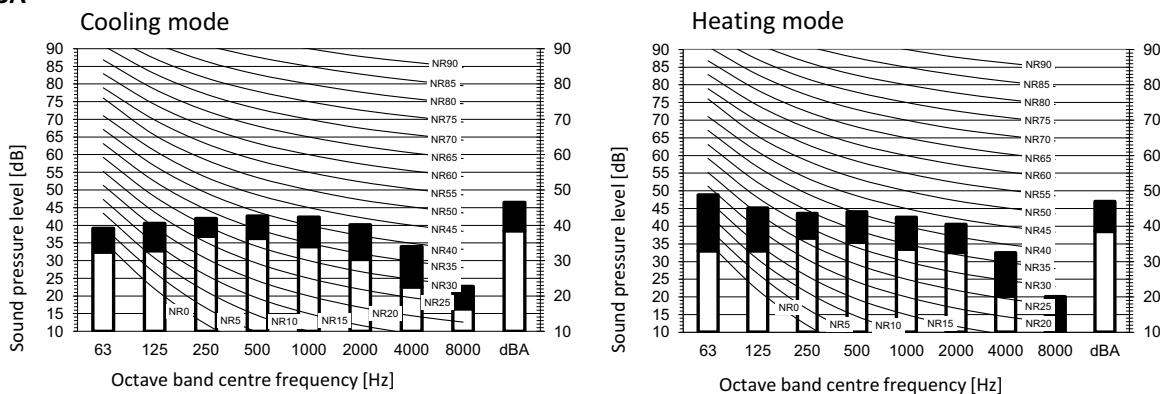
- 1 . Operating conditions: power source 220-240 V/220 V 50/60 Hz; JIS standard
- 2 . Background noise already taken into account.
- 3 . Operating noise varies depending on operation and ambient conditions.
- 4 . The operation noise measuring method is in accordance with JISC9612.
- 5 . Measuring location: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

3D112493

10 Sound data

10 - 1 Sound Pressure Spectrum

FXAQ63A



Legend

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

- A Scale
- B Fan speed: High
- C Fan speed: Low

Cooling		
Total dB		
A	B	C
dBA	46,5	38,5

Heating		
Total dB		
A	B	C
dBA	47	38,5

Notes

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

3D112494



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