



Air Conditioners

Technical Data

SkyAir®

Ceiling Suspended Cassette Unit



EEDEN10-100

FHQ-B



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EEDEN10-100

FHQ-B

TABLE OF CONTENTS

FHQ-BVV1B

1	Features	2
2	Specifications	3
	For indoor units only	3
	Technical Specifications	3
	Electrical Specifications	4
3	Safety device settings	5
4	Options	6
5	Control systems	8
6	Dimensional drawing & centre of gravity	9
	Dimensional drawing	9
7	Piping diagram	12
8	Wiring diagram	13
	Wiring diagram	13
	External connection diagram	14
9	Sound data	15
	Sound level data	15
	Sound pressure spectrum	16
10	Air flow pattern	18

1 Features

- Slim unit with super silent and greater air flow
- Ideal for shops, restaurants or offices requiring maximum floor space for furniture, decorations and fittings
- Can be installed in both new and existing buildings.
- Compact casing (only 960 to 1,590mm width).
- Extremely quiet in operation
- Auto-swing function ensures efficient air and temperature distribution.
- Air flow distribution for ceiling heights up to 3.8m without loss of capacity.
- Up to 4 indoor units can be connected to 1 Multi outdoor unit. All indoor units are individually controllable with remote control and do not need to be installed in the same room or at the same time. They operate simultaneously within the same cooling operation
- Daikin remote controls give you easy control at your fingertips.
- The wired remote control provides you with a schedule timer, enabling to program the air conditioning daily or weekly.
- The optional remote ON/OFF enables you to start/stop the air conditioning from a mobile phone via a telephone remote control (field supply).
- The optional forced OFF enables you to switch off the unit automatically. E.g. when a window is opened, the unit switches off.
- The 'home leave' operation button prevents large temperature differences by continuously operating at a minimum (heating mode) or maximum (cooling mode) preset level while you're out or sleeping. It also allows the indoor temperature to return quickly to your favourite comfort level.



heat pump

2 steps

optional



35°C/60°F

optional

2 Specifications

2-1 FOR INDOOR UNITS ONLY			FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B
Nominal Input	Cooling	kW	0.111	0.111	0.115	0.117	0.135	0.144

2-2 TECHNICAL SPECIFICATIONS				FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B
Casing	Colour			White					
Dimensions	Packing	Height	mm	279	279	279	279	275	275
		Width	mm	1046	1046	1246	1246	1486	1676
		Depth	mm	818	818	818	818	818	818
	Unit	Height	mm	195	195	195	195	195	195
		Width	mm	960	960	1160	1160	1400	1590
		Depth	mm	680	680	680	680	680	680
Weight	Unit		kg	24.0	25.0	27.0	27.0	32.0	35.0
	Packed Unit		kg	31.0	32.0	35.0	35.0	41.0	45.0
Heat Exchanger	Dimensions	Length	mm	722	722	922	922	1162	1352
		Nr of Rows		2	3	2	3	3	3
		Fin Pitch	mm	1.75	1.75	1.75	1.75	1.75	1.75
		Nr of Passes		6	6	6	6	11	11
		Face Area	m²	0.182	0.182	0.233	0.233	0.293	0.341
		Nr of Stages		12	12	12	12	12	12
		Empty Tubeplate Hole			2				
	Tube type		N-Hix						
	Fin	Type	ML fin (Multi louver)						
	Fan	Type			Sirocco fan				
Quantity			3	3	4	4	3	4	
Air Flow Rate	Cooling	High	m³/min	13.0	13.0	17.0	17.0	24.0	30.0
		Low	m³/min	10.0	10.0	13.0	14.0	20.0	25.0
	Heating	High	m³/min	13.0	13.0	16.0	17.0	24.0	30.0
		Low	m³/min	10.0	10.0	13.0	14.0	20.0	25.0
Fan	Motor	Quantity		1	1	1	1	1	1
		Model		3D12K1AA1	3D12K1AA1	4D12K1AA1	4D12K1AA1	3D12K2AA1	4D12K2AA1
		Number of steps		2	2	2	2	2	2
		Output (high)	W	62	62	62	62	130	130
Cooling	Sound Power	High	dBA	53.0	54.0	55.0	55.0	58.0	60.0
		Low	dBA	48.0	49.0	49.0	51.0	53.0	55.0
	Sound Pressure	High	dBA	37.0	38.0	39.0	39.0	42.0	44.0
		Low	dBA	32.0	33.0	33.0	35.0	37.0	39.0
Heating	Sound Power	High	dBA	53.0	54.0	55.0	55.0	58.0	60.0
		Low	dBA	48.0	49.0	49.0	51.0	53.0	55.0
	Sound Pressure	High	dBA	37.0	38.0	39.0	39.0	42.0	44.0
		Low	dBA	32.0	33.0	33.0	35.0	37.0	39.0
Refrigerant	Type			R-410A					
Piping connections	Liquid (OD)	Type		Flare connection					
		Diameter (OD)	mm	6.4	6.4	6.4	9.5	9.5	9.5
	Gas	Type		Flare connection					
		Diameter (OD)	mm	9.5	12.7	12.7	15.9	15.9	15.9
	Drain	Diameter (OD)	mm	VP20 (I.D. 20/O.D. 26)					
	Heat Insulation			Foamed polystyrene/polyethylene					
Safety Devices				Fuse	Fuse	Fuse			
				Fan motor thermal protector					

2 Specifications

2-2 TECHNICAL SPECIFICATIONS		FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B
Standard Accessories	Item	Installation and operation manual					
	Quantity	1	1	1	1	1	1
	Item	Paper pattern for installation					
		Drain hose					
		Clamp metal					
		Insulation for fitting					
		Sealing pad					
		Clamps					
		Washer for hanger bracket					

2-3 ELECTRICAL SPECIFICATIONS			FHQ35BVV1B	FHQ50BVV1B	FHQ60BVV1B	FHQ71BVV1B	FHQ100BVV1B	FHQ125BVV1B
Power Supply	Name		V1					
	Phase		1	1	1	1	1	1
	Frequency	Hz	50	50	50	50	50	50
	Voltage	V	220-240					
Power Supply Intake			Outdoor unit only					

3 Safety device settings

FHQ25~140B

	Safety devices		35	40 • 50	60	71	100	125
FHQ-BVV1B	Fuse		250V 5A	250V 5A	250V 5A	-	-	-
	Fan motor thermal protector	°C	OFF: 130 ± 5 ON: 83 ± 20	OFF: 130 ± 5 ON: 83 ± 20	OFF: 130 ± 5 ON: 83 ± 20	OFF: 130 ± 5 ON: 83 ± 20	OFF: 130 ± 5 ON: 83 ± 20	OFF: 130 ± 5 ON: 83 ± 20

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4 Options

FHQ35~ 60B

Name of option			FHQ~ B		
			35	50	60
Replacement long-life filter			KAFJ501DA56		KAFJ501DA80
Drain up kit			KDU50N60VE		
L-type piping kit (for upward direction)			KHFP5MA35	KHFP5MA63	
Remote control	Wired type		BRC1D528		
	Infrared type	Heat pump	BRC7EA63W		
		Cooling only	BRC7EA66		
Central remote control			DCS302CA51		
Unified ON/OFF control			DCS301BA51		
Schedule timer			DST301BA51		
Adapter for wiring			KRP1BA54		
Wiring adapter (hour meter)			EKRP1B2A		
Adaptor for external ON/OFF and monitoring ※1			KRP4AA52		
Interface adapter for Sky Air series			DTA112BA51		
Installation box for adapter PCB			KRP1CA93		
Remote ON/OFF, forced OFF			EKROROA		

Note ※1: Installation box for adapter PCB (KRP1CA93) is necessary.

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4 Options

Name of option	Remark	FHQ-B		
		71	100	125
Replacement long-life filter		KAF501DA80	KAF501DA112	KAF501DA160
Drain up kit			KDU50N125VE	
L-type piping kit (for upward direction)			KHFP5MA160	
Remote control	Wired type		BRC1D528	
	Infrared type	For Heat pump	BRC7EA63W	
		For cooling only	BRC7EA66	
Central remote control			DCS302CA51	
Unified ON/OFF control			DCS301BA51	
Schedule timer			DST301BA51	
Adapter for wiring			KRP1BA54	
Wiring adapter for electrical appendices *1			KRP4AA52	
Interface adapter for Sky Air series			DTA112BA51	
Installation box for adapter PCB			KRP1CA93	
Remote sensor			KRCS01-1A	
Connector for forced on, forced off			EKROROA	
Electrical box with earth terminal (3 blocks)			KJB311AA	
Electrical box with earth terminal (2 blocks)			KJB212AA	

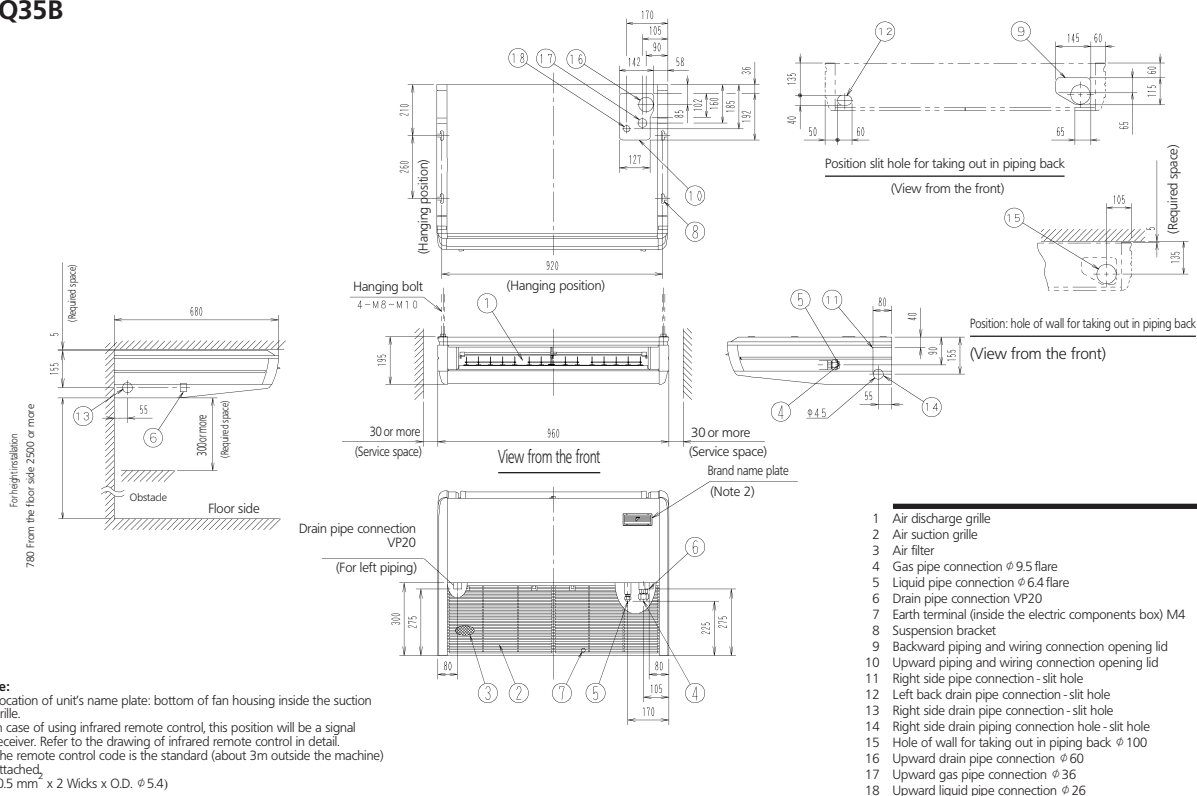
NOTE: *1: Installation box for adapter PCB (KRP1CA93) is necessary

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5 Dimensional drawing & centre of gravity

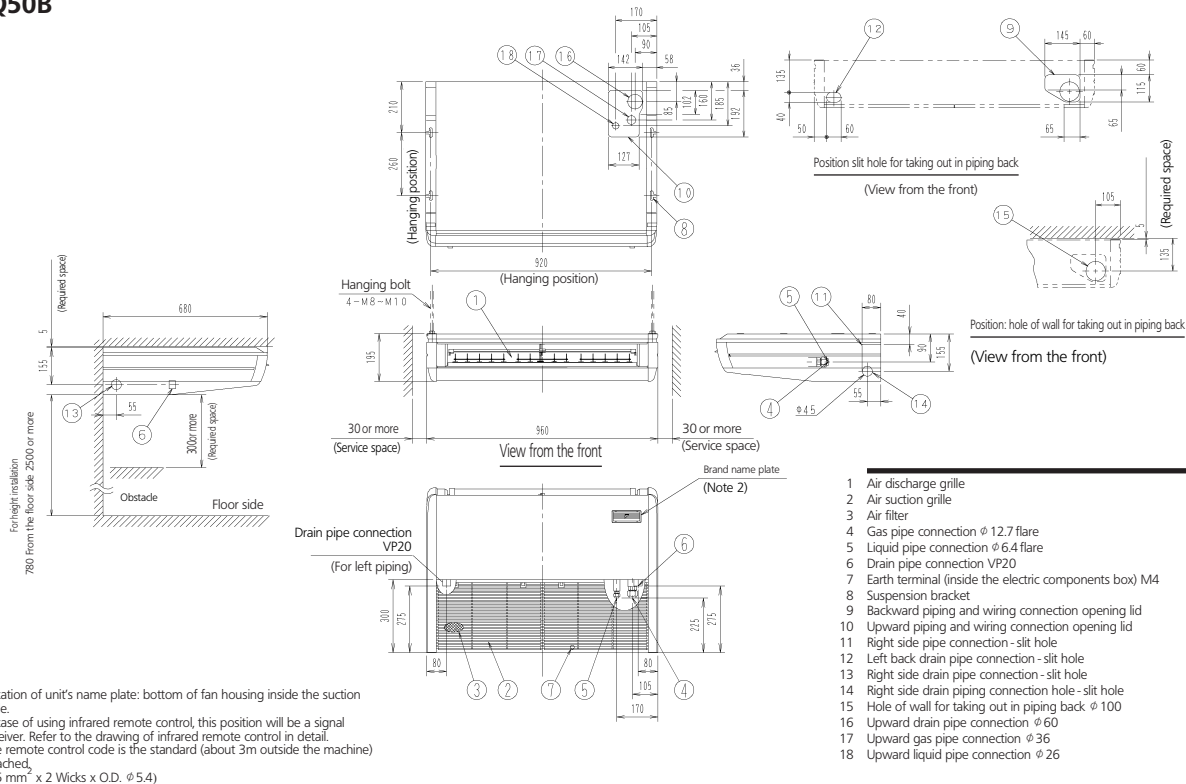
5 - 1 Dimensional drawing

FHQ35B



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FHQ50B

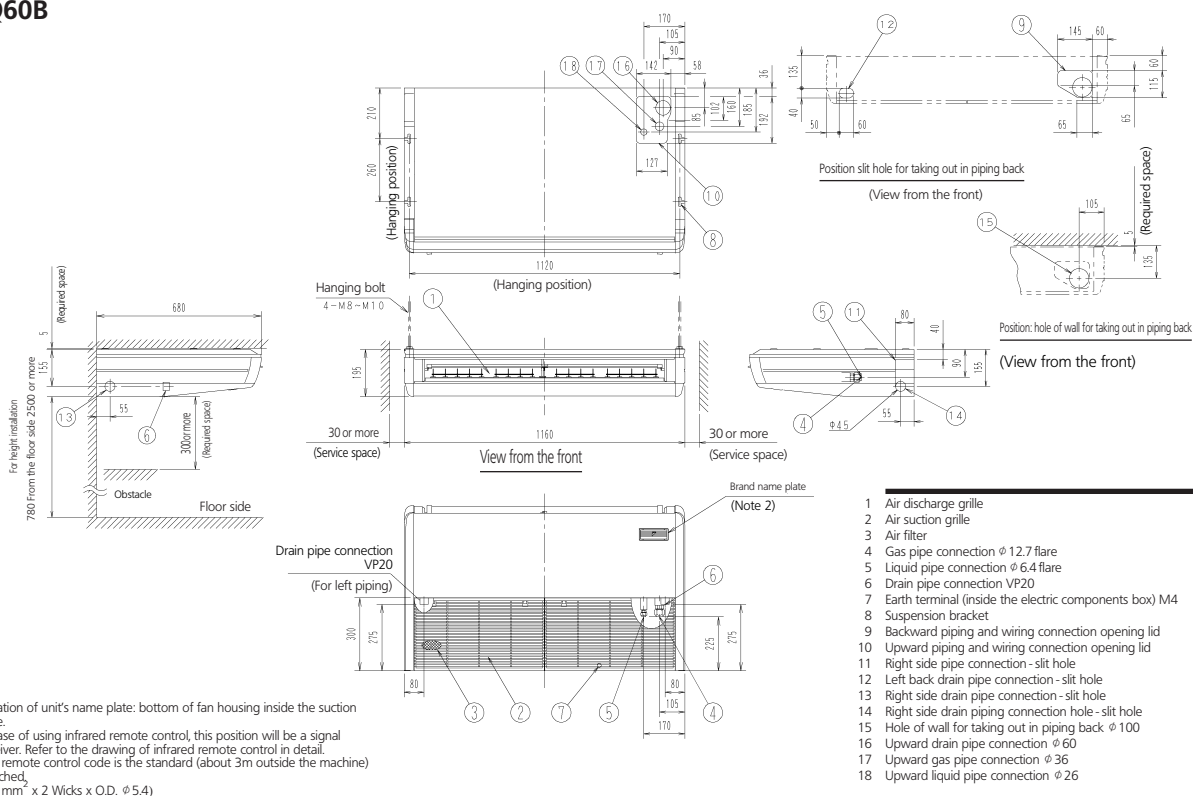


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5 Dimensional drawing & centre of gravity

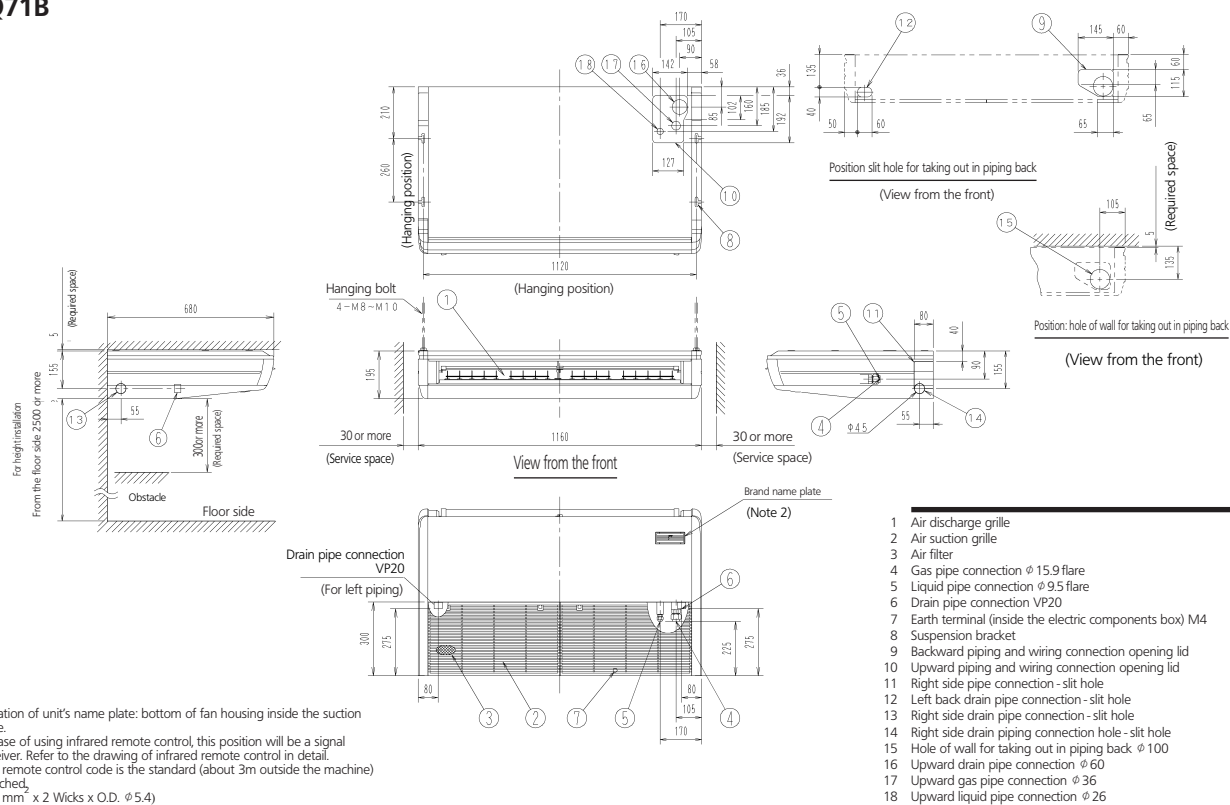
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FHQ60B



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FHQ71B

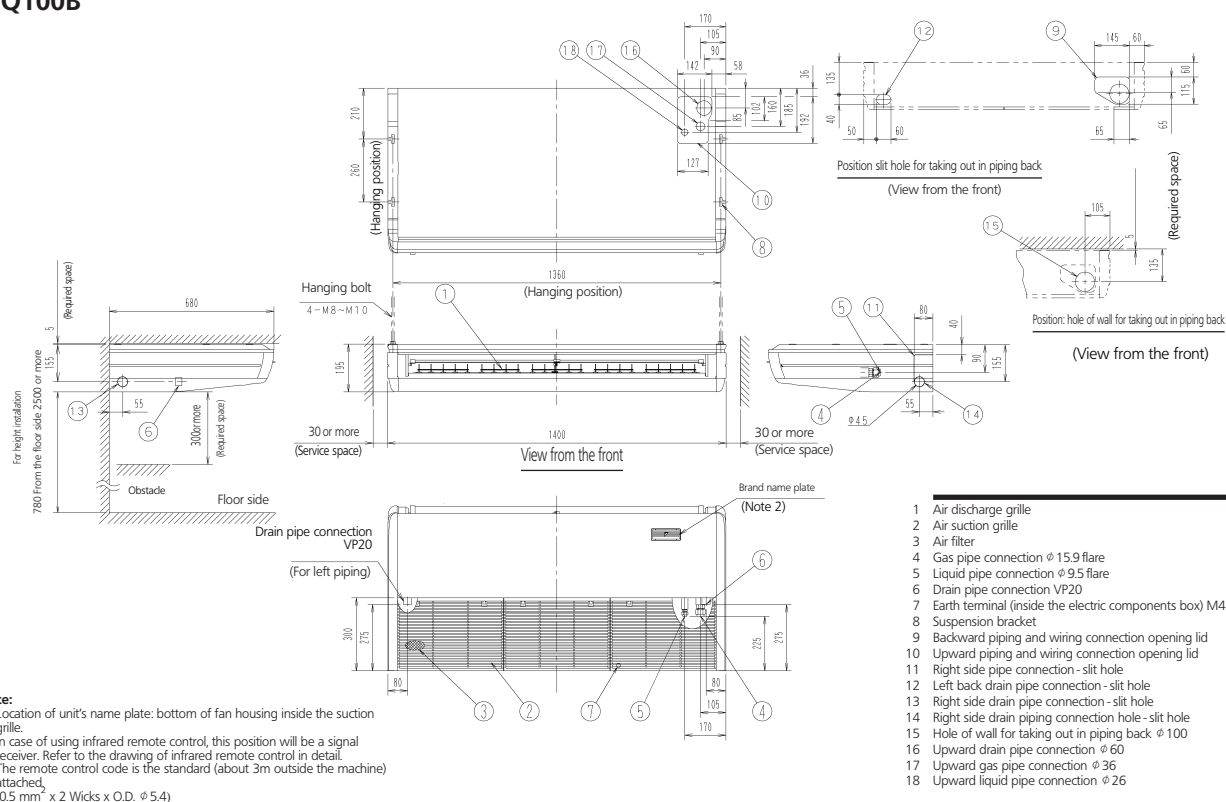


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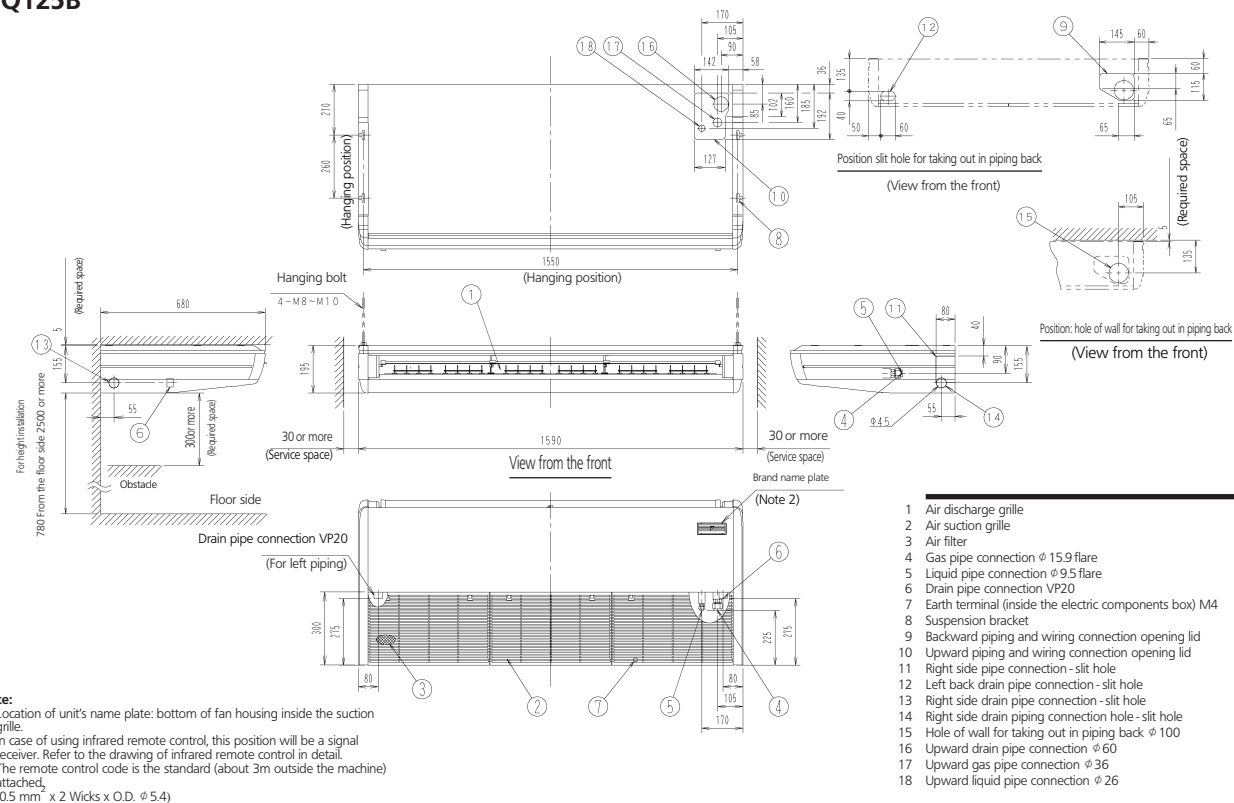
5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

FHQ100B



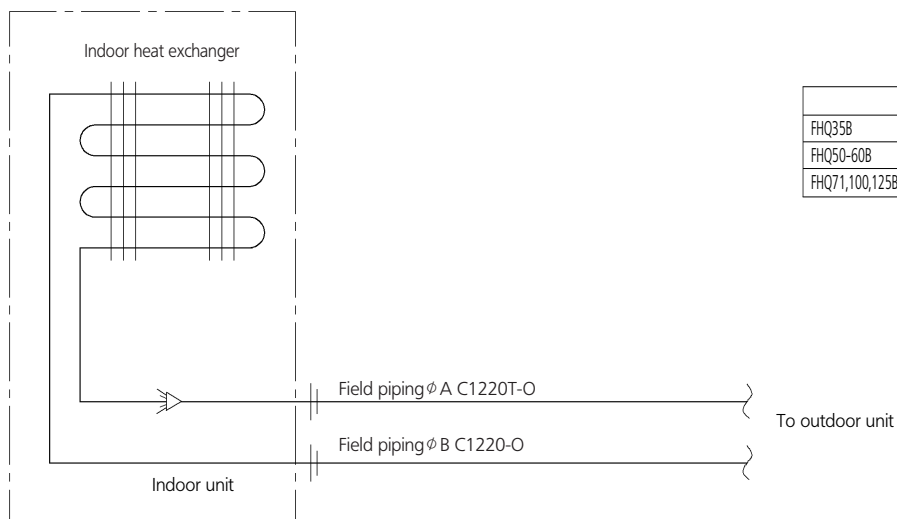
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FHQ125B

3D044899 4 B

6 Piping diagram

FHQ35~ 125B



Check valve
 Flare connection
 Screw connection
 Flange connection
 Pinched pipe
 Spinned pipe

4D037995H

7 Wiring diagram

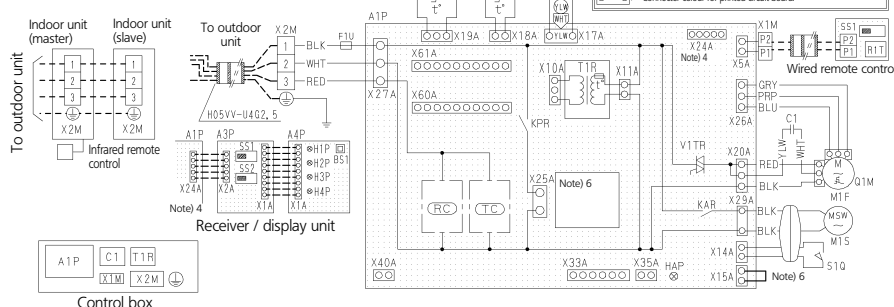
7 - 1 Wiring diagram

FHQ35~60B

Notes

- Terminal : : Connector : : Protective earth (screw) :
- Field wiring :
- In case using central remote control, connect it to the unit in accordance with the attached instruction manual.
- X24A is connected when the infrared remote control kit is being used.
- Remote control model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
- In case installing the drain pump (M1P), remove the jumper connector of X15A and execute the additional wiring for float switch and drain pump.
- Symbols show as follows Red:red, Blk:black, Ylw:yellow, Org:orange, Gry:gray, Prp:purple, Blu:blue

In case of simultaneous operation system.



1-RED, 2-WHITE, 3-BLACK
A1P Printed circuit board
C1R Capacitor (M1F)
FIU Fuse(5A 250V)
HAP Light emitting diode (service monitor green)
KAR Magnetic relay (M1S)
KPR Magnetic relay (M1P)
M1S Motor (swing flap)
M1F Motor (indoor fan)
Q1M Thermo switch (M1F embedded)
R1T Thermistor (air)
R2T Thermistor (coil1)
R3T Thermistor (coil2)

S1Q Limit switch (swing flap)
T1R Transformer(220-240V/22V)
V1TR Phase control circuit
X1M Terminal block
X2M Terminal block
RC Signal receiver circuit
TC Signal transmission circuit
Wired remote control
R1T Thermistor (air)
SS1 Selector switch (main/sub)
SS2 Selector switch (wireless address set)

Infrared remote control
Receiver / display unit
A3P Printed circuit board
A4P Printed circuit board
BS1 Push button (on/off)
H1P Light emitting diode (service monitor red)
H2P Light emitting diode (service monitor green)
H3P Light emitting diode (service monitor red)
H4P Light emitting diode (service monitor orange)
SS1 Selector switch (main/sub)
SS2 Selector switch (wireless address set)

Connector for optional parts
X15A Connector (float switch)
X25A Connector (drain pump)
X33A Connector (adapter for wiring)
X35A Connector (group control adapter)
X40A Connector
X60A (ON/OFF input from outside)
X61A Connector (interface adapter for sky air series)

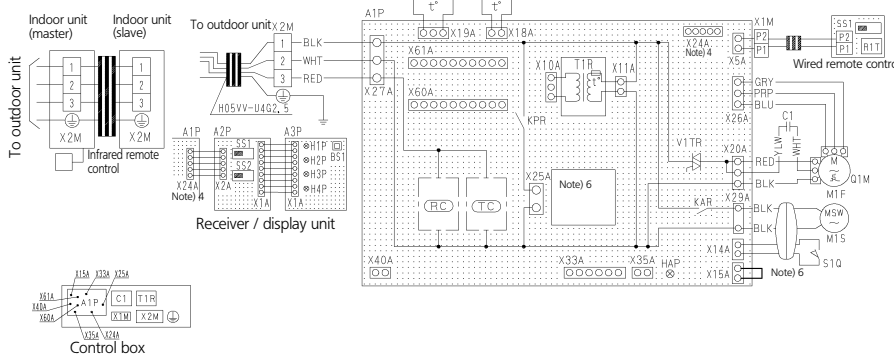
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FHQ71,100,125B

Notes

- Terminal : : Connector : : Protective earth (screw) :
- Field wiring :
- In case using central remote control, connect it to the unit in accordance with the attached instruction manual.
- X24A is connected when the infrared remote control kit is being used.
- Remote control model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
- In case installing the drain pump (M1P), remove the jumper connector of X15A and execute the additional wiring for float switch and drain pump.
- Symbols show as follows Red:red, Blk:black, Ylw:yellow, Org:orange, Gry:gray, Prp:purple, Blu:blue

In case of simultaneous operation system.



1-RED, 2-WHITE, 3-BLACK
A1P Printed circuit board
C1R Capacitor (M1F)
FIU Fuse(5A 250V)
HAP Light emitting diode (service monitor green)
KAR Magnetic relay (M1S)
KPR Magnetic relay (M1P)
M1S Motor (swing flap)
M1F Motor (indoor fan)
Q1M Thermo switch (M1F embedded)
R1T Thermistor (air)
R2T Thermistor (coil1)
R3T Thermistor (coil2)

S1Q Limit switch (swing flap)
T1R Transformer(220-240V/22V)
V1TR Phase control circuit
X1M Terminal block
X2M Terminal block
RC Signal receiver circuit
TC Signal transmission circuit
Wired remote control
R1T Thermistor (air)
SS1 Selector switch (main/sub)
SS2 Selector switch (wireless address set)

Infrared remote control
Receiver / display unit
A2P Printed circuit board
A3P Printed circuit board
BS1 Push button (on/off)
H1P Light emitting diode (service monitor red)
H2P Light emitting diode (service monitor green)
H3P Light emitting diode (service monitor red)
H4P Light emitting diode (service monitor orange)
SS1 Selector switch (main/sub)
SS2 Selector switch (wireless address set)



Connector for optional parts
X15A Connector (float switch)
X25A Connector (drain pump)
X33A Connector (adapter for wiring)
X35A Connector (group control adapter)
X40A Connector
X60A (ON/OFF input from outside)
X61A Connector (interface adapter for sky air series)

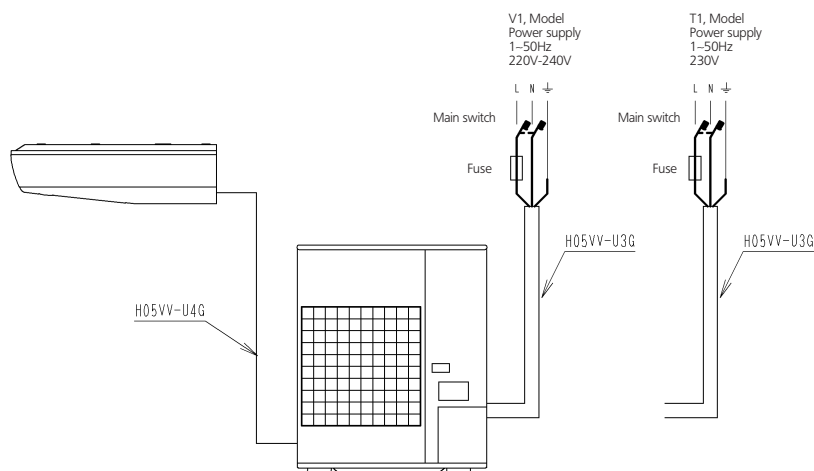
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7 Wiring diagram

7 - 2 External connection diagram

NOTES

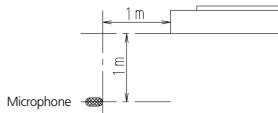
- 1  Line voltage wiring
 Control circuit wiring
- 2 All wiring, components and materials to be produced on the site must comply with the applicable local and national codes.
- 3 Use copper conductors only.
- 4 See wiring diagrams for details.
- 5 Install fuse and mainswitch for safety.
- 6 All field wiring and components must be provided by a licensed electrician.
- 7 The unit shall be grounded in compliance with the applicable local and national codes.
- 8 Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
- 9 Never share a common power supply with other equipment.



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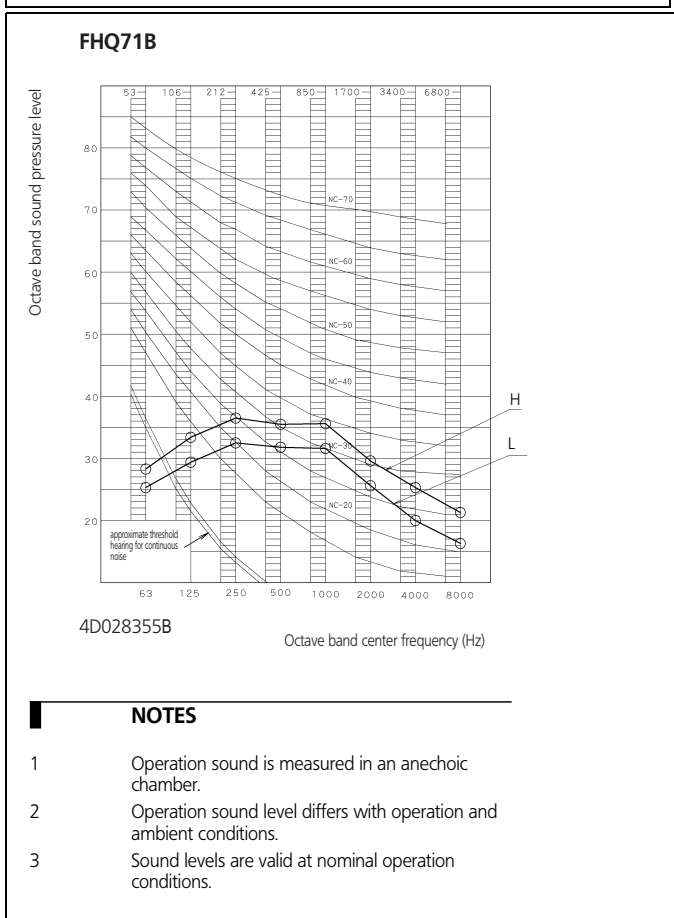
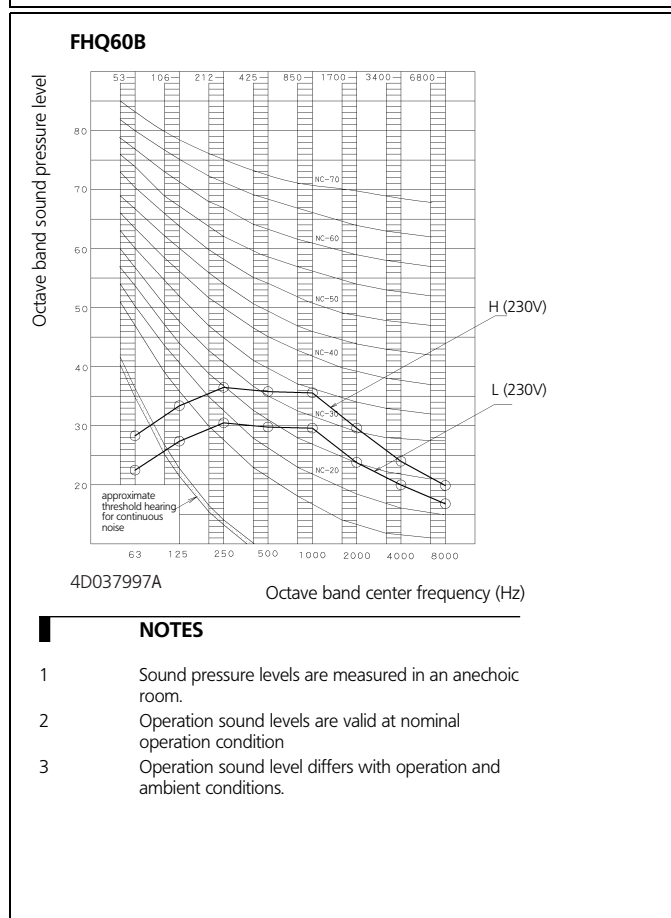
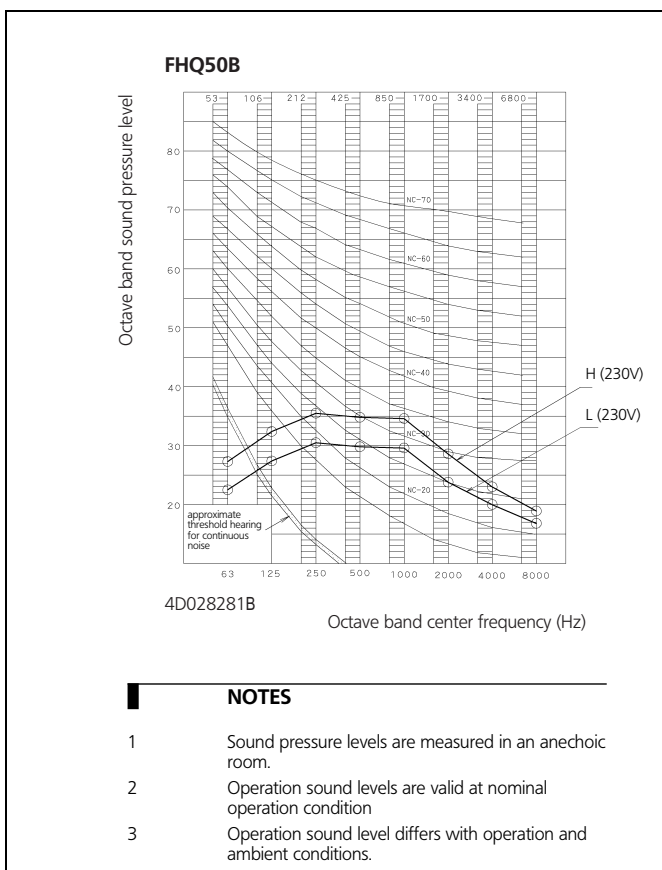
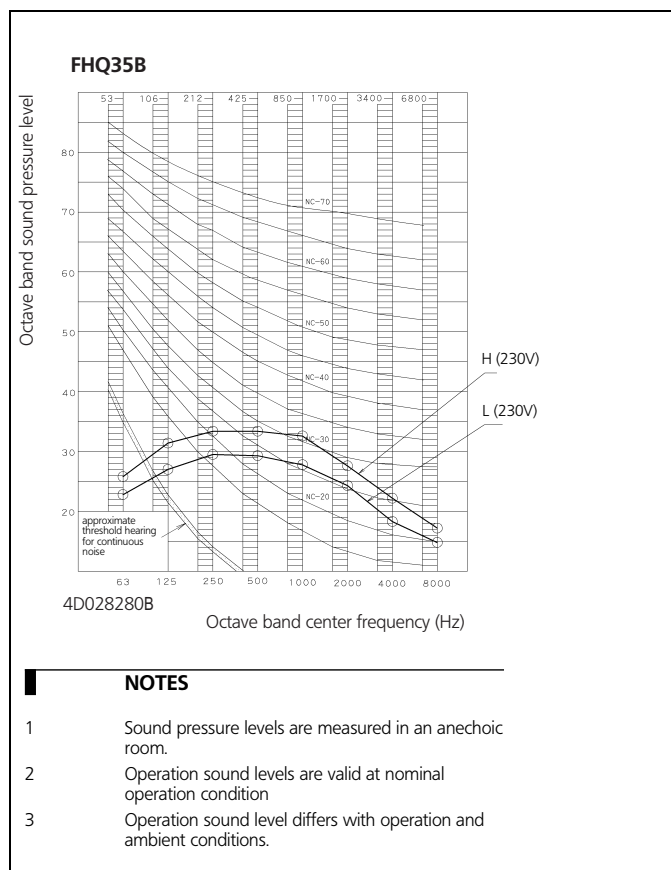
8 Sound data

8 - 1 Sound level data

Model	Sound pressure level		Measuring location	Sound power level	
	230V			H (cooling/heating)	L (cooling/heating)
	50Hz				
	H (cooling/heating)	L (cooling/heating)			
FHQ35B	37/37	32/32	<div>Location of microphone</div> 	53/53	48/48
FHQ50B	38/38	33/33		54/54	49/49
FHQ60B	39/-	33/-		55/-	49/-
FHQ71B	39/39	35/35		55/55	51/51
FHQ100B	42/42	37/37		58/58	53/53
FHQ125B	44/44	39/39		60/60	55/55

8 Sound data

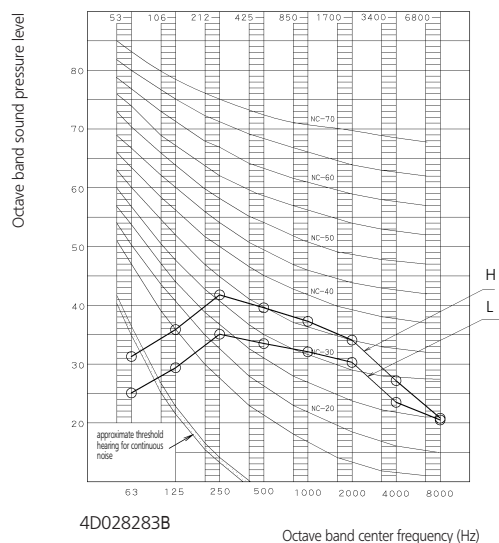
8 - 2 Sound pressure spectrum



8 Sound data

8 - 2 Sound pressure spectrum

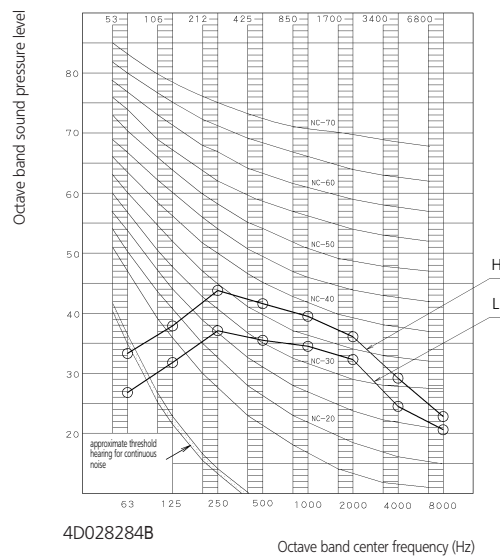
FHQ100B



NOTES

- 1 Operation sound is measured in an anechoic chamber.
- 2 Operation sound level differs with operation and ambient conditions.
- 3 Sound levels are valid at nominal operation conditions.

FHQ125B



NOTES

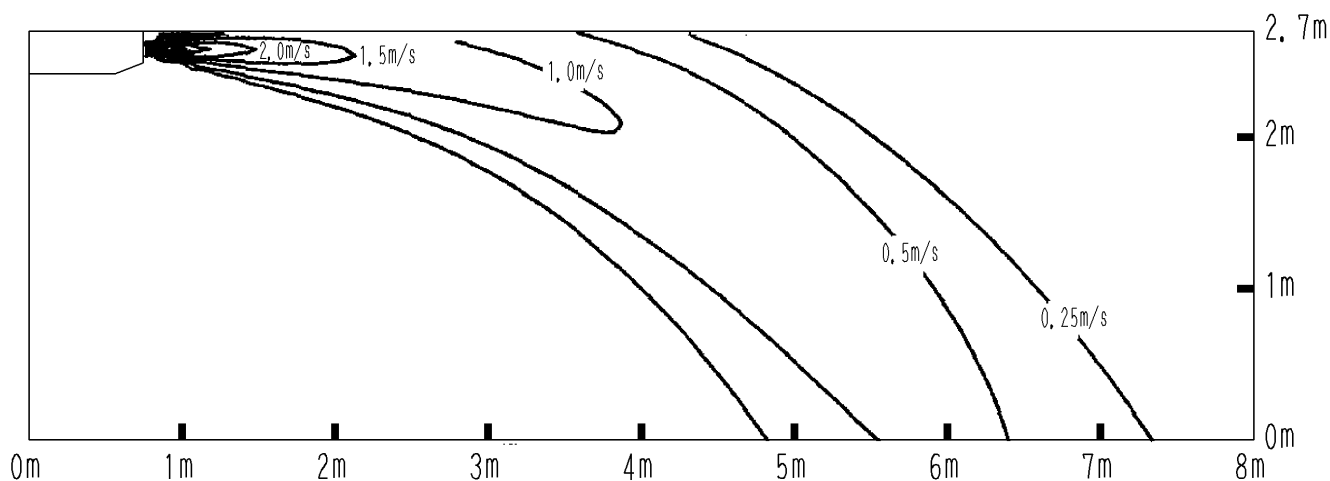
- 1 Operation sound is measured in an anechoic chamber.
- 2 Operation sound level differs with operation and ambient conditions.
- 3 Sound levels are valid at nominal operation conditions.

9 Air flow pattern

FHQ35~50B

Cooling - air velocity distribution

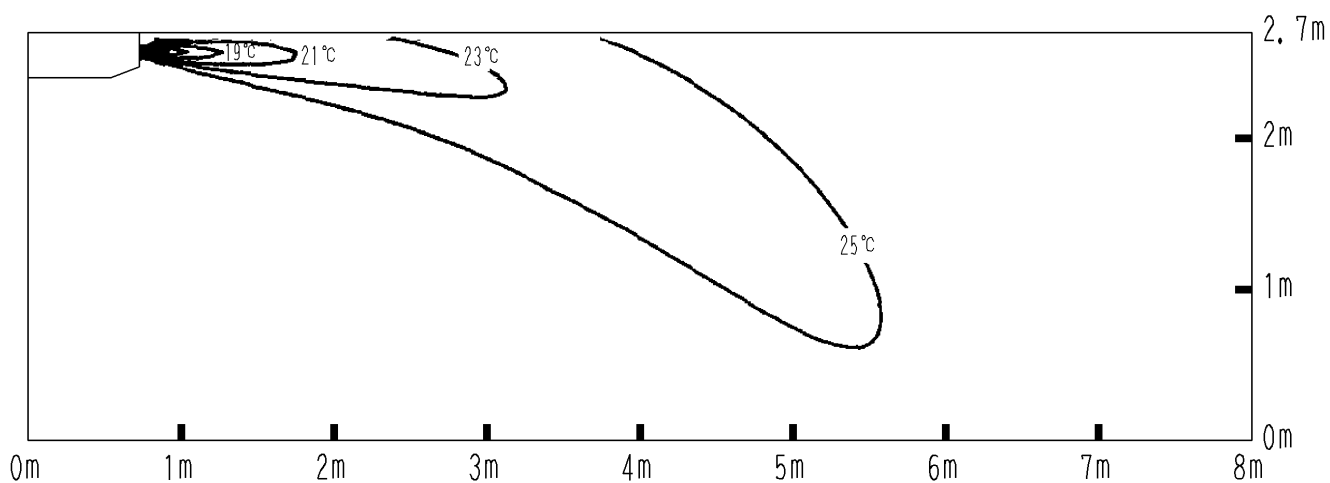
Air flow direction: horizontal



FHQ35~50B

Cooling - air temperature distribution

Air flow direction: horizontal



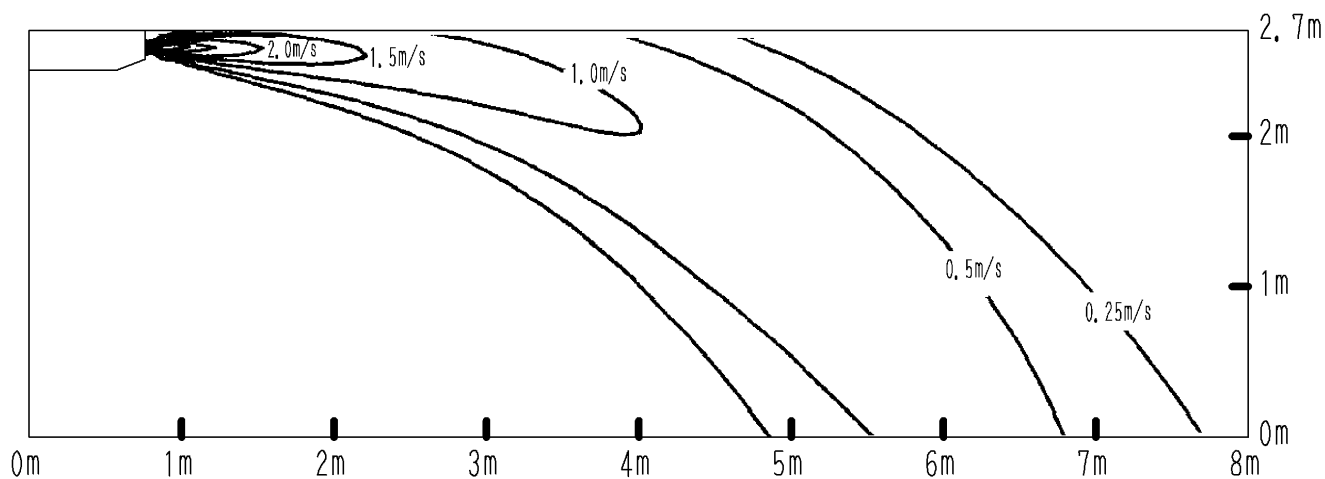
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9 Air flow pattern

FHQ60-71B

Cooling - air velocity distribution

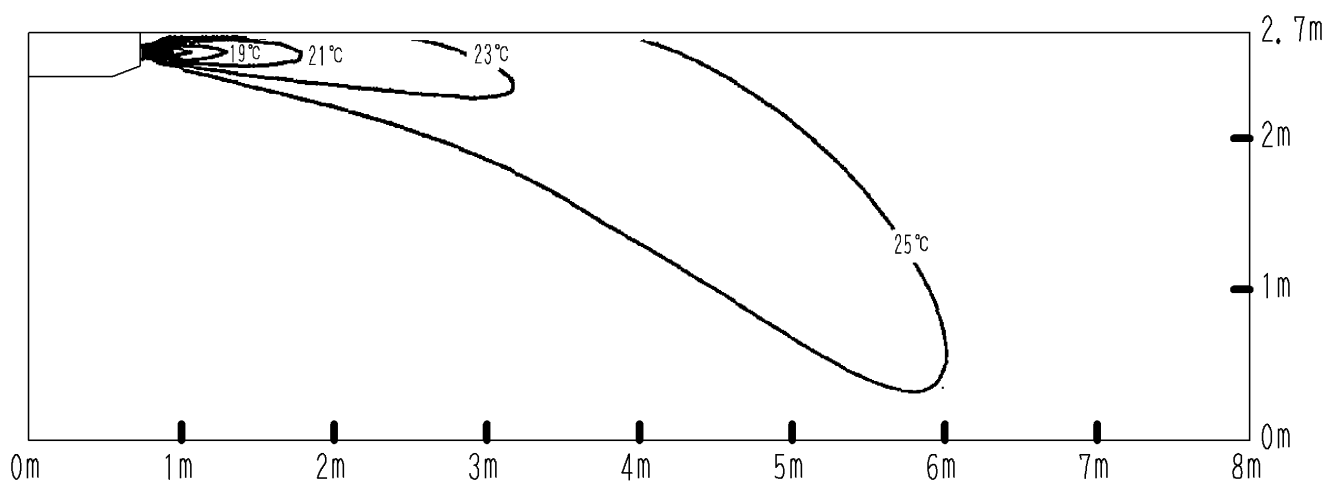
Air flow direction: horizontal



FHQ60-71B

Cooling - air temperature distribution

Air flow direction: horizontal



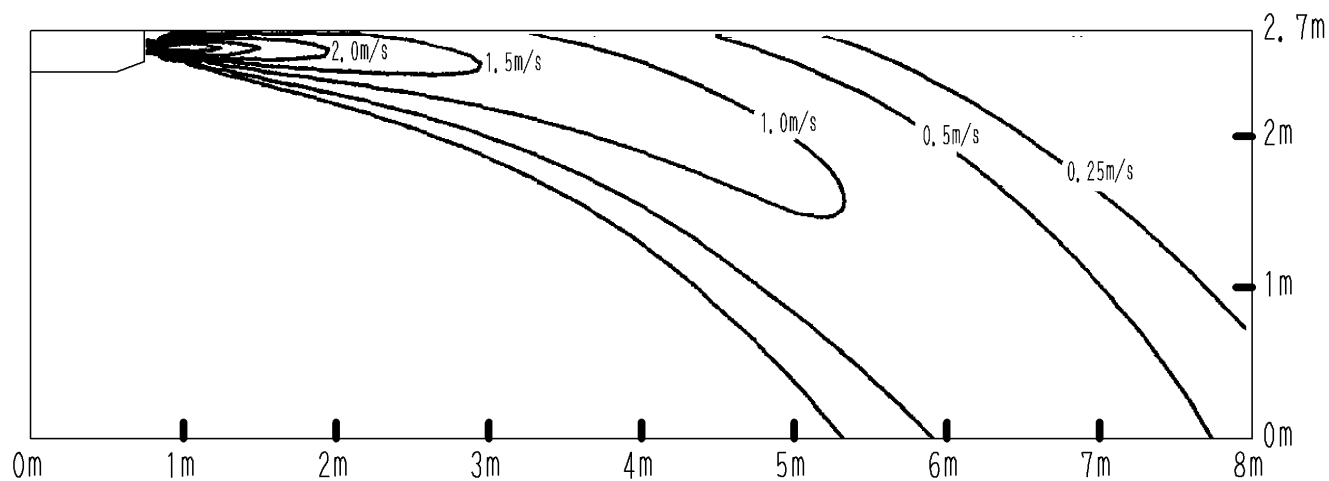
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9 Air flow pattern

FHQ100B

Cooling - air velocity distribution

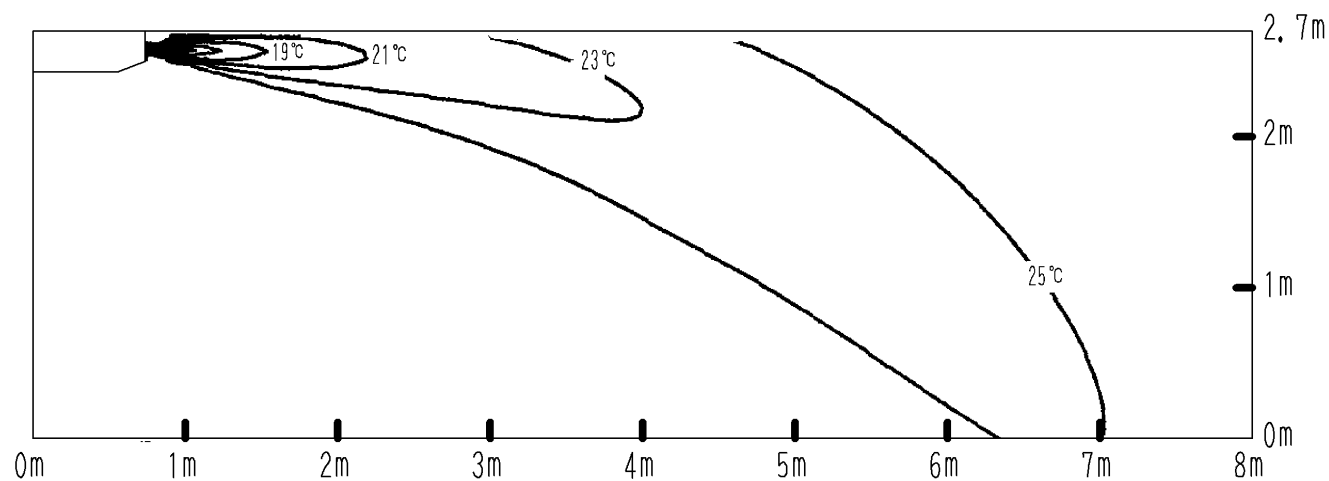
Air flow direction: horizontal



FHQ100B

Cooling - air temperature distribution

Air flow direction: horizontal



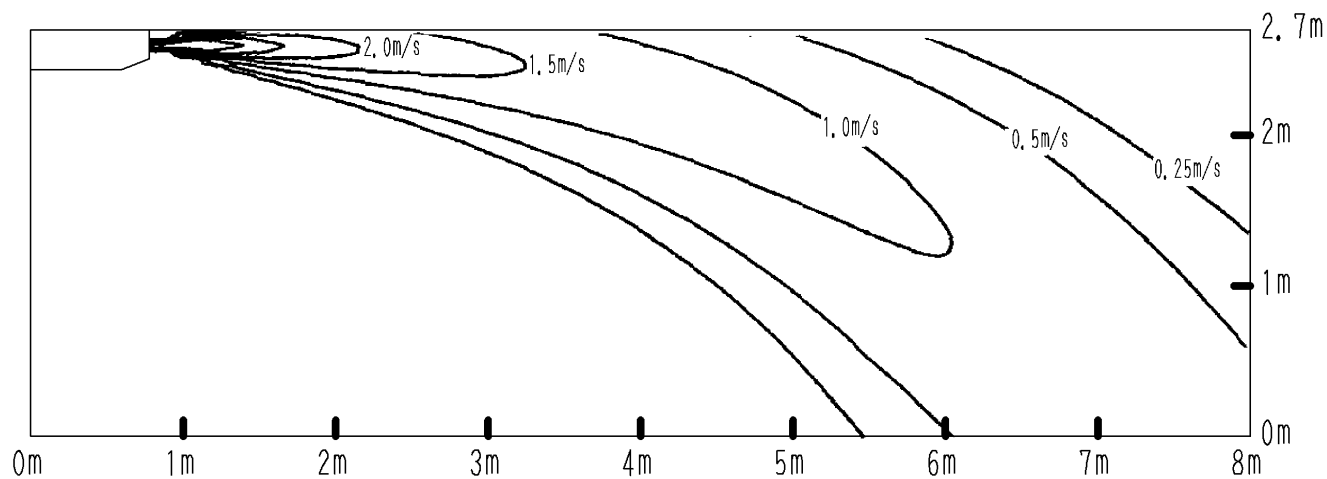
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9 Air flow pattern

FHQ125B

Cooling - air velocity distribution

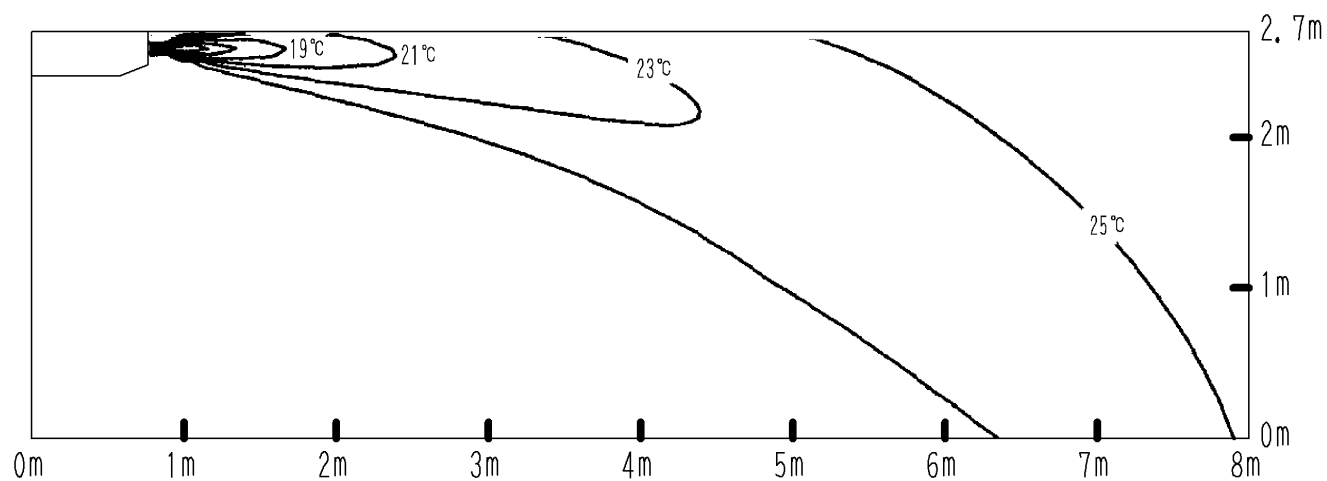
Air flow direction: horizontal



FHQ125B

Cooling - air temperature distribution

Air flow direction: horizontal



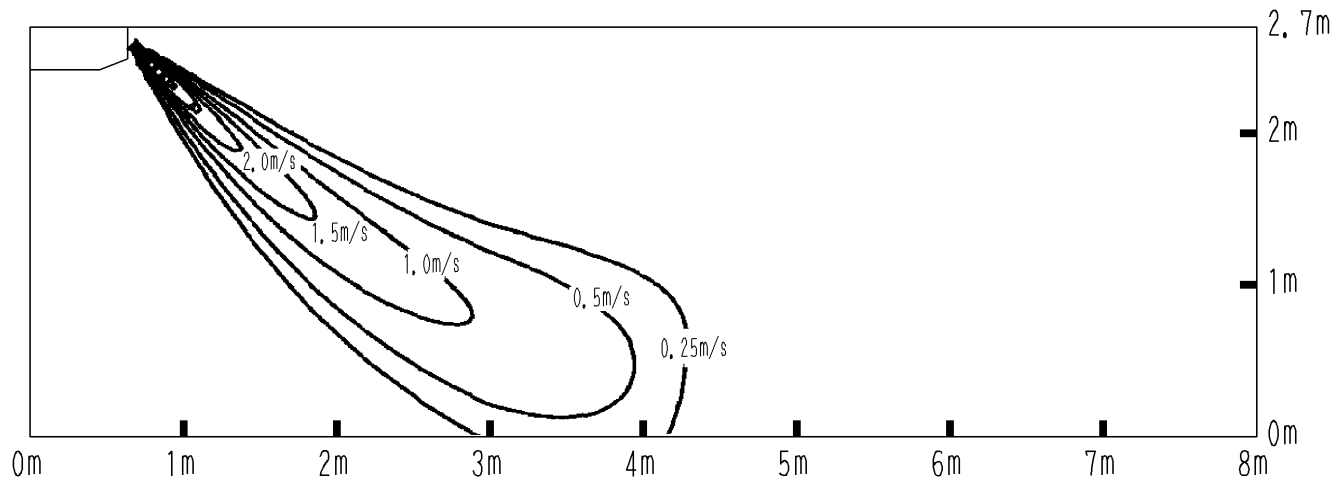
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9 Air flow pattern

FHQ35-50B

Heating - air velocity distribution

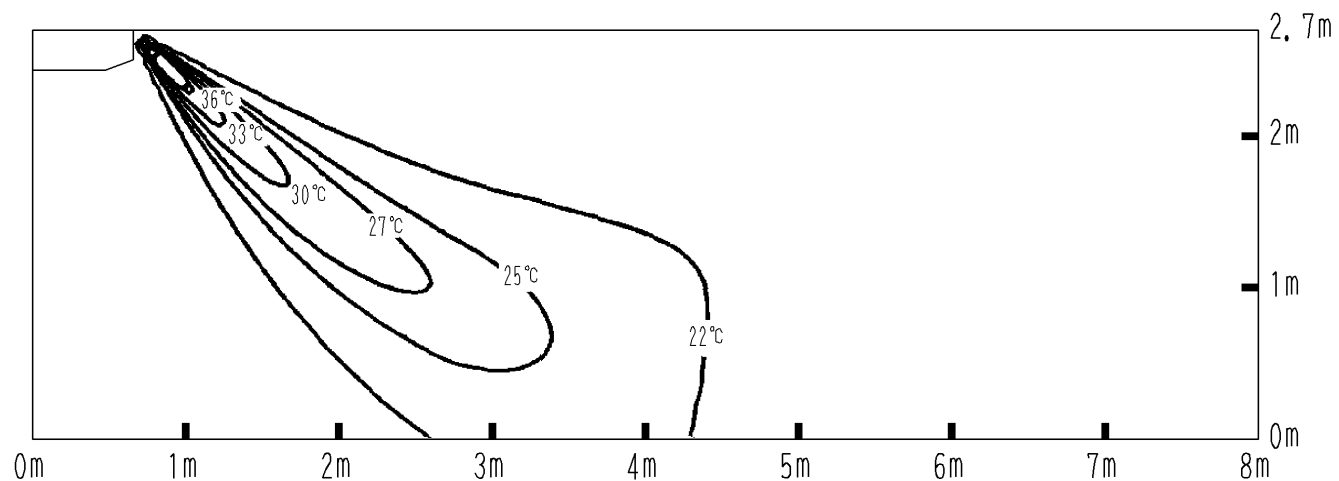
Air flow direction: 45° (downward)



FHQ35-50B

Heating - air temperature distribution

Air flow direction: 45° (downward)



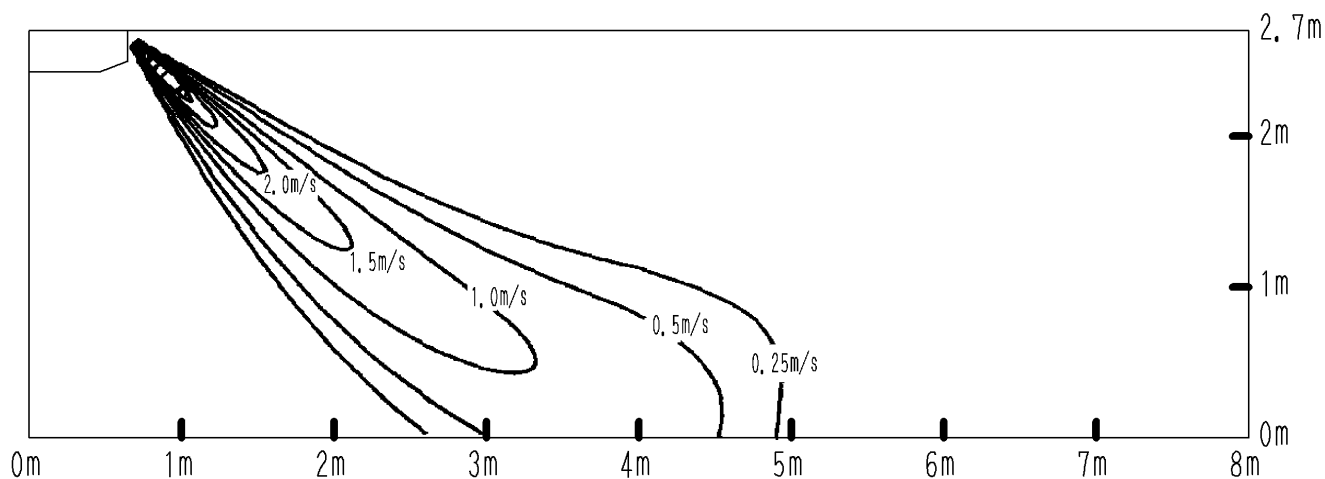
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9 Air flow pattern

FHQ60-71B

Heating - air velocity distribution

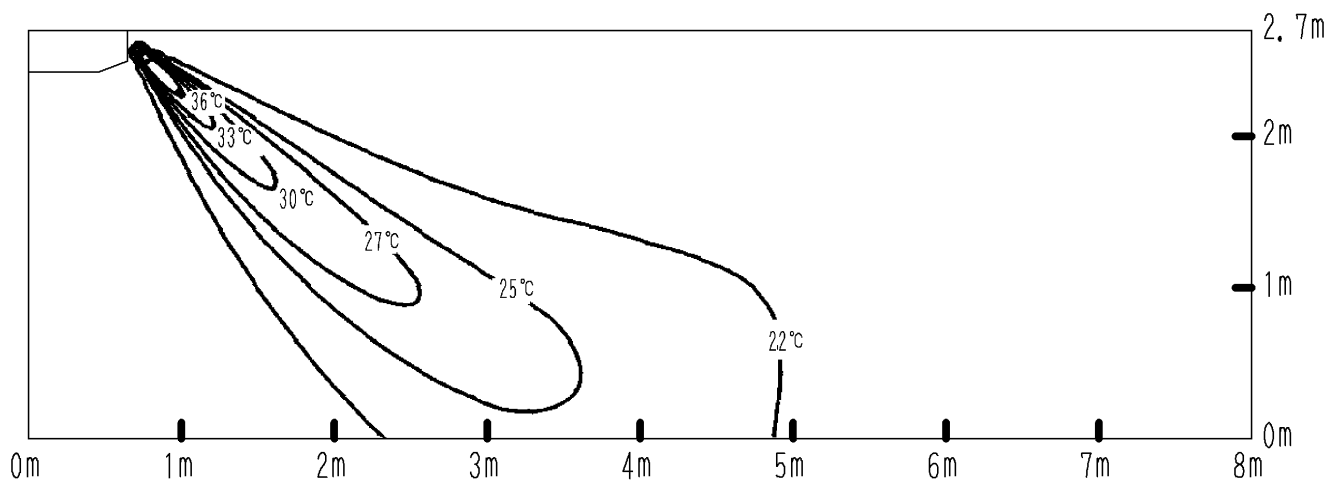
Air flow direction: 45° (downward)



FHQ60-71B

Heating - air temperature distribution

Air flow direction: 45° (downward)



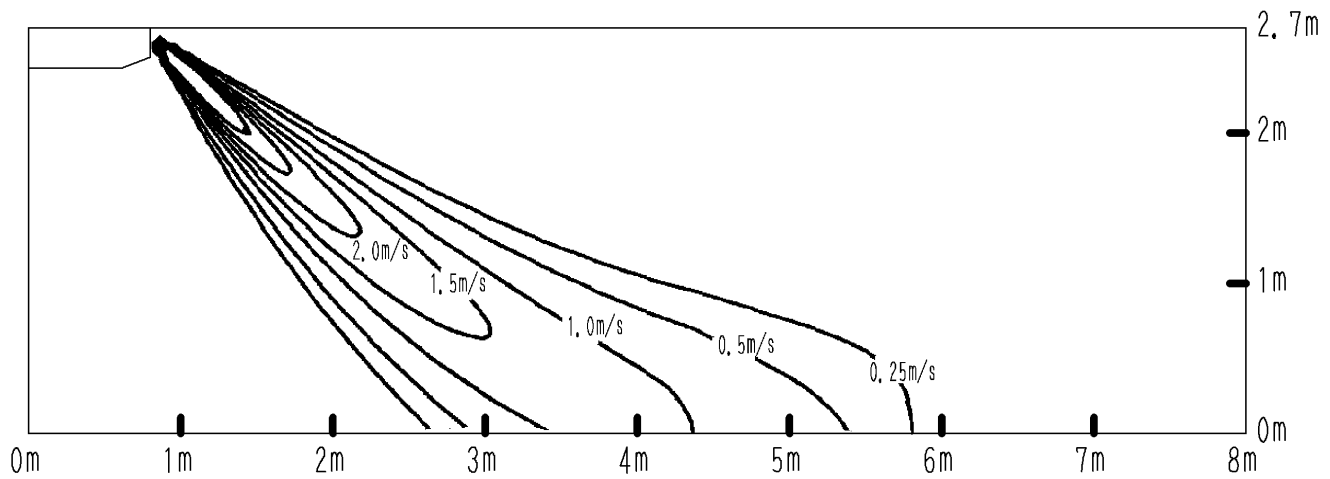
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9 Air flow pattern

FHQ100B

Heating - air velocity distribution

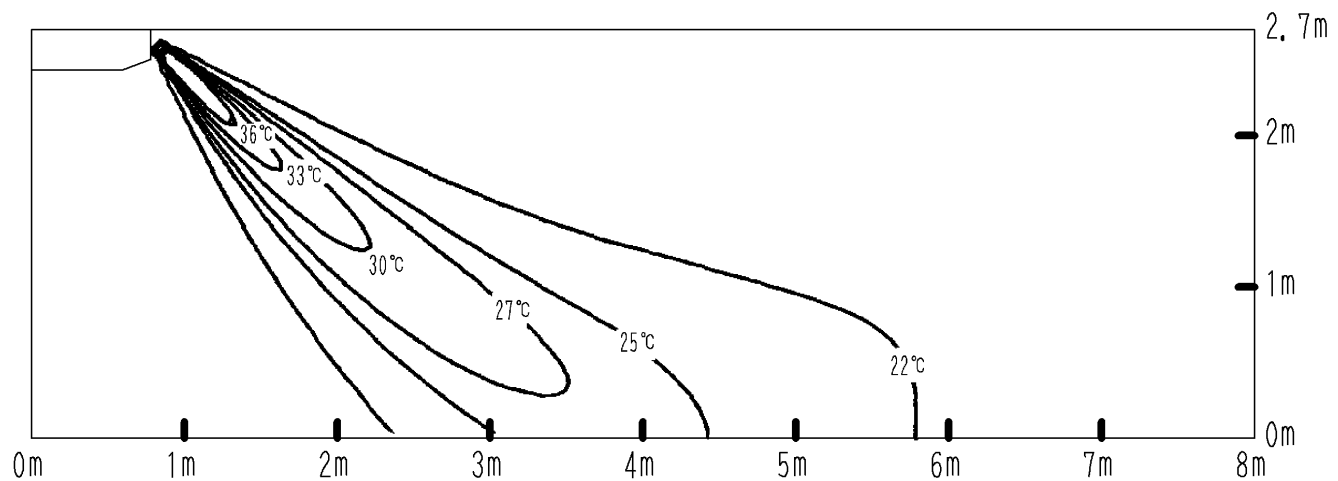
Air flow direction: 45° (downward)



FHQ100B

Heating - air temperature distribution

Air flow direction: 45° (downward)



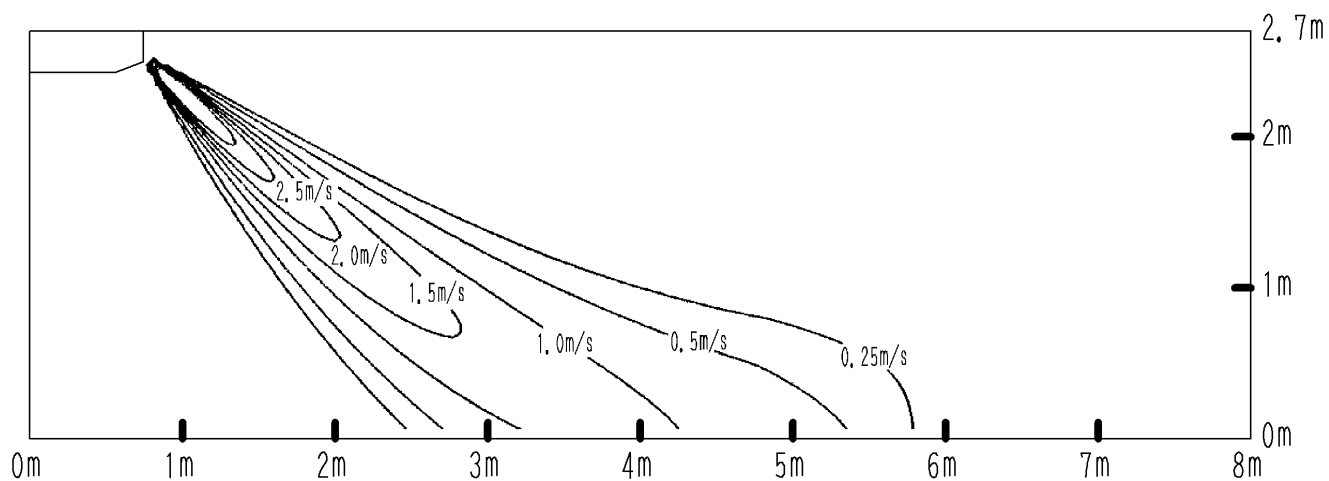
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9 Air flow pattern

FHQ125B

Heating - air velocity distribution

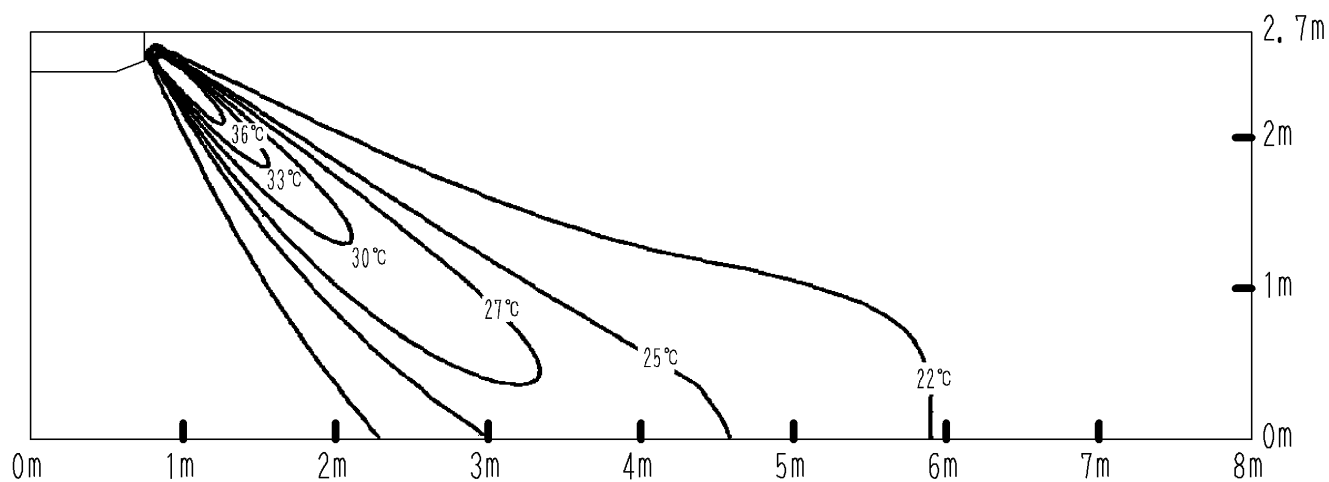
Air flow direction: 45° (downward)



FHQ125B

Heating - air temperature distribution

Air flow direction: 45° (downward)



4D028557B



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 intention 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.



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