



technical data

FFQ-B

**4-way Blow Ceiling
Mounted Cassette
(600mm x 600mm)**



air conditioning systems

Split Sky Air

Split - Sky Air



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.



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.



Daikin Europe N.V. is participating in the EUROVENT Certification Programme. Products are as listed in the EUROVENT Directory of Certified Products.

Specifications are subject to change without prior notice.

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* For capacity tables, please refer to part II: outdoor units





1 Features

1

- Leaves maximum floor and wall space for furniture, decoration and fittings
- Fits flush into each ceiling thanks to the new and very compact casing (only 575mm width), which matches in standard architectural modules.
- Modern looking decoration panel in white (RAL9010)
- Extremely quiet in operation both indoors and outdoors
- Possibility to shut off 1 or 2 flaps for easy installation in corners
- Designed for excellent low draft performance.
- Automatic air flow director ensures uniform air flow and temperature distribution
- 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.
- The wired remote control has following features:
 - A real time clock
 - A schedule timer:
 - Possibility to program a weekly schedule timer.
 - Possibility to program 5 actions for each day of the week.
 - Limit operation (min./max.): room temperature is controlled within adjustable upper and lower limits. This can be activated manually or by schedule timer.
 - Home leave (frost protection): during absence, the indoor temperature can be maintained at a certain level. This function can also switch the unit ON/OFF.



Optional



Optional



Optional



2 steps



2 Specifications



NOMINAL CAPACITY and NOMINAL INPUT							
For indoor units only:							
INDOOR UNITS				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
INPUT	Cooling	min~nom~max	kW	0.073	0.084	0.097	0.12
	Heating	min~nom~max	kW	0.064	0.076	0.089	0.111

For combination indoor + outdoor units (air cooled):									
INDOOR UNITS				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B	FFQ50BV1B	FFQ60BV1B
OUTDOOR UNITS				RKS25BVMB	RKS35BVMB	RKS50BVMB9	RKS60BVMB9	RS50BVMB	RS60BVMB
CAPACITY (3)	Cooling	min~nom~max	kW	1.00~2.50~3.00	1.00~3.40~3.70	0.90~4.70~5.60	0.90~5.80~6.00	4.70 (nom.)	5.80 (nom.)
INPUT	Cooling	min~nom~max	kW	0.48~0.83~1.10	0.48~1.30~1.47	0.45~1.80~2.26	0.45~2.07~2.15	1.80 (nom.)	2.07 (nom.)
EER				3.01	2.62	2.61	2.80	2.61	2.80
ENERGY LABEL	Cooling			B	D	D	D	D	D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	415	650	900	1,035	900	1,035

For combination indoor + outdoor units (air cooled):									
INDOOR UNITS				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B		
OUTDOOR UNITS				RXS25BVMB	RXS35BVMB	RXS50BVMB	RXS60BVMB		
CAPACITY (3)	Cooling	min~nom~max	kW	1.00~2.50~3.00	1.00~3.40~3.70	0.90~4.70~5.60	0.90~5.80~6.00		
	Heating	min~nom~max	kW	1.00~3.20~4.50	1.00~4.50~5.00	0.90~5.50~7.00	0.90~7.00~8.00		
INPUT	Cooling	min~nom~max	kW	0.48~0.83~1.10	0.48~1.30~1.47	0.45~1.80~2.26	0.45~2.07~2.15		
	Heating	min~nom~max	kW	0.40~0.94~1.75	0.44~1.60~1.80	0.45~1.96~2.78	0.45~2.49~2.92		
EER				3.01	2.62	2.61	2.80		
COP				3.40	2.81	2.81	2.81		
ENERGY LABEL	Cooling			B	D	D	D		
	Heating			C	D	D	D		
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	415	650	900	1,035		

TECHNICAL SPECIFICATIONS										
For indoor units only:										
INDOOR UNITS				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B			
DIMENSIONS	Unit	H	mm	286						
		W	mm	575						
		D	mm	575						
	Decoration panel	H	mm	55						
		W	mm	700						
		D	mm	700						
WEIGHT	Unit	kg	17.5							
	Decoration panel	kg	2.7							
COLOUR	Decoration panel	White (Ral 9010)								
SOUND LEVEL	Sound pressure (1)	high	dB(A)	29.5	32	36	41			
		low	dB(A)	24.5	25	27	32			
	Sound power (2)	dB(A)	46.5	49	53	58				
FAN	Air flow rate	high	m ³ /min	9	10	12	15			
		low	m ³ /min	6.5		8	10			
	Speed	steps	2 steps							
		high	rpm	556	624	725	866			
		low	rpm	414	414	471	612			
	Type	Turbo fan								
Qty x motor output	W	1x55								
HEAT EXCHANGER	Type	Multi louver fins and φ7Hi-XSS tubes								
	Rows x stages x fin pitch	mm	2x10x1.5							
	Face area	m ²	-							
AIR DIRECTION CONTROL	Horizontal and downwards									
TEMPERATURE CONTROL	Microcomputer control									
PIPING CONNECTIONS	liquid	mm	φ6.4							
		mm	φ9.5		φ12.7					
	drain I.D.	mm	φ20 (VP20)							
		mm	φ26 (VP20)							
INSULATION MATERIAL	Heat insulation	Both liquid and gas pipes								

For outdoor units only:		
Pair application	See chapters RS-B + RKS-B + RXS-B	
Multi model application	See chapters 4MKS-B + 3MXS-B/4MXS-B	

2 Specifications



2

ELECTRICAL SPECIFICATIONS						
For indoor units only:			FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
CURRENT	Nominal running current	A	0.37	0.40	0.49	0.61
	Max. running current	A	See chapters RS-B + RKS-B + RXS-B			

For combination indoor units + outdoor units:				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B	FFQ50BV1B	FFQ60BV1B	
				RKS25BVMB	RKS35BVMB	RKS50BVMB9	RKS60BVMB9	RS50BVMB	RS60BVMB	
CURRENT	Nominal running current	cooling	A	4.2	5.7	8.1	9.3	8.1	9.3	
	Maximum running current	cooling	A	See chapter RKS-B				See chapter RS-B		
	Starting current	cooling	A	See chapter RKS-B				See chapter RS-B		

For combination indoor units + outdoor units:				FFQ25BV1B	FFQ35BV1B	FFQ50BV1B	FFQ60BV1B
				RXS25BVMB	RXS35BVMB	RXS50BVMB	RXS60BVMB
CURRENT	Nominal running current	cooling/heating	A	4.2/4.4	5.7/7.0	8.1/8.8	9.3/11.2
	Maximum running current	cooling/heating	A	See chapter RXS-B			
	Starting current	cooling/heating	A	See chapter RXS-B			

For indoor units only:			FFQ25BV1B	FFQ35B7V1	FFQ50BV1B	FFQ60BV1B
POWER SUPPLY			V1			
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase		1~			
	Frequency	Hz	50			
	Voltage	V	230			

3D040444A 3D040442A
 3D040437 3D040431
 3D040445 3D040443
 3D040441 3D040436
 3D040438 3D040433

NOTES

- Nominal cooling capacities are based on: indoor temperature 27°CDB/19°CWB * outdoor temperature 35°CDB * refrigerant piping length: 7.5m * level difference: 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB * outdoor temperature: 7°CDB/6°CWB * refrigerant piping length: 7.5m * level difference 0m.
- Capacities are net, including a deduction for cooling (an addition for heating) for indoor fan motor heat.
- The sound pressure level is measured at 1.5m distance from the unit. It is a relative value, depending on the distance and acoustic environment. For measuring conditions: please refer to item 6 of this chapter.
- The sound power level is an absolute value indicating the "power" which a sound source generates.
- Energy label: scale from A (most efficient) to G (less efficient).
- The Energy Label Directive 2002/31/EC will enter into force once the relevant measurement standard will be published in the European Official Standard.
- Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).



3 Dimensional drawings

FFQ25-35B

BYFQ60BW1 White Ral 9010

For fresh air intake kit connection (direct installation type)

A Arrow view

B Arrow view

Required installation space
When the discharge grille is closed, the required space is 200mm or more

- Liquid pipe connection ϕ 6.4 Flare connection
- Gas pipe connection ϕ 9.5 Flare connection
- Drain pipe connection VP20 (O.D. ϕ 26)
- Power supply connection
- Remote control code and control wiring connection
- Air discharge grille
- Air suction grille
- Drain hose I.D. ϕ 25

3D039003B

FFQ50-60B

BYFQ60BW1 White Ral 9010

For fresh air intake kit connection (direct installation type)

A Arrow view

B Arrow view

Required installation space
When the discharge grille is closed, the required space is 200mm or more

- Liquid pipe connection ϕ 6.4 Flare connection
- Gas pipe connection ϕ 12.7 Flare connection
- Drain pipe connection VP20 (O.D. ϕ 26)
- Power supply connection
- Remote control code and control wiring connection
- Air discharge grille
- Air suction grille
- Drain hose I.D. ϕ 25

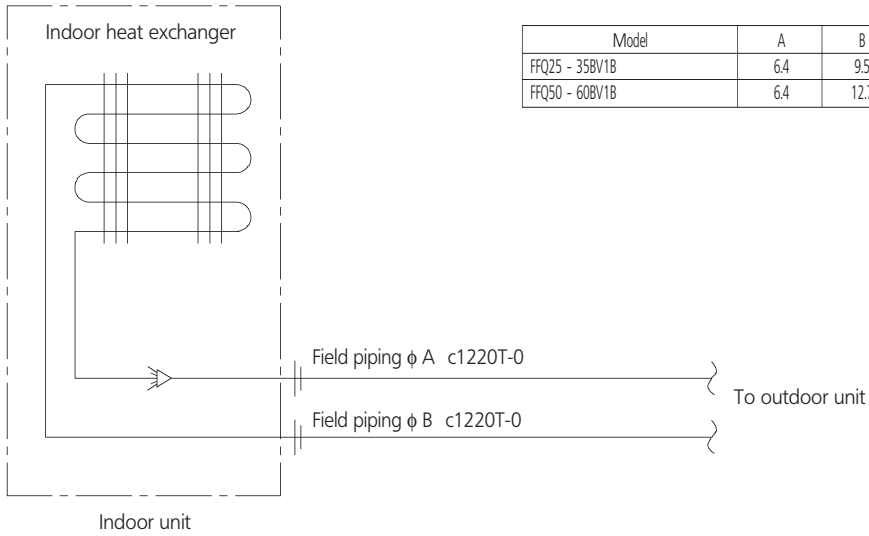
3D039005B



4 Piping diagrams

4

FFQ-B

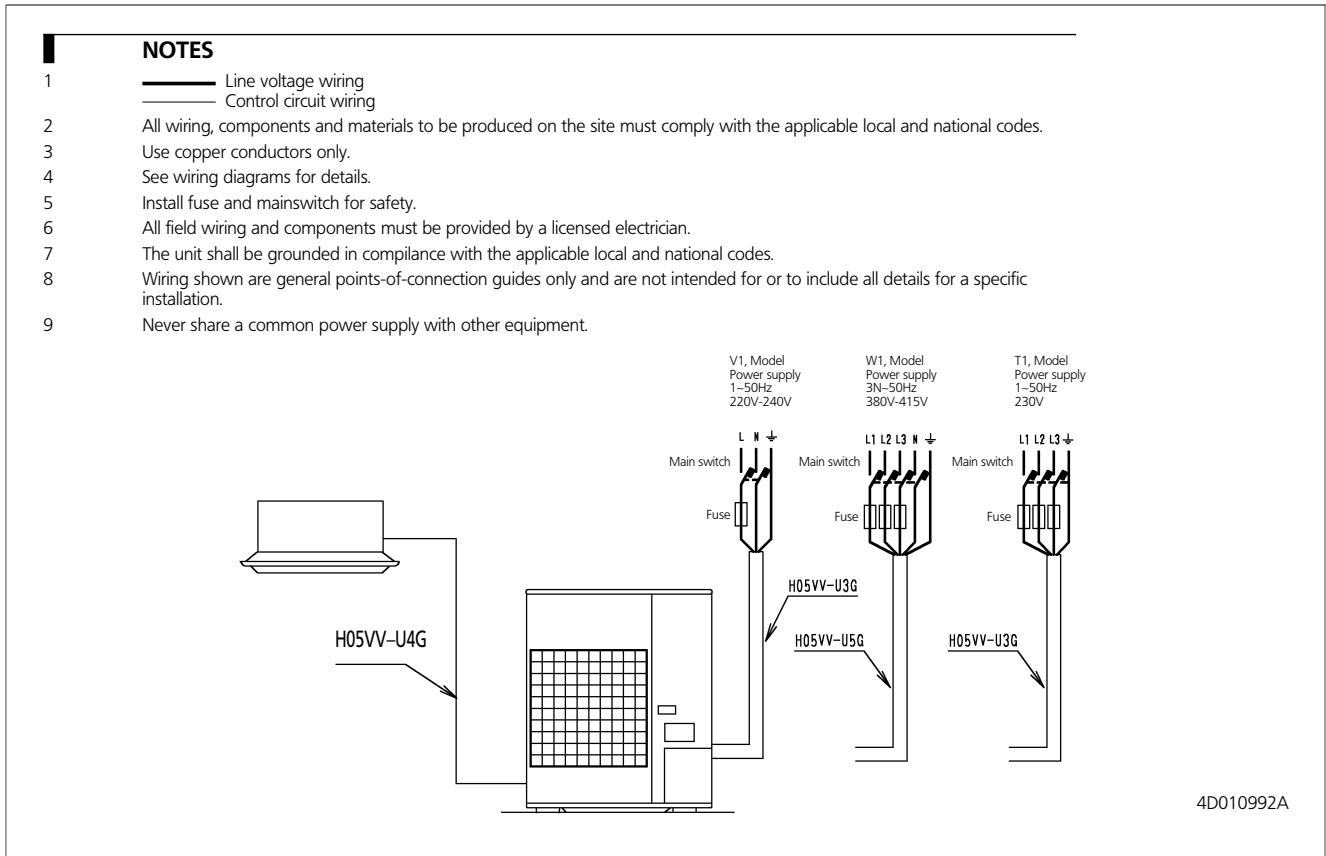
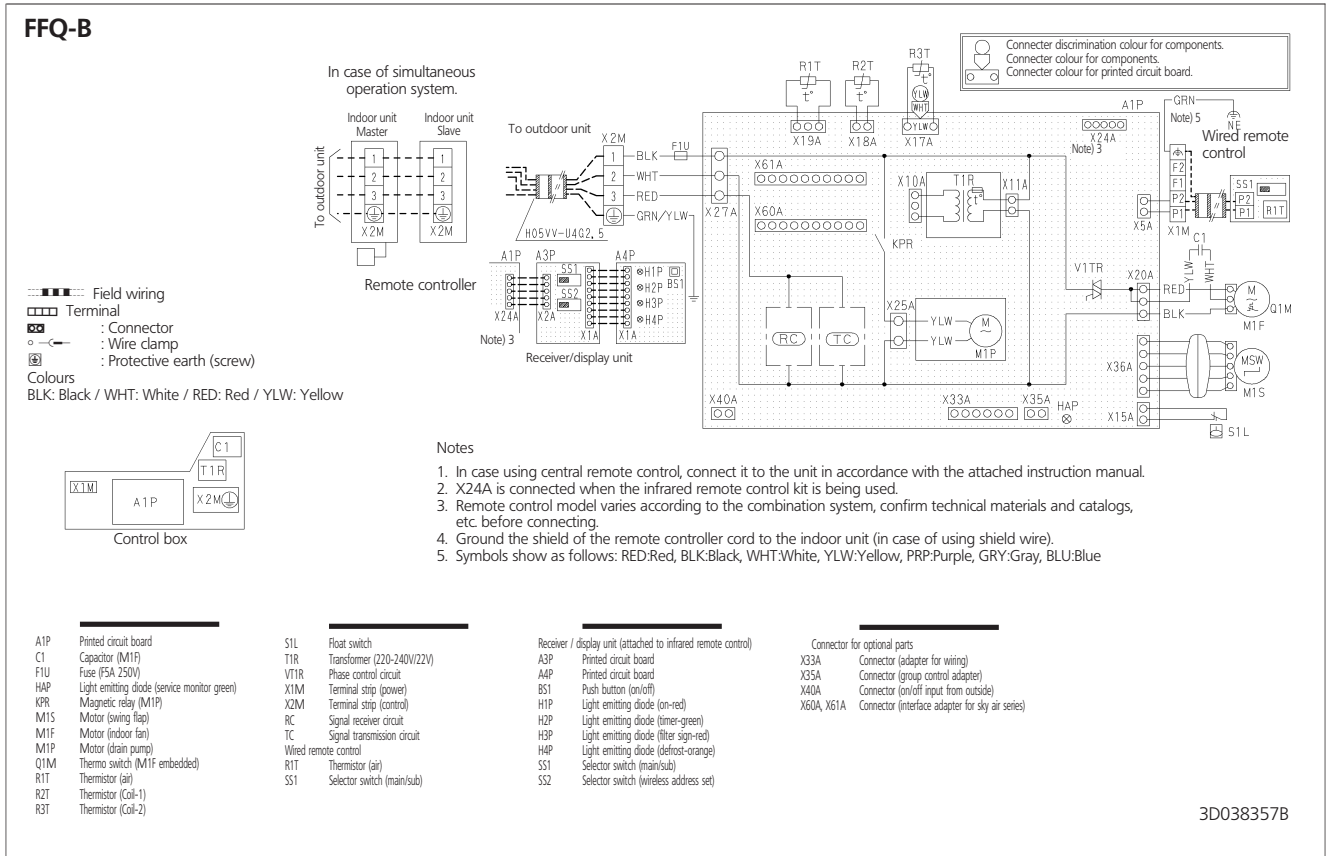


Check valve
 Flare connection
 Screw connection
 Flange connection
 Pinched pipe
 Spinned pipe

4D039335



5 Wiring diagrams





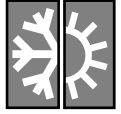
6 Sound level

6-1 Sound level data

6

6-1

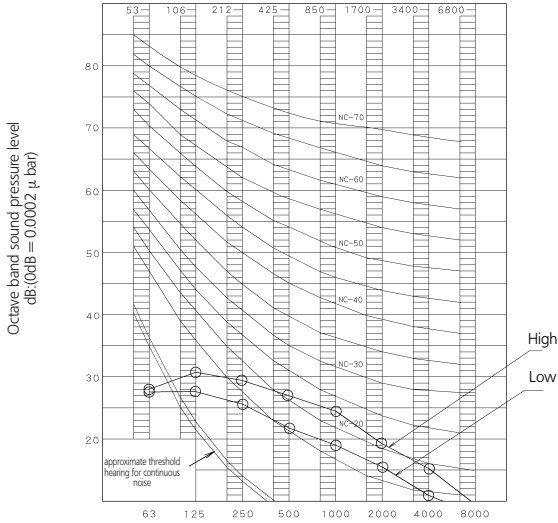
Model	Sound pressure level		Measuring location	Sound power level (H)
	230V, 50Hz			
	H	L		
FFQ25BV1B	29.5	24.5	Location of microphone 	46.5
FFQ35BV1B	32	25		49
FFQ50BV1B	36	27		53
FFQ60BV1B	41	32		58



6 Sound level

6-2 Sound pressure spectrum

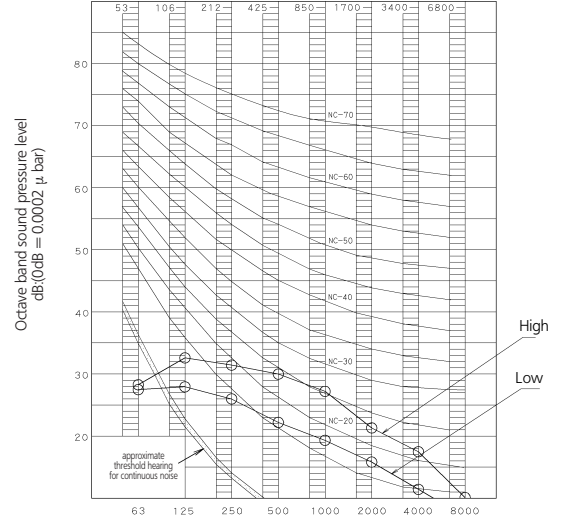
FFQ25B



4D040176A

Octave band center frequency (Hz)

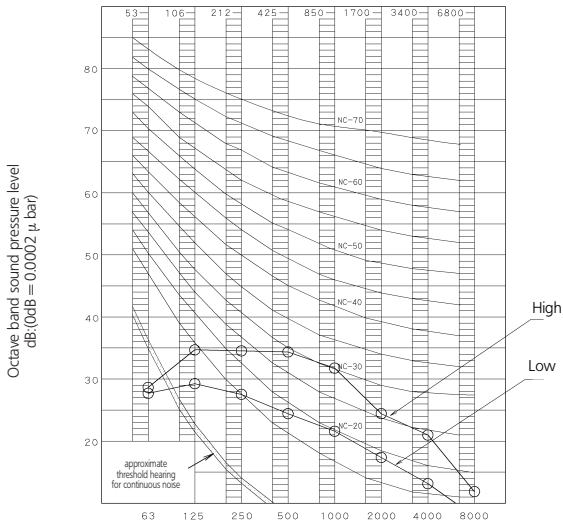
FFQ35B



4D040177A

Octave band center frequency (Hz)

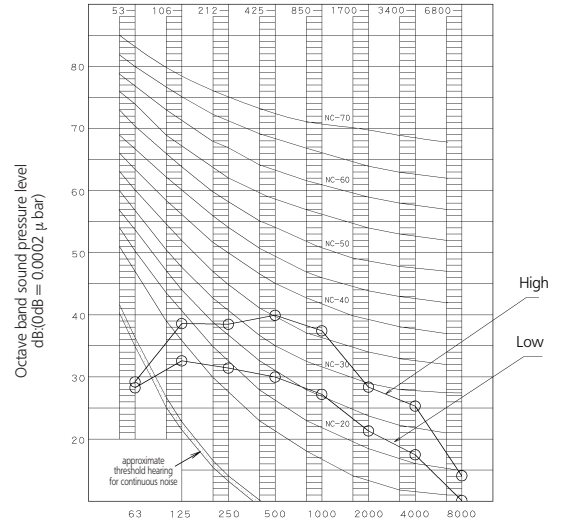
FFQ50B



4D040178A

Octave band center frequency (Hz)

FFQ60B



4D040179A

Octave band center frequency (Hz)

Legend

- 50Hz 230V (H)
- -○ 50Hz 230V (L)

NOTES

- 1 Operation noise differs with operation and ambient conditions.
- 2 Measuring place: anechoic room

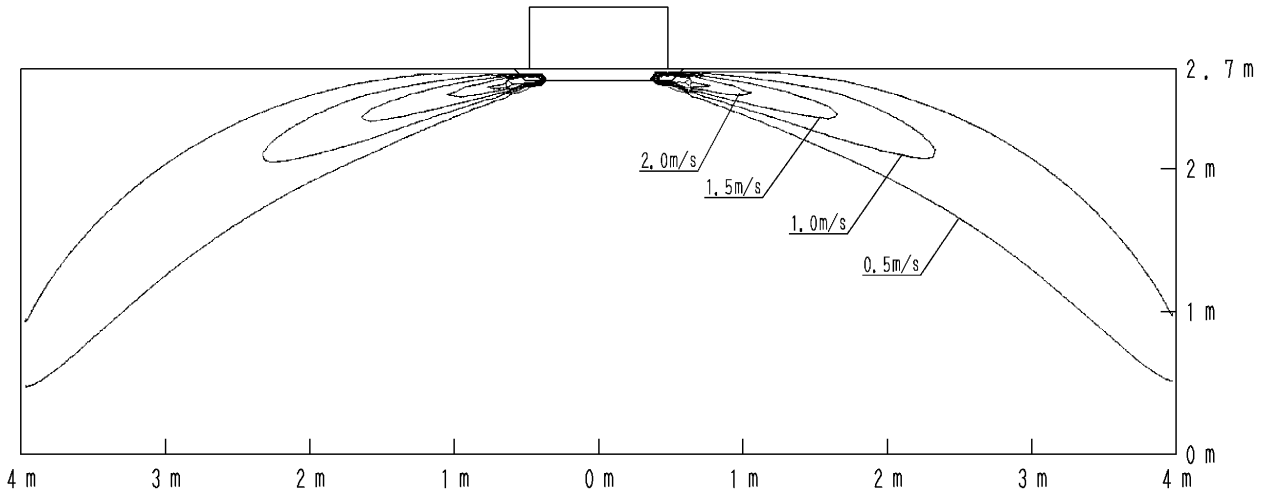


7 Air flow patterns

7 FFQ25B

Cooling - air velocity distribution

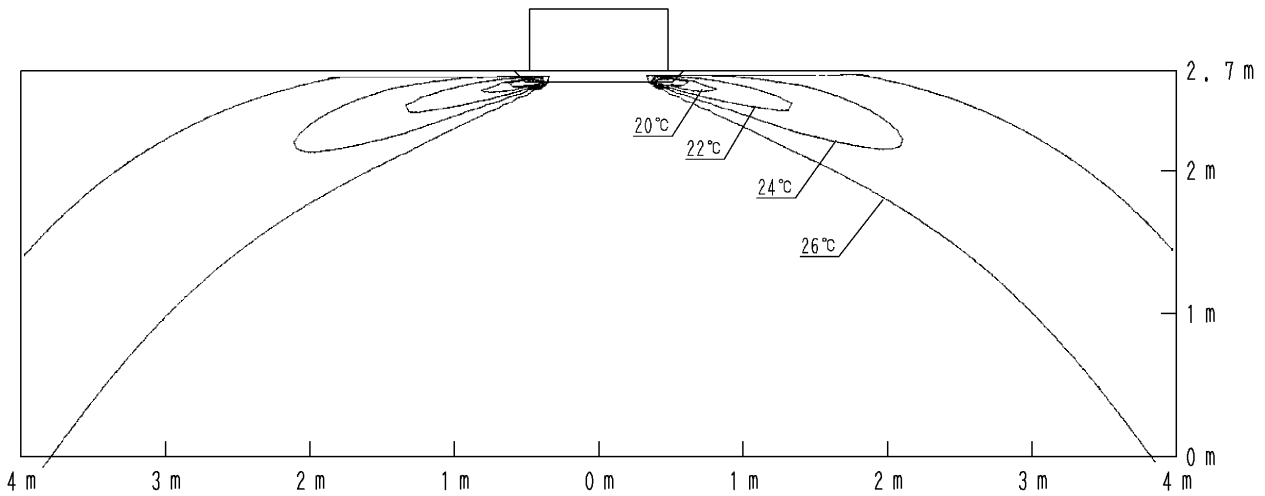
4-way discharge air flow direction: horizontal



FFQ25B

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal



4D039738A

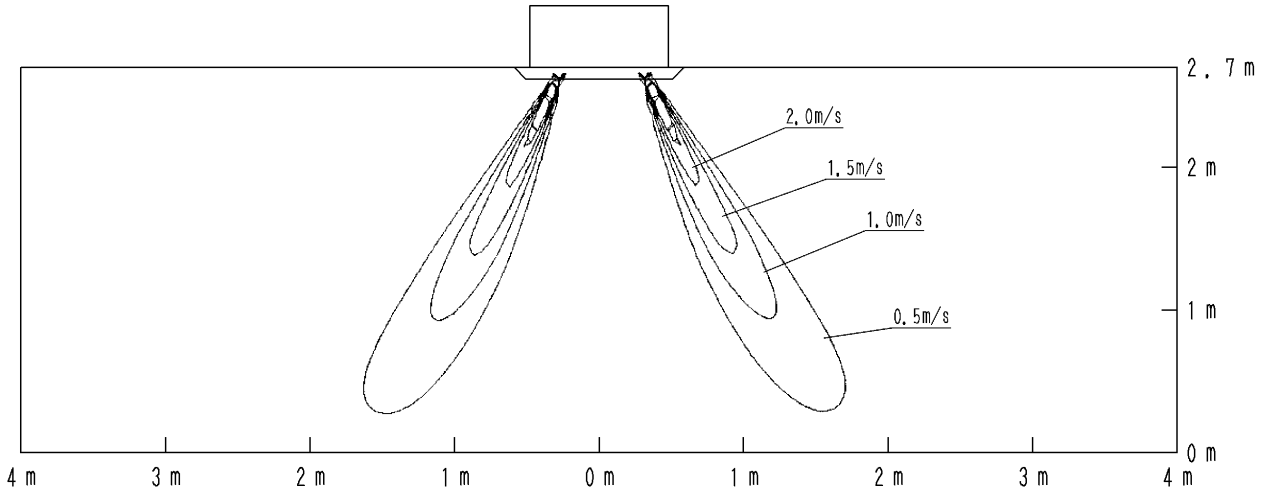


7 Air flow patterns

FFQ25B

Heating - air velocity distribution

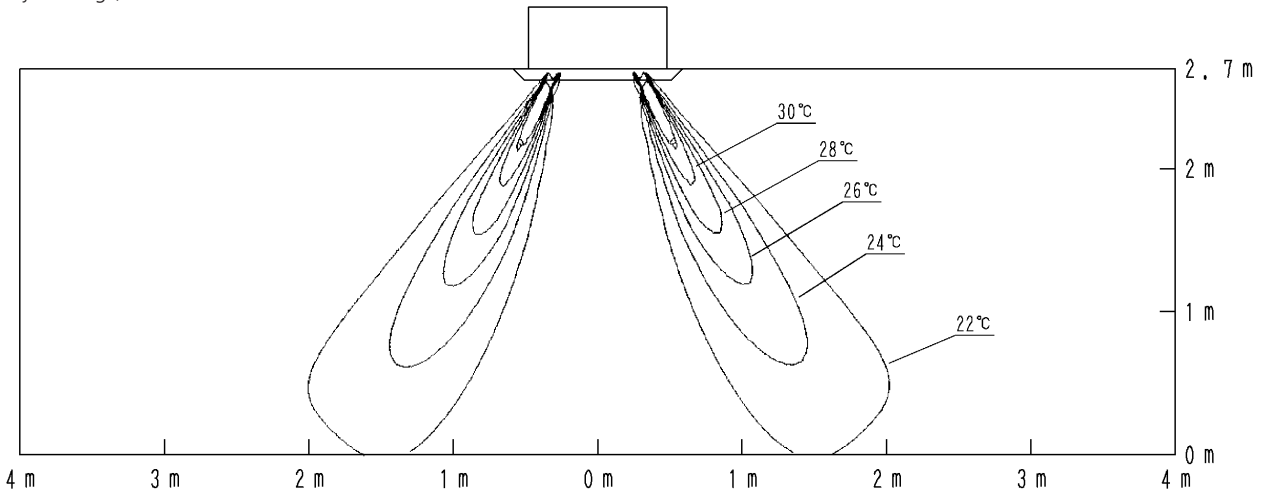
4-way discharge, air flow direction: down



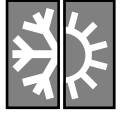
FFQ25B

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D039820A

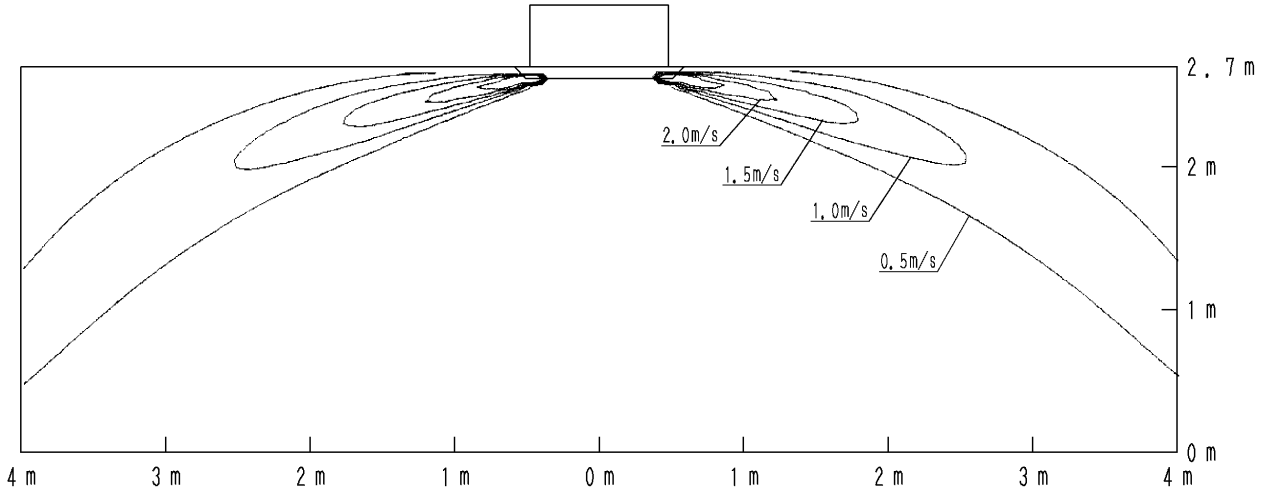


7 Air flow patterns

7 FFQ35B

Cooling - air velocity distribution

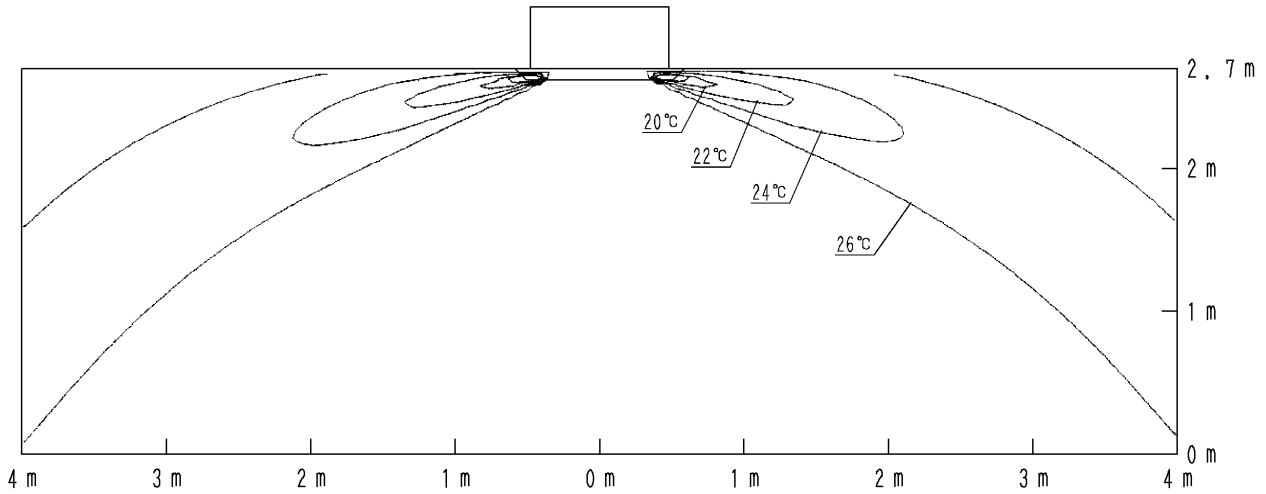
4-way discharge air flow direction: horizontal



FFQ35B

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal



4D039816



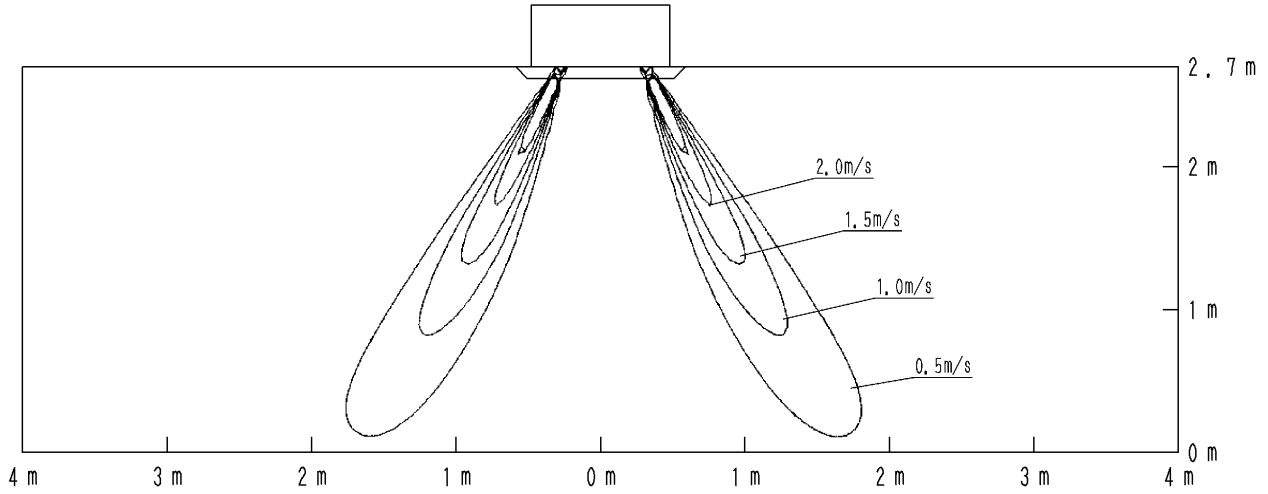
7 Air flow patterns

7

FFQ35B

Heating - air velocity distribution

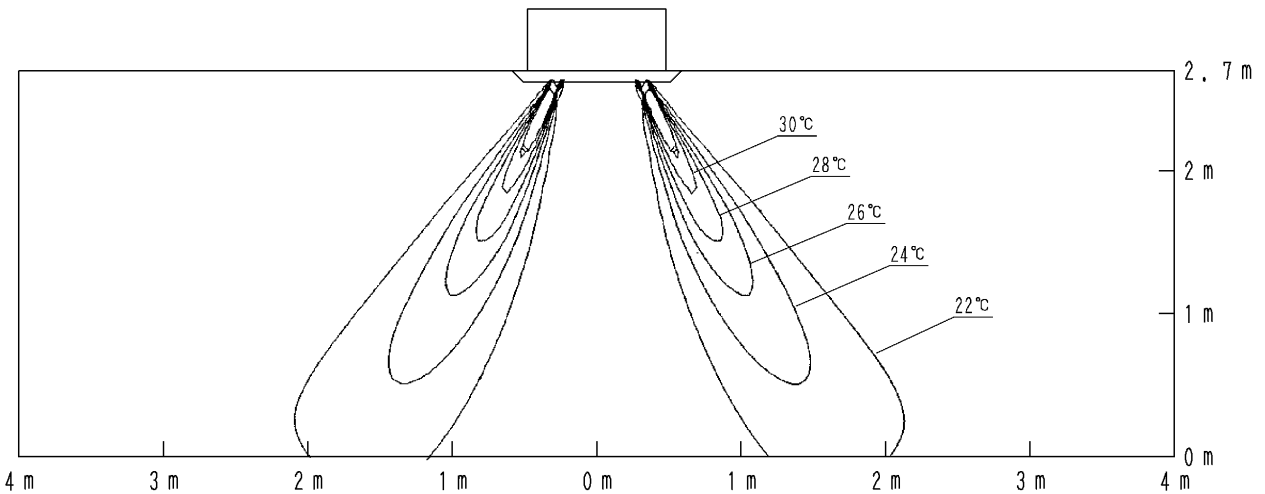
4-way discharge, air flow direction: down



FFQ35B

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D039846

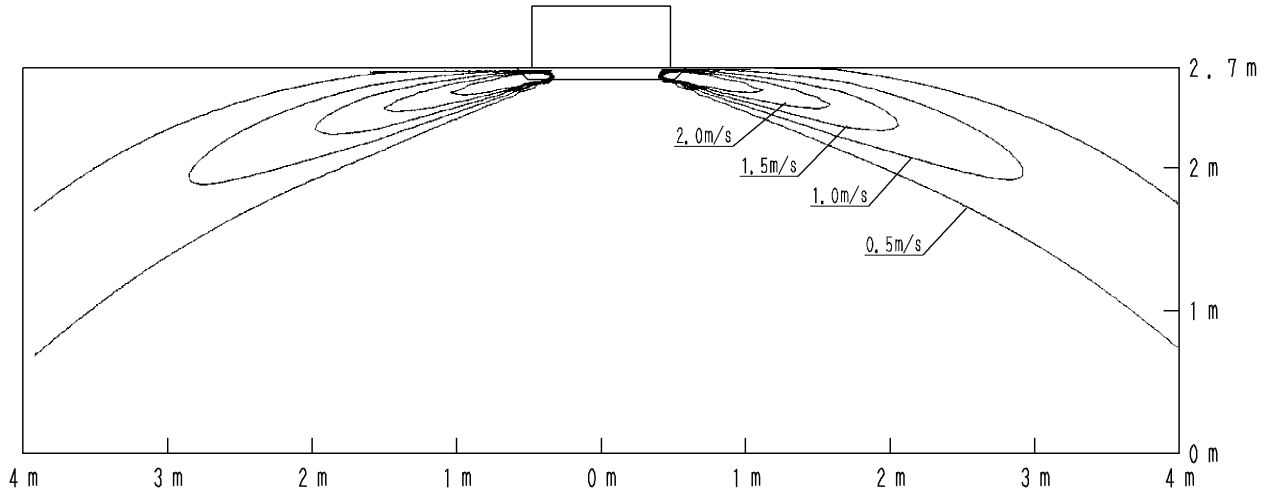


7 Air flow patterns

7 FFQ50B

Cooling - air velocity distribution

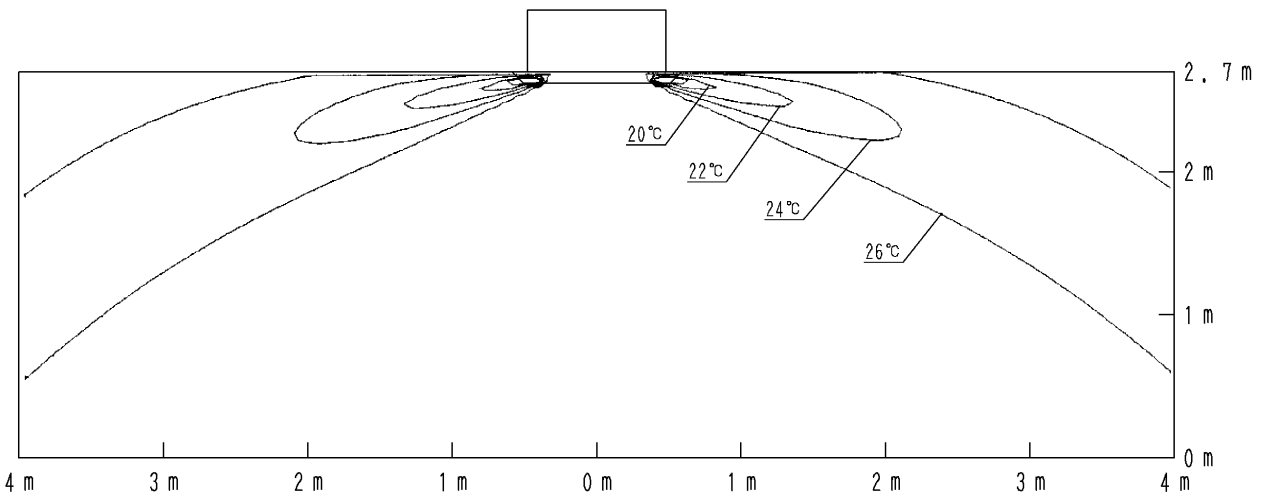
4-way discharge air flow direction: horizontal



FFQ50B

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal



4D039815

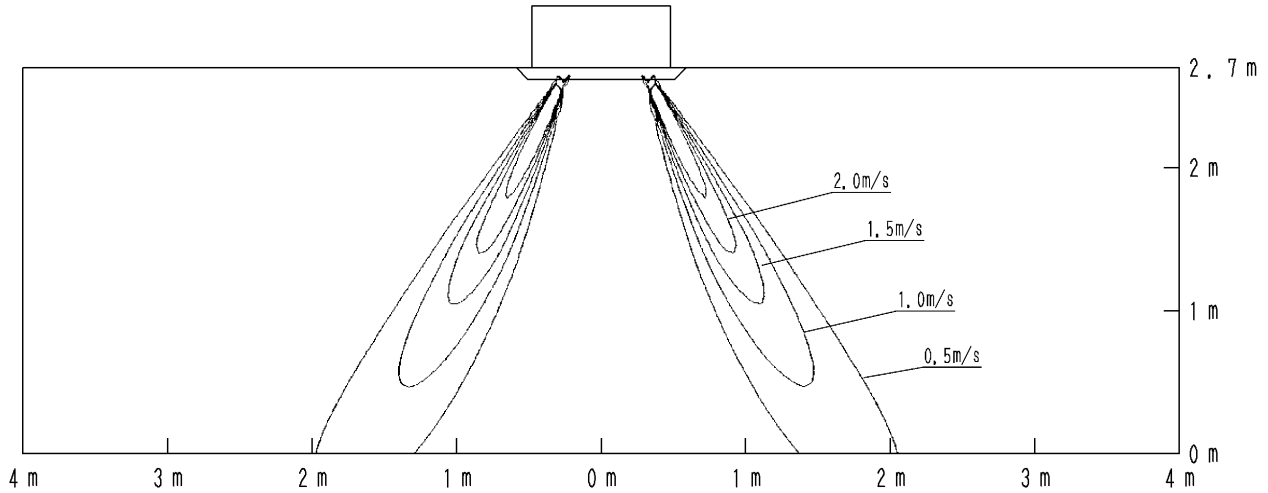


7 Air flow patterns

FFQ50B

Heating - air velocity distribution

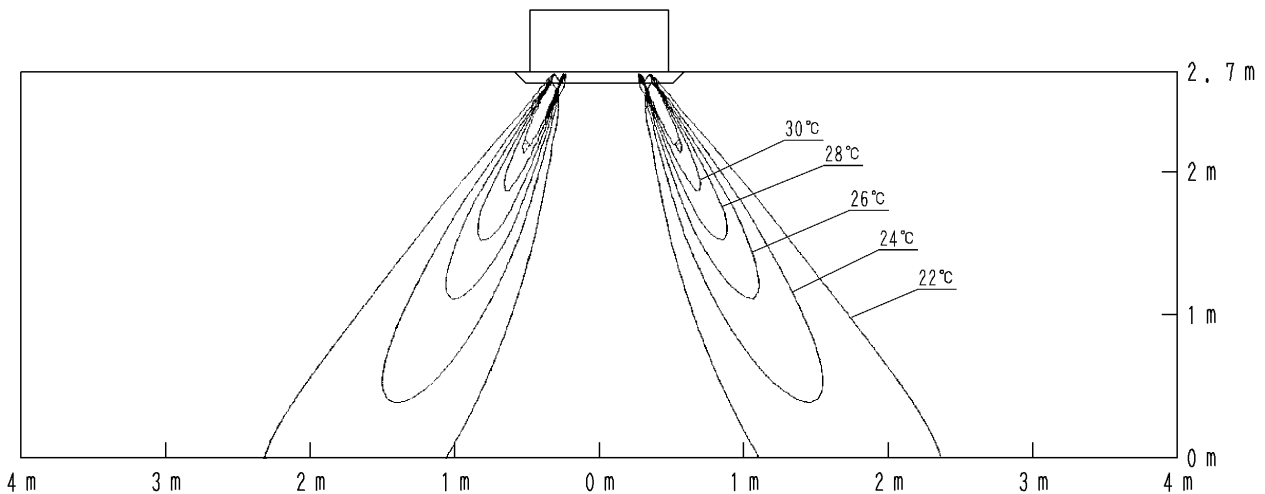
4-way discharge, air flow direction: down



FFQ50B

Heating - air temperature distribution

4-way discharge, air flow direction: down



4D039848

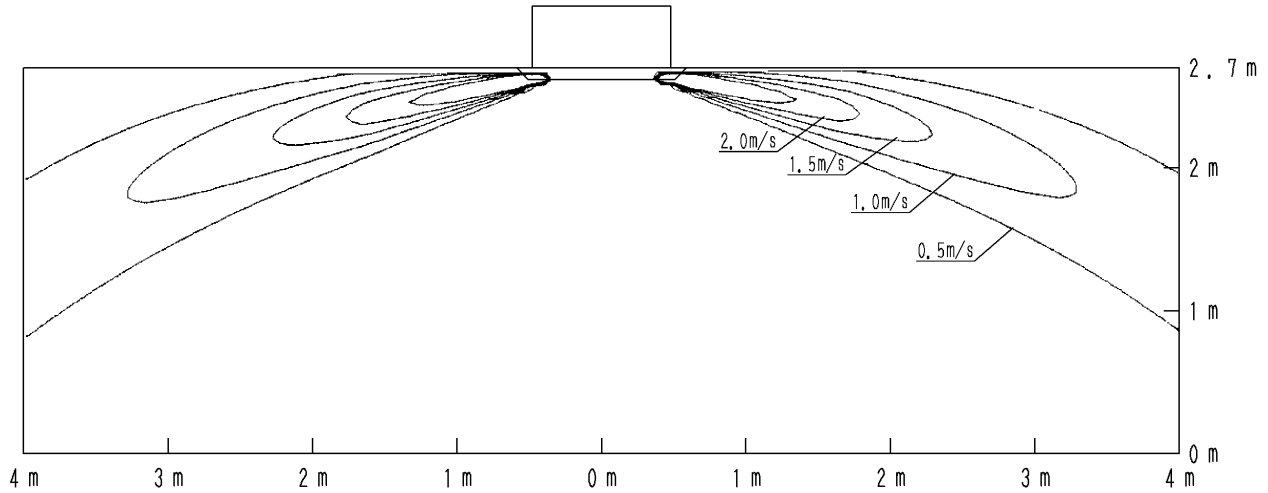


7 Air flow patterns

7 FFQ60B

Cooling - air velocity distribution

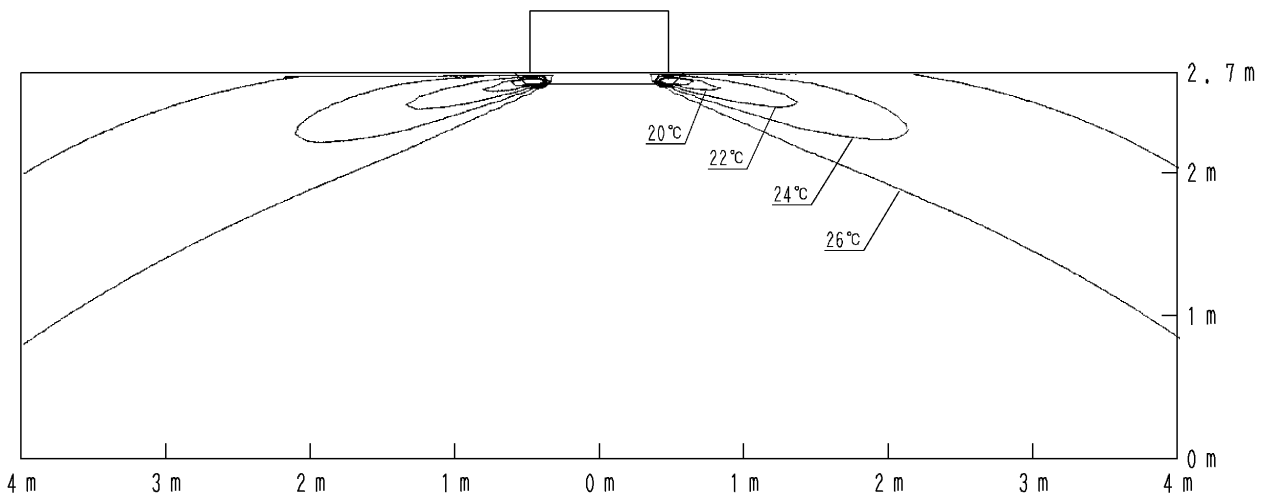
4-way discharge air flow direction: horizontal



FFQ60B

Cooling - air velocity distribution

4-way discharge air flow direction: horizontal



4D039733

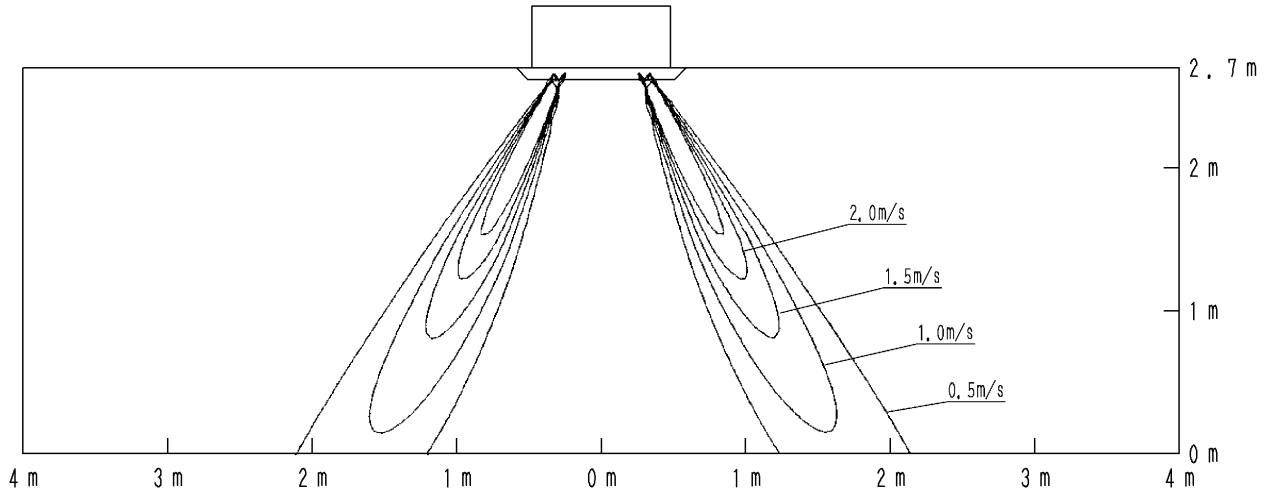


7 Air flow patterns

FFQ60B

Heating - air velocity distribution

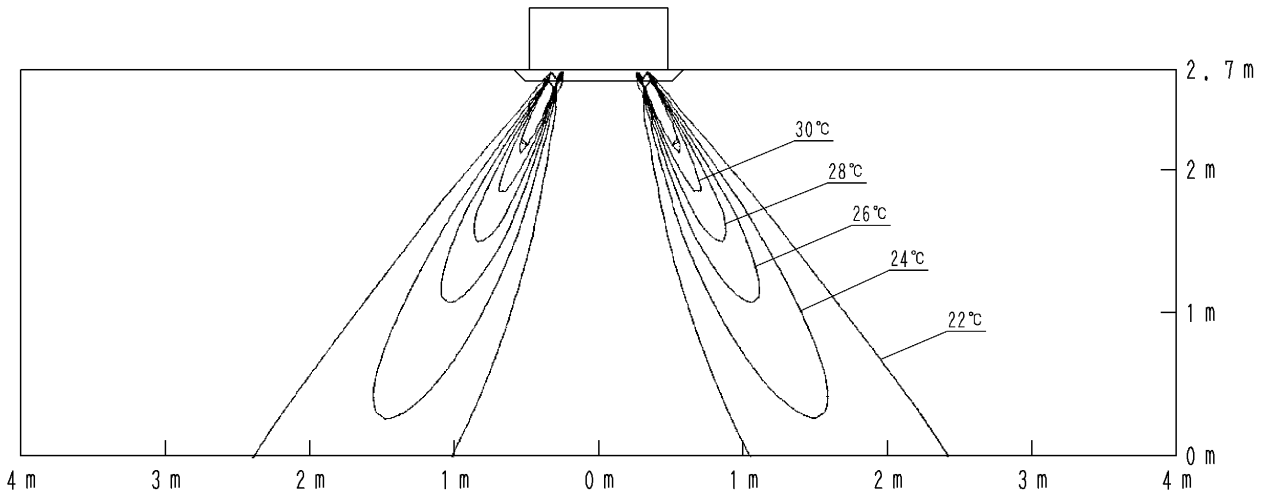
4-way discharge, air flow direction: down



FFQ60B

Heating - air temperature distribution

4-way discharge, air flow direction: down









4D039849

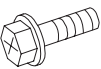





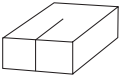


8 Accessories

8-1 Standard accessories

8
8-1

Name	① Drain hose	② Clamp	③ Washer for hanging bracket	④ Clamp		⑤ Paper pattern for installation
Quantity	1 pc.	1 pc.	8 pcs.	(Big) 6 pcs.	(Small) 1 pc.	1 pc.
Shape						Also used as packing material 

Name	⑥ Screws (M5)	⑦ Washer fixing plate	Insulation for fitting	Sealing pad	⑫ Sealing material	(Other)
Quantity	4 pcs.	4 pcs.	1 each	1 each	2 pcs.	<ul style="list-style-type: none"> • Operation manual • Installation manual
Shape			 ⑧ For gas pipe  ⑨ For liquid pipe	 ⑩ Large  ⑪ Small		

8-2 Optional accessories

Name of option		Remark	FFQ25BV1B	FFQ35BV1B	FFQ50BVB	FFQ60BV1B
Decoration panel					BYFQ60BW1	
Sealing member of air discharge outlet					KDBHQ44B60	
Panel spacer					KDBQ44B60	
Fresh air intake kit	Direct installation type				KDDQ44X60	
Long life air filter					KAFQ441B60	
Remote control	Wired type				BRC1D527	
	Infrared type	Heat pump			BRC7E530W	
		Cooling only			BRC7E531W	
Central remote control					DCS302B51	
Unified ON/OFF control					DCS301B51	
Schedule timer					DST301B51	
Wiring adapter for electrical appendices *1					KRP1B57	
Wiring adapter for electrical appendices *1					KRP4A53	
Wiring adapter (hour meter) *2					EKR1B2	
Installation box for adaptor PCB					KRP1B101	
Remote sensor					KRCS01-1	
Interface adapter for Sky Air series					DTA112B51	
Remote ON/OFF, forced OFF					EKRORO	

Note *1 Installation box for adaptor PCB (KRP1B101) is necessary.

*2 Possibility to connect an hour meter. This part should not be installed inside the equipment.

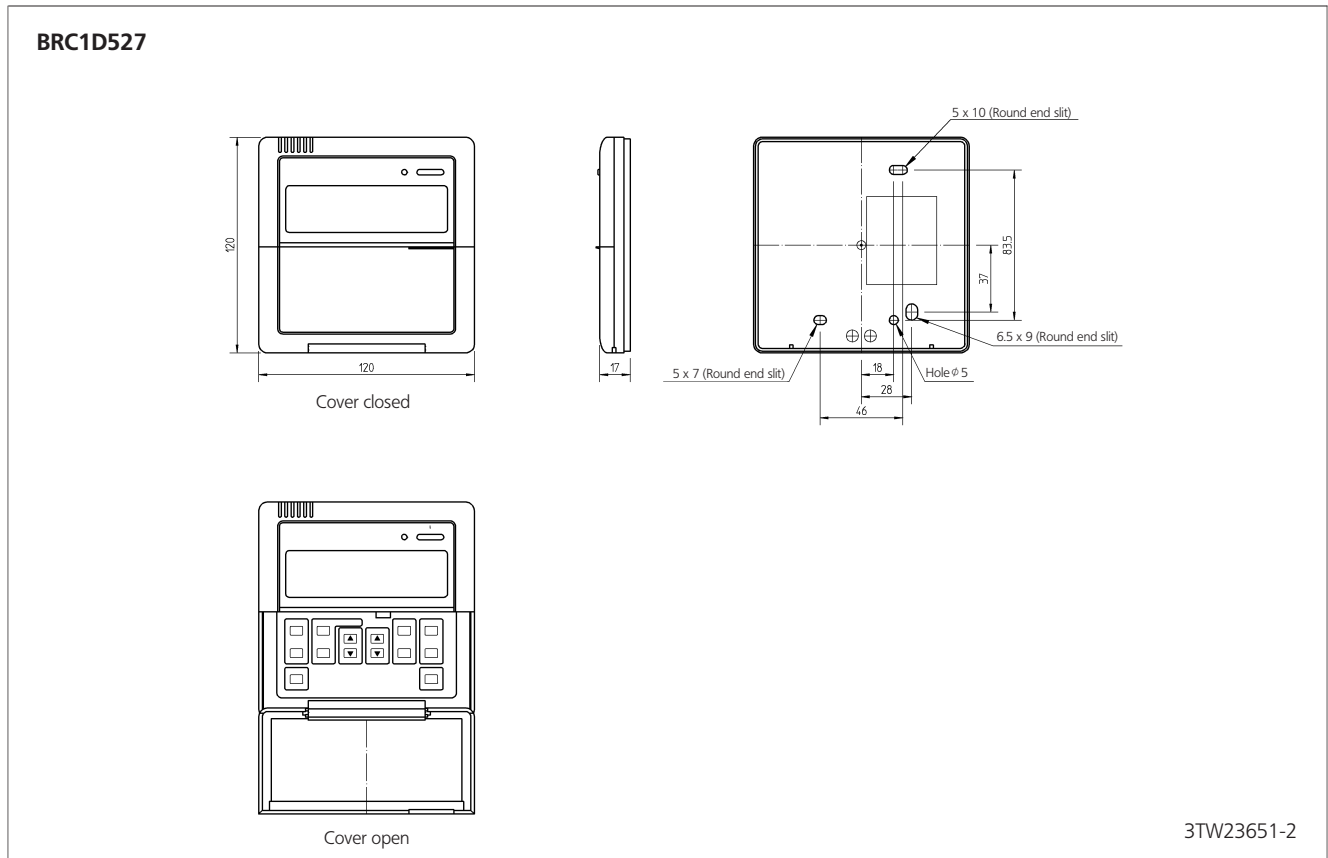
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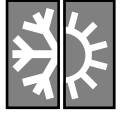


9 Control systems

9-1 Wired remote control

9
9-1





9 Control systems

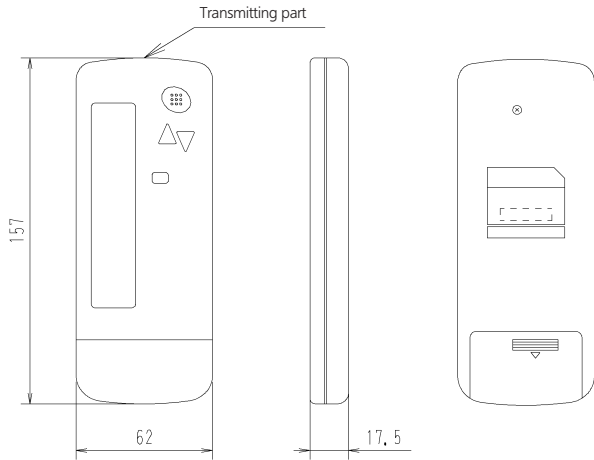
9-2 Infrared remote control kit

9

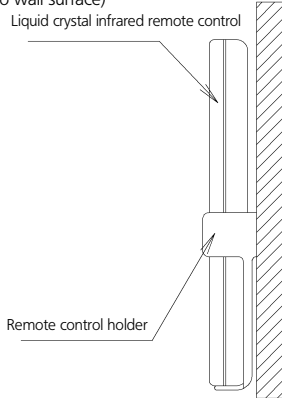
FFQ-B

9-2

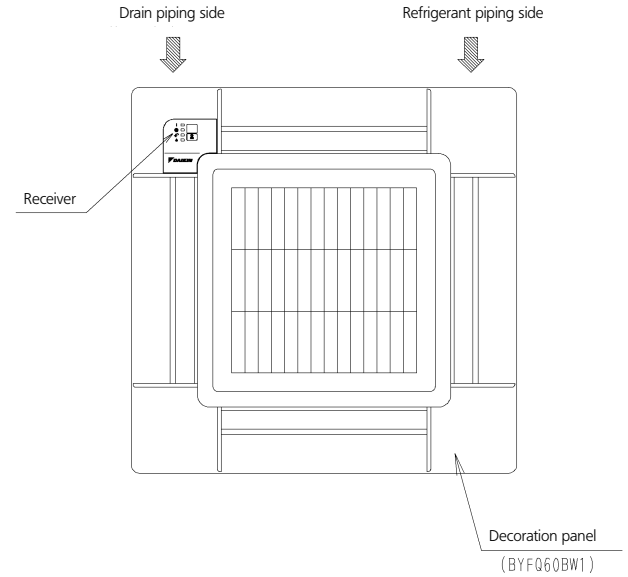
Remote control dimensions



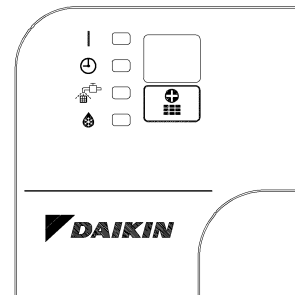
Remote control holder
Installation procedure
(Installation to wall surface)



Receiver installation procedure



Receiver detail





10 Safety device settings

Model	Safety devices	25	35	50	60
FFQ-BV1B	Fuse	250V 5A	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

3D006611F

11 Installation

