



# technical data

**FAQ-BU**

**Wall Mounted Unit**



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. participates in the Eurovent Certification Programme for Air Conditioners (AC), Liquid Chilling Packages (LCP) and Fan Coil Units (FC); the certified data of certified models are listed in the Eurovent Directory.

Specifications are subject to change without prior notice.

**DAIKIN EUROPE N.V.**

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

# 1 Features



1

- Ideal for shops, restaurants or offices requiring maximum floor space for furniture and fittings
- The 71 class has a modern casing: it is very compact (290mm height - 1050mm width) and very lightweight (only 13 kg).
- Fits neatly on a wall
- Automatic air flow director ensures uniform air flow and temperature distribution
- The flap of the unit is closed when not operating.
- The front panel of the new casing is easy removable and washable.
- Extremely quiet in operation both indoors and outdoors
- For equal distribution in larger rooms, up to 3 indoor units can be connected to 1 outdoor. They are operated from 1 remote control
- These indoor units can also be connected to the Sky Air super inverter RZQ-B.
- 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.



Optional



Optional



Optional



Optional



Optional



Optional



Heat pump



Optional



Optional



Optional



2 steps



Twin / Triple



Optional



Optional

## 2 Specifications


**2**

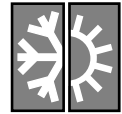
NOMINAL CAPACITY and NOMINAL INPUT					
For indoor units only:					
INDOOR UNITS				FAQ71BUV1B	FAQ100BUV1B
NOMINAL INPUT	Cooling		kW	0.068	0.101
	Heating		kW	0.068	0.101

For combination indoor + outdoor units (air cooled):					
INDOOR UNITS				FAQ71B7V3B	FAQ100B7V3B
OUTDOOR UNITS				RR71B7V3B/RR71B7W1B	RR100B7V3B/RR100B7W1B
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.10	10.00
NOMINAL INPUT	Cooling	nominal	kW	2.65/2.53	3.56/3.52
EER				2.68/2.81	2.81/2.84
ENERGY LABEL	Cooling			D/C	C/C
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,325	1,780

For combination indoor + outdoor units (air cooled):					
INDOOR UNITS				FAQ71B7V3B	FAQ100B7V3B
OUTDOOR UNITS				RQ71B7V3B/RQ71B7W1B	RQ100B7V3B/RQ100B7W1B
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.10	10.10
	Heating (2)	nominal	kW	8.00	11.20
NOMINAL INPUT	Cooling	nominal	kW	2.65/2.53	3.56/3.52
	Heating	nominal	kW	2.58/2.49	3.96/3.82
EER				2.68/2.81	2.81/2.84
COP				3.10/3.21	2.83/2.93
ENERGY LABEL	Cooling			D/C	C/C
	Heating			D/C	D/D
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,325	1,780

For combination indoor + outdoor units (air cooled):					
INDOOR UNITS				FAQ71BUV1B	FAQ100BUV1B
OUTDOOR UNITS				RZQ71B8V3B	RZQ100B8V3B/B7W1B
NOMINAL CAPACITY (3)	Cooling (1)	nominal	kW	7.10	10.00
	Heating (2)	nominal	kW	8.00	11.20
NOMINAL INPUT	Cooling	nominal	kW	2.36	2.78
	Heating	nominal	kW	2.42	3.39
EER				3.01	3.6
COP				3.31	3.30
ENERGY LABEL	Cooling			B	A
	Heating			C	C
ANNUAL ENERGY CONSUMPTION	Cooling		kWh	1,180	1,390

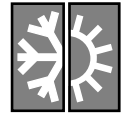
## 2 Specifications



### 2

TECHNICAL SPECIFICATIONS						
INDOOR UNITS				FAQ71BUV1B		FAQ100BUV1B
DIMENSIONS	Unit	H	mm	290		360
		W	mm	1,050		1,570
		D	mm	230		200
WEIGHT	Unit	kg		13		26
MATERIAL	Unit	Resin				
COLOUR	Unit	White				
SOUND LEVEL	Sound pressure (cooling/heating) (4)	high	dB(A)	43/43		45/45
		low	dB(A)	37/37		41/41
	Sound power (cooling/heating) (5)	high	dB(A)	59/59		61/61
		low	dB(A)	53/53		57/57
FAN	Air flow rate	high	m <sup>3</sup> /min	19/19		23/23
		low	m <sup>3</sup> /min	15/15		19/19
	Speed	steps		2 steps		
	Type	Cross flow fan				
	Qty x motor output	W		1 x 43		1 x 49
HEAT EXCHANGER	Type	Cross fin coil (Multi louver fins and Hi-XA tubes)				
	Rows x stages x fin pitch	mm		2 x 16 x 1.4		2 x 12 x 1.4
	Face area	m <sup>2</sup>		0.289		0.332
PIPING CONNECTIONS		liquid	mm	ϕ9.5 (flare)		
		gas	mm	ϕ15.9 (flare)		
		drain I.D.	mm	ϕ13 (VP13)		ϕ20 (VP20)
		drain O.D.	mm	ϕ18 (VP13)		ϕ26 (VP20)
INSULATION MATERIAL	Heat insulation		Foamed polystyrene/foamed polyethylene			
For outdoor units		Pair / Twin / Triple application		See chapter RR-B / RQ-B / RZQ-B		

## 2 Specifications


**2**

ELECTRICAL SPECIFICATIONS						
For indoor units only:				FAQ71BUV1B		FAQ100BUV1B
CURRENT	Nominal running current	cooling	A	See chapter RR-B7, RQ-B7, RZQ-B		
		heating	A			
	Max. running current	cooling	A			
		heating	A			
For combination indoor + outdoor units (air cooled):				FAQ71B7V3B		FAQ100B7V3B
				RR71B7V3B/RR71B7W1B		RR100B7V3B/RR100B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RR-B7		
	Maximum running current	cooling	A			
	Starting current	cooling	A			
For combination indoor + outdoor units (air cooled):				FAQ71BUV1B		FAQ100BUV1B
				RQ71B7V3B/RQ71B7W1B		RQ100B7V3B/RQ100B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RQ-B7		
	Maximum running current	cooling	A			
	Starting current	cooling	A			
For combination indoor units + outdoor units:				FAQ71BUV1B		FAQ100BUV1B
				RZQ71B8V3B		RZQ100B8V3B/B7W1B
CURRENT	Nominal running current	cooling	A	See chapter RZQ-B		
	Maximum running current	cooling	A			
	Starting current	cooling	A			
For indoor units only:				FAQ71BUV1B		FAQ100BUV1B
POWER SUPPLY				V1		V1
NOMINAL DISTRIBUTION SYSTEM VOLTAGE	Phase			1~		1~
	Frequency		Hz	50		50
	Voltage		V	220-240		220-240

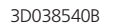
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### NOTES

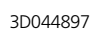
- Nominal cooling capacities are based on: indoor temperature 27°CDB/19.5°CWB \* outdoor temperature 35°CDB \* equivalent refrigerant piping length: 7.5m \* level difference: 0m.
- Nominal heating capacities are based on: indoor temperature: 20°CDB \* outdoor temperature: 7°CDB/6°CWB \* refrigerant piping 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 via a microphone at 1m 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).
- Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

## 3

## unit (mm)



## unit (mm)





4

Piping diagrams

**FAQ71-100BUV1B**

Indoor heat exchanger

Indoor unit

Field piping  $\phi 9.5$  C1220T-0

Field piping  $\phi 15.9$  C1220T-0

To outdoor unit

Refrigerant pipe connection port diameters

Model	A	B
FAQ71, 100BUV1B	$\phi 9.5$	$\phi 15.9$

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

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# 5 Wiring diagrams



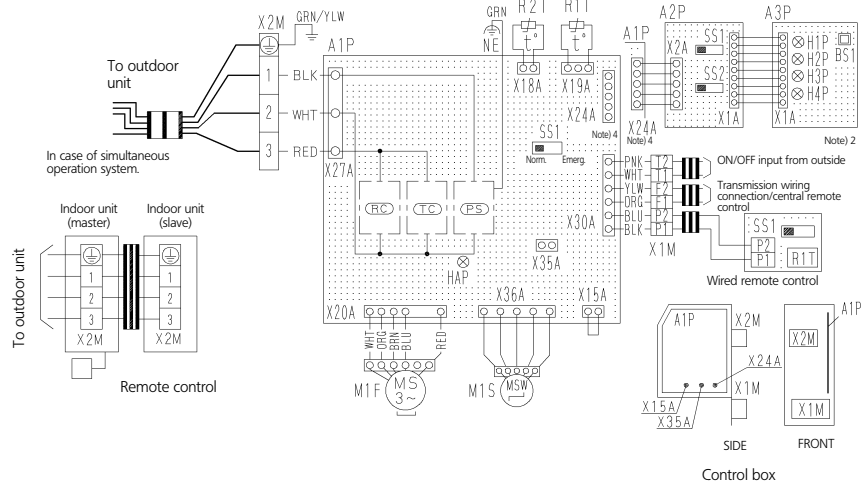
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## FAQ71BUB1B

Receiver / display unit (attached to infrared remote control)

### Notes

1. Terminal, : Connector, : Field wiring
2. In case using central remote control, connect it to the unit in accordance with the attached instruction manual.
3. Remote control model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
4. X24A is connected when the infrared remote control kit is being used.
5. Shows short circuit connector
6. Symbols show as follows Red:red, Blk:black, Ylw:yellow, Org:orange, Gry:gray, Prp:purple, Blu:blue
7. Confirm the method of setting the selector switch (SS1, SS2) by installation manual and engineering materials, etc.



A1P	Printed circuit board	Infrared remote control	
HAP	Light emitting diode (service monitor green)	Receiver / display unit	
M1S	Motor (swing flap)	A2P	Printed circuit board
M1F	Motor (indoor fan)	A3P	Printed circuit board
R1T	Thermistor (air)	BS1	Push button (on/off)
R2T	Thermistor (coil)	H1P	Light emitting diode (on-red)
SS1	Selector switch (emergency)	H2P	Light emitting diode (timer-green)
X1M	Terminal block	H3P	Light emitting diode (filter sign-red)
X2M	Terminal block	H4P	Light emitting diode (defrost-orange)
	Power supply	SS1	Selector switch (main/sub)
	Signal receiver circuit	SS2	Selector switch (wireless address set)
	Signal transmission circuit		

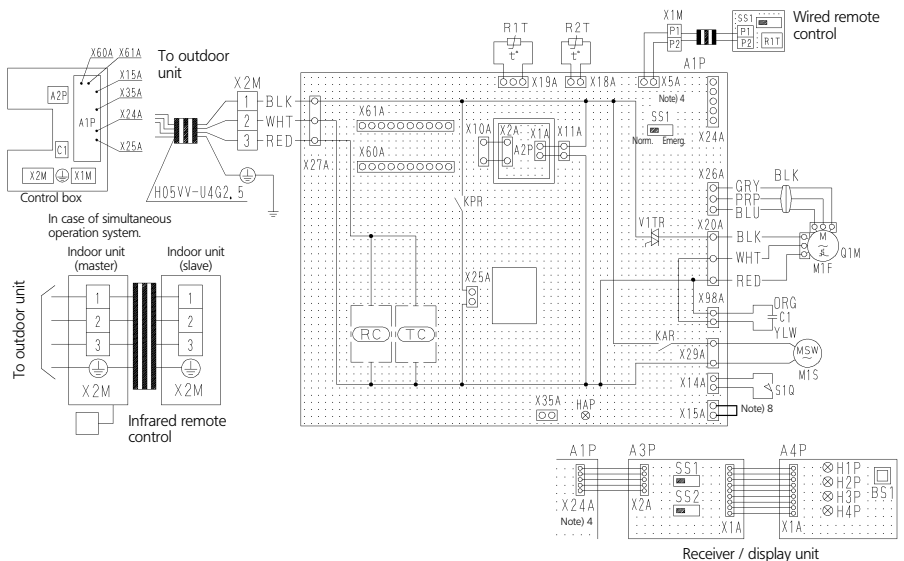
Connector for optional parts	
X15A	Connector (float switch)
X35A	Connector (group control adapter)
Wired remote control	
R1T	Thermistor (air)
SS1	Selector switch (main/sub)

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## FAQ100BUB1B

### Notes

1. Terminal, : Connector, : Field wiring
2. In case using central remote control, connect it to the unit in accordance with the attached instruction manual.
3. Remote control model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
4. X24A is connected when the infrared remote control kit is being used.
5. Remote control model varies according to the combination system, confirm technical materials and catalogs, etc. before connecting.
6. Symbols show as follows Red:red, Blk:black, Ylw:yellow, Org:orange, Gry:gray, Prp:purple, Blu:blue
7. Confirm the method of setting the selector switch (SS1, SS2) by installation manual and engineering materials, etc.
8. x15A, x25A are connected when the drain up kit is being used. Connect it to the kit in accordance with the attached installation manual.



A1P	Printed circuit board	S1Q	Limit switch (swing flap)
A2P	Printed circuit board (Transformer 230V/16V)	SS1	Selector switch (emergency)
C1R	Capacitor (M1F)	V1TR	Phase control circuit
HAP	Light emitting diode (service monitor green)	X1M	Terminal block
KAR	Magnetic relay (M1S)	X2M	Terminal block
KPR	Magnetic relay (M1P)		
M1F	Motor (indoor fan)		
M1S	Motor (swing flap)		
Q1M	Thermo switch (M1F embedded)		
R1T	Thermistor (air)		
R2T	Thermistor (coil)		

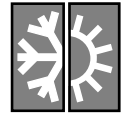
Infrared remote control	
Receiver / display unit	
A3P	Printed circuit board
A4P	Printed circuit board
BS1	Push button (on/off)
H1P	Light emitting diode (on-red)
H2P	Light emitting diode (timer-green)
H3P	Light emitting diode (filter sign-red)
H4P	Light emitting diode (defrost-orange)
SS1	Selector switch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

Connector for optional parts	
X15A	Connector (float switch)
X25A	Connector (drain pump)
X35A	Connector (group control adapter)
X16A	Connector (interface adapter for sky air series)

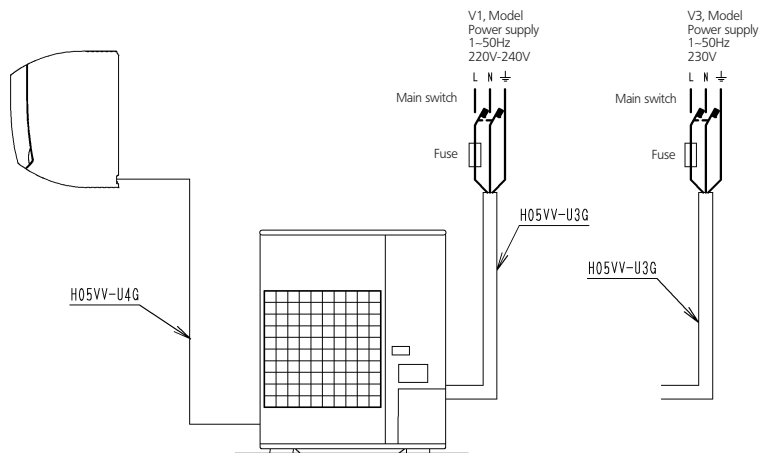
Receiver / display unit

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## 5 Wiring diagrams



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### NOTES

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

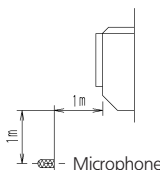
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## 6 Sound levels

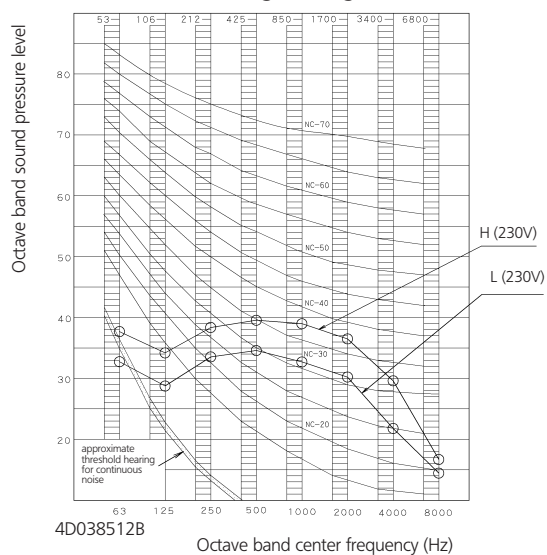
### 6-1 Sound level data

6  
6-1

Model	Sound pressure level		Measuring location	Sound power level	
	230V			Cooling H/L	Heating H/L
	50Hz				
FAQ71BUV1B	43/37	43/37		45/41	45/41
FAQ100BUV1B	59/53	59/53		61/57	61/57

### 6-2 Sound pressure spectrum

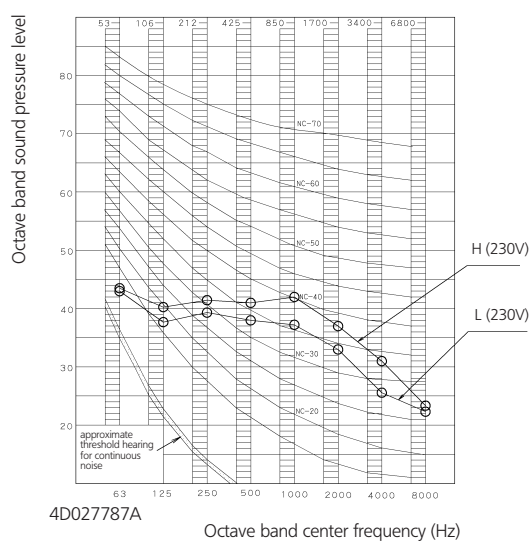
FAQ71BUV1B (Cooling/Heating)



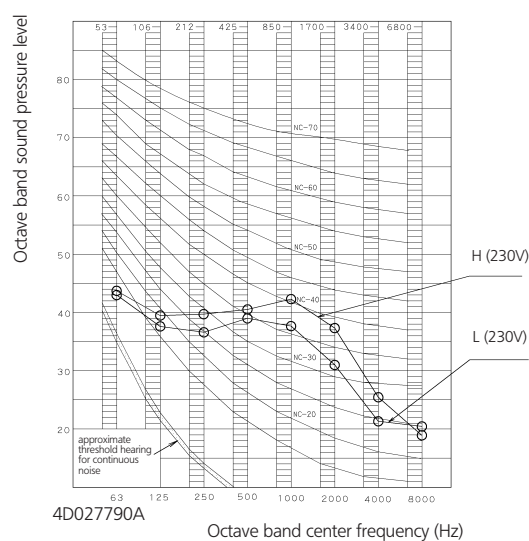
**Note:**

1. Sound pressure levels are measured in an anechoic room.
2. Data are valid at nominal operation conditions.
3. Operation sound level differs with operation and ambient conditions.

FAQ100BUV1B (Cooling)



FAQ100BUV1B (Heating)



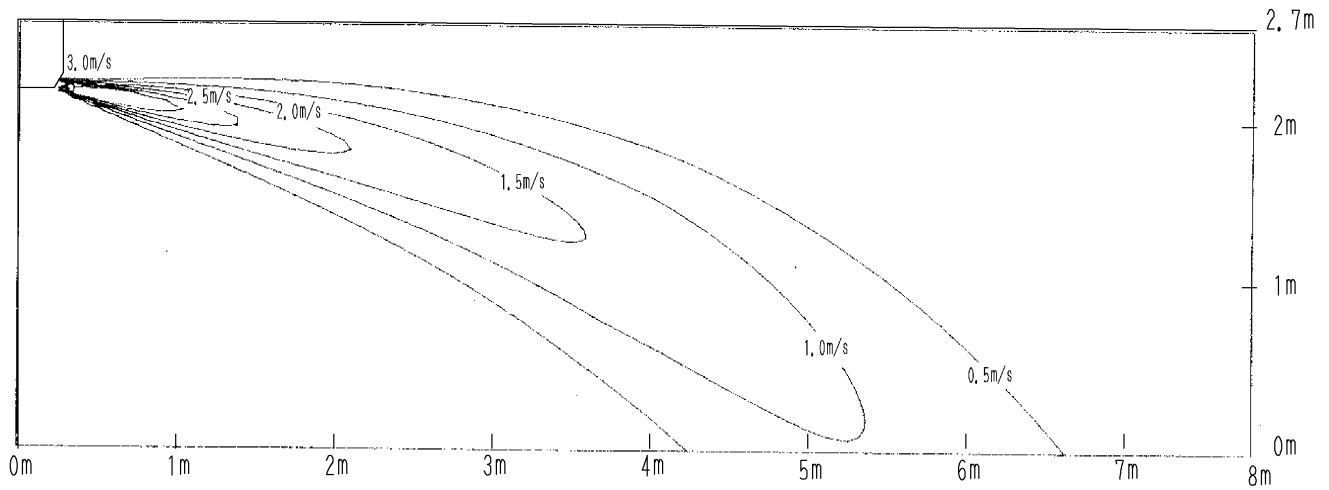
## 7 Air flow patterns



### FAQ71BUV1B

Cooling - air velocity distribution

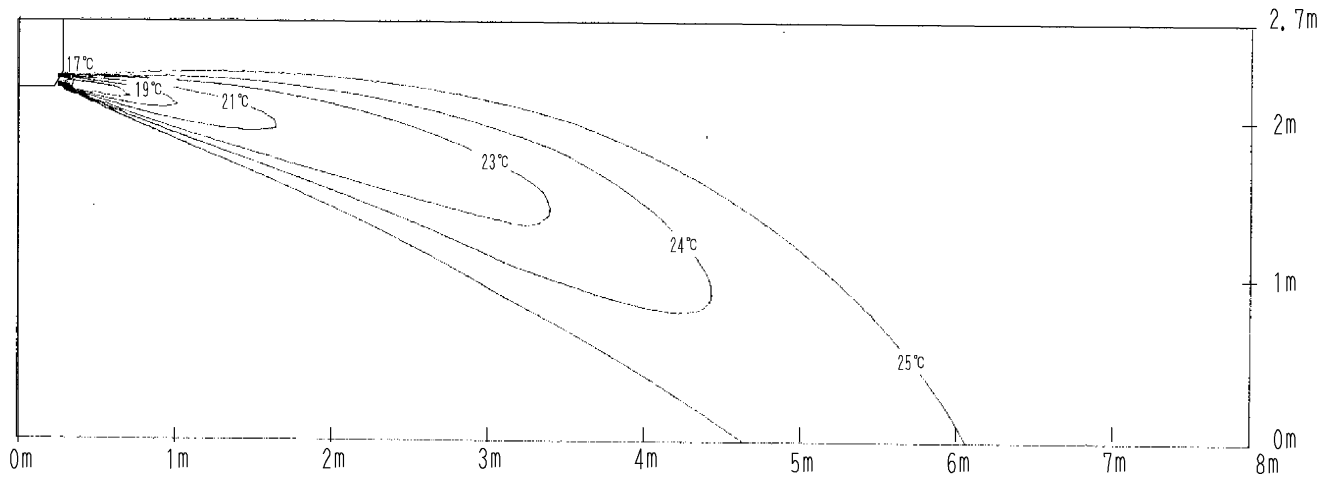
Air flow direction: 10° (downward)



### FAQ71BUV1B

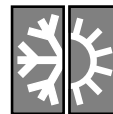
Cooling - air temperature distribution

Air flow direction: 10° (downward)



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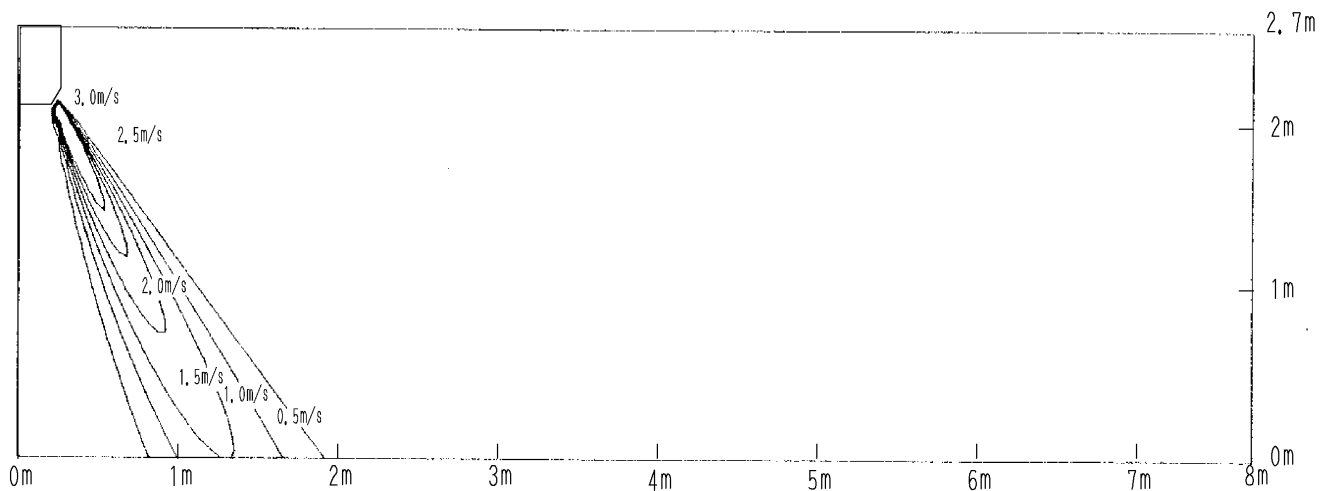
## 7 Air flow patterns



### 7 FAQ71BUV1B

Heating - air velocity distribution

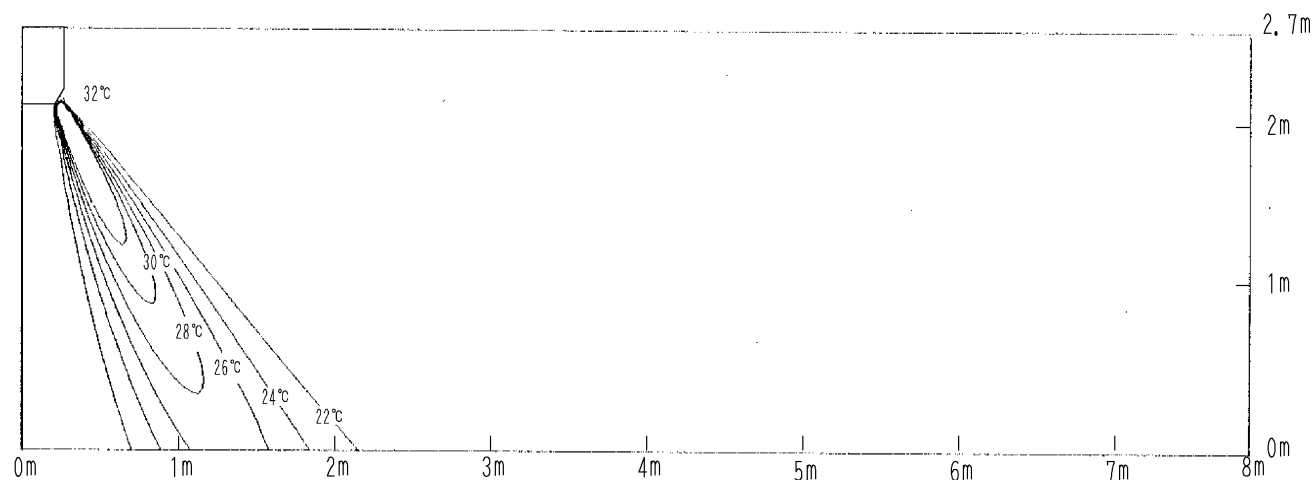
Air flow direction: 65°C (downward)



### FAQ71BUV1B

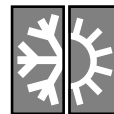
Heating - air temperature distribution

Air flow direction: 65°C (downward)



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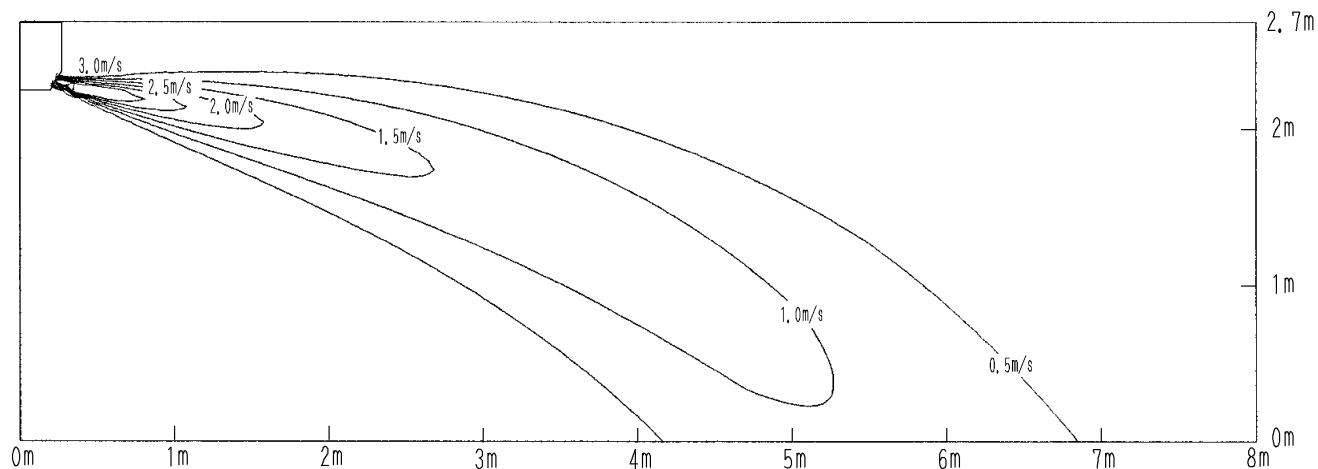
## 7 Air flow patterns



### FAQ100BUV1B

Cooling - air velocity distribution

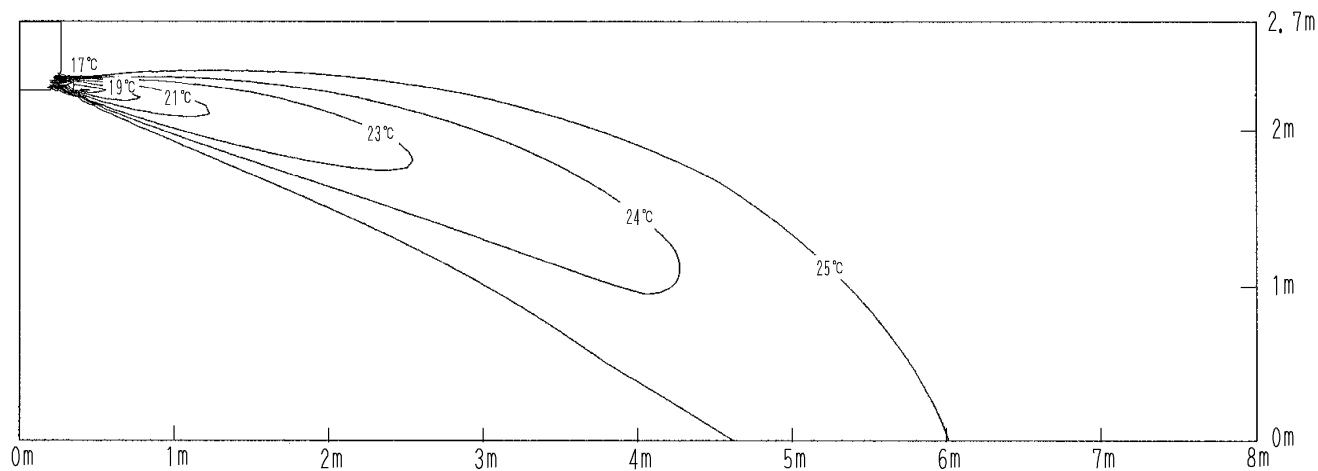
Air flow direction: 10° (downward)



### FAQ100BUV1B

Cooling - air temperature distribution

Air flow direction: 10° (downward)



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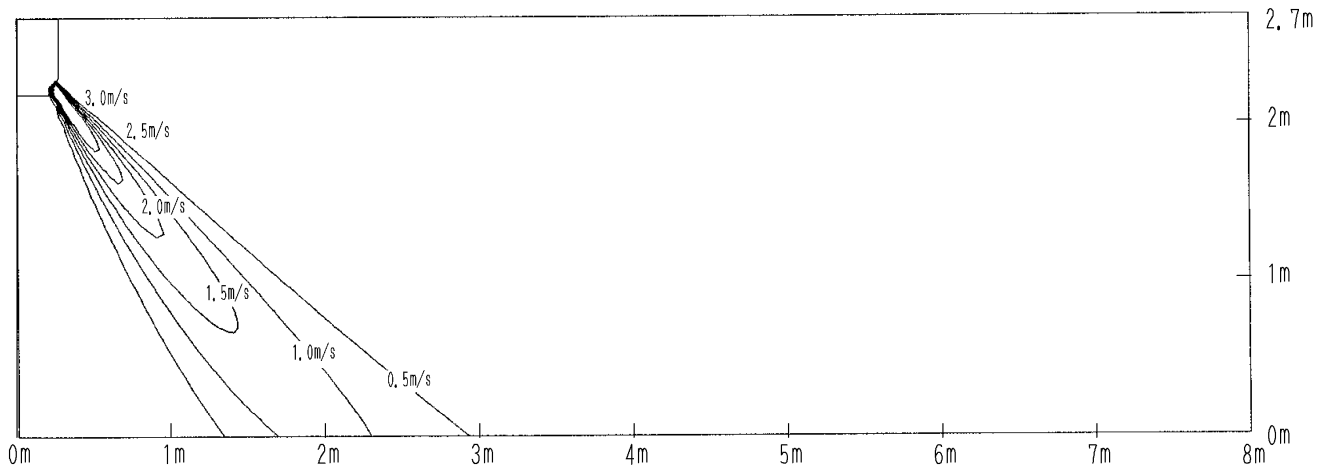
## 7 Air flow patterns



### 7 FAQ100BUV1B

Heating - air velocity distribution

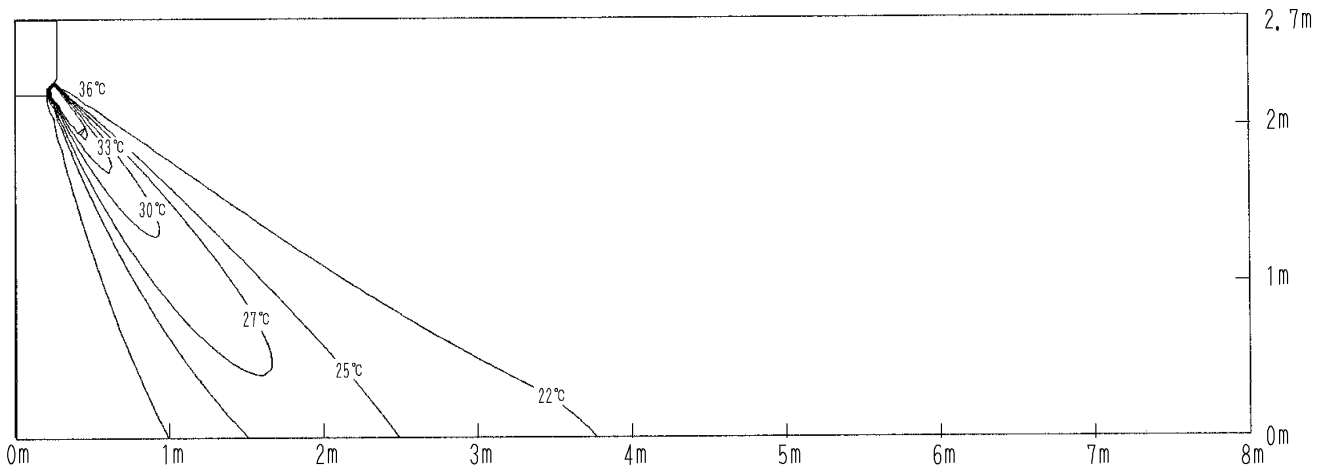
Air flow direction: 65°C (downward)



### FAQ100BUV1B

Heating - air temperature distribution

Air flow direction: 65°C (downward)

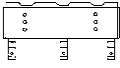





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## 8 Accessories

### 8-1 Standard accessories

Name	1. Installation panel	Insulation for fitting (for refrigerant pipe)	4. Insulation tape	5. Paper pattern for installation	(Other) • Installation manual • Operation manual
Quantity	1 pc.	1 of each	2 pcs.	1 pc.	
Shape	 6. Screw x 12	2. For liquid pipe  3. For gas pipe			

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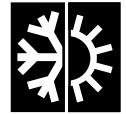
### 8-2 Optional accessories

Optional accessories			FAQ71BUV1B	FAQ100BUV1B
Remote control	Wired		BRC1D527	
	Infrared type	Heat pump	BRC7E618	BRC7C510W
		Cooling only	BRC7E619	BRC7C511W
Wiring adapter for electrical appendices (2)*			*KRP4A51	
Installation box for adapter PCB			KRP4A93	-
Central remote control			DCS302C51	
Electrical box with earth terminal (3 blocks)			KJB311A	
Unified ON/OFF control			DCS301B51	
Electrical box with earth terminal (2 blocks)			KJB212A	
Noise filter (for electromagnetic interface use only)			KEK26-1	-
Schedule timer			DST301B51	
Interface adapter for Sky Air series			-	DTA112B51
Remote sensor			KRCS01-1	-
Drain up kit			K-KDU572CVE	-
Connector for forced on, forced off			-	EKRORO

**Note:**

1. Installation box (KRP4A93) is necessary for each adapter marked\*

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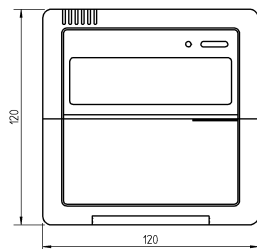
## 9 Control systems

### 9-1 Wired remote control

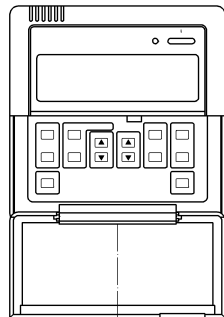
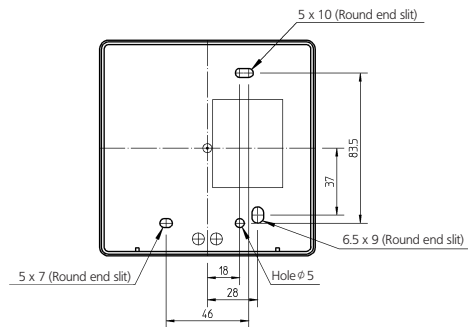
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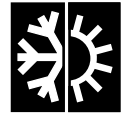
Cover closed



Cover open

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## 10 Safety device settings



### FAQ71-100BUV1B

10

Model	Safety devices	FAQ71BUV1B	FAQ100BUV1B
FAQ~BUV1B	Fuse	—	—
	Fan motor thermal fuse (°C)	—	—
	Fan motor thermal protector (°C)	—	OFF: 130±5 ON: 83±20

DU423-9101K

## 11 Installation

### Names and functions of parts

- Ⓐ Indoor unit
- Ⓑ Outdoor unit
- Ⓒ Infrared remote control
- Ⓓ Inlet air
- Ⓔ Discharged air
- Ⓕ Air outlet
- Ⓖ Air flow flap (at air outlet)
- Ⓗ Refrigerant piping, connection electric wire
- Ⓘ Drain pipe
- Ⓢ Air inlet
- The built-in air filter removes dust and dirt.
- Ⓚ Ground wire
- Wire to ground from the outdoor unit to prevent electrical shocks.

