

# 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 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 units comply with the European regulations that guarantee the safety of 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.

#### DAIKIN EUROPE N.V.

Zandvoordestraat 300 B - 8400 Ostend Belgium Internet: http://www.daikineurope.com



I ABLE OF	CON	IEN	13
FAQ-BU			

1	Features	2
2	Specifications  Nominal capacity, capacity steps and nominal input Technical specifications	3
3	Dimensional drawings	5
4	Piping diagrams	6
5	Wiring diagrams	7
6	Sound level Sound level data Sound pressure spectrum	9
7	Air flow patterns	10
8	Accessories Standard accessories Optional accessories	14
9	Control systems	15
10	Safety device settings	16
11	Installation	16

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



### **Features**



- 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
- 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

- These indoor units can also be connected to the Sky Air super inverter RZQ-B.
- 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.

















Heat pump















### 2 Specifications



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

INDOOR UNITS			FAQ71BUV1B	FAQ100BUV1B
OUTDOOR UNITS			RZQ71B7V3B	RZQ100B7V3B
Nominal Capacity (3)	Cooling (1)	min.~nom.~max. kW	10 0 10 1	
	Heating (2)	min.~nom.~max. kW		
Nominal input	Cooling	min.~nom.~max. kW		
	Heating	min.~nom.~max. kW		
ER			3.23	3.59
COP			3.60	3.50
NERGY LABEL	Cooling		A	A
	Heating		В	В
Annual Energy Consumption	Cooling	kWh		

INDOOR UNITS				FAQ71BUV1B	FAQ100BUV1B
DIMENSIONS	Unit	Н	mm	290	360
		W	mm	1,050	1,570
		D	mm	230	200
WEIGHT	Unit		kg	13	26
MATERIAL	Unit			Re	esin
COLOUR	Unit			W	hite
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	
	Туре			Cross f	low fan
	Qty x motor output		W	1 x 43	1 x 49
HEAT EXCHANGER	Туре			Cross fin coil (Multi lou	ver 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	ф9.5	(flare)
q		gas	mm	ф15.9	9 (flare)
		liquid I.D.	mm	φ13 (VP13)	ф20 (VP20)
		mm	φ18 (VP13)	φ26 (VP20)	
Insulation Material	Heat insulation	•		Foamed polystyrene/foamed polyethylene	

 For outdoor units
 Pair application
 See chapter RZQ-B

### 2 Specifications



2

ELECTRICAL SPECIFICATIONS						
For indoor units only: FAQ10BUV1B FAQ10BUV1B						
CURRENT	Nominal running current	cooling	А			
		heating	А	See chapter RZQ-B		
	Max. running current	cooling	А	3ее спар	lei rzų-b	
		heating	Α			

For combination indoor units + outdoor units:				FAQ71BUV1B RZQ71B7V3B	FAQ100BUV1B RZQ100B7V3B	
CURRENT	Nominal running current	cooling	Α			
	Maximum running current	cooling	A	See chapter RZQ-B		
	Starting current	cooling	A			

For indoor units only:			FAQ71BUV1B	FAQ100BUV1B
POWER SUPPLY			V1	V1
NOMINAL DISTRIBUTION	Phase		1~	1~
System voltage	Frequency	Hz	50	50
	Voltage	٧	220-240	220-240

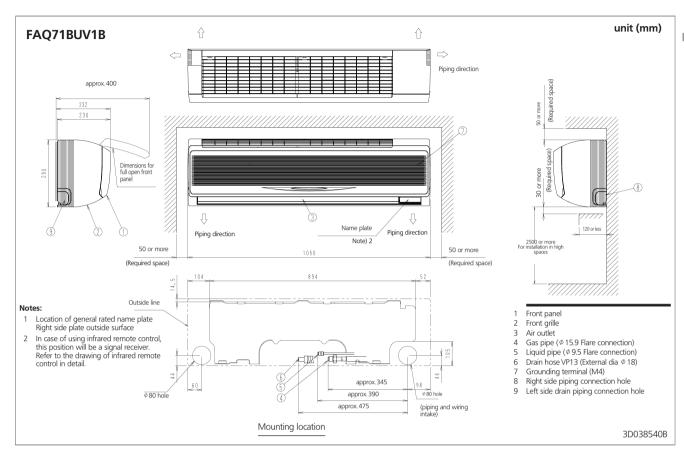
4D043953

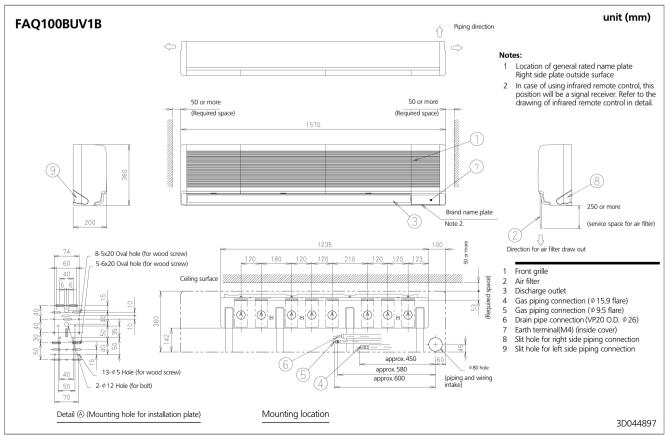
#### NOTES

- 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.
- 3 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.
- 5 The sound power level is an absolute value indicating the "power" which a sound source generates.
- 6 Energy label: scale from A (most efficient) to G (less efficient).
- 7 The Energy Label Directive 2002/31/EC will enter into force once the relevant measurement standard will be published in the European official Standard.
- 8 Annual energy consumption: based on average use of 500 running hours per year at full load (= nominal conditions).

### 3 Dimensional drawings

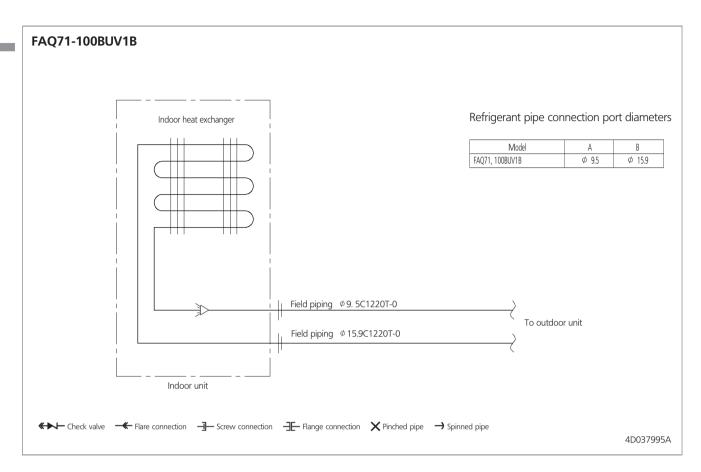






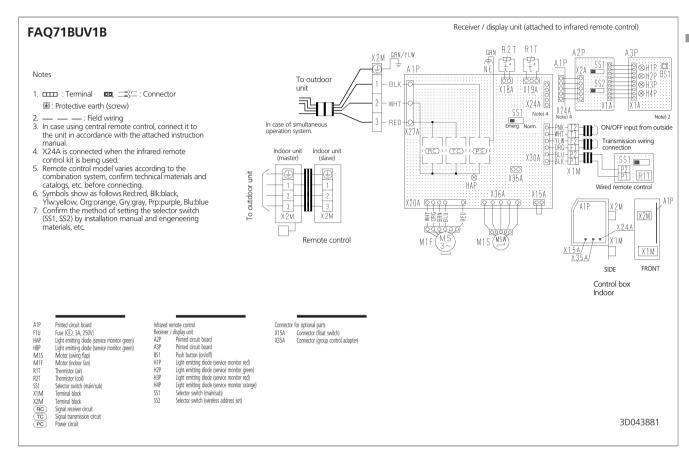
### 4 Piping diagrams

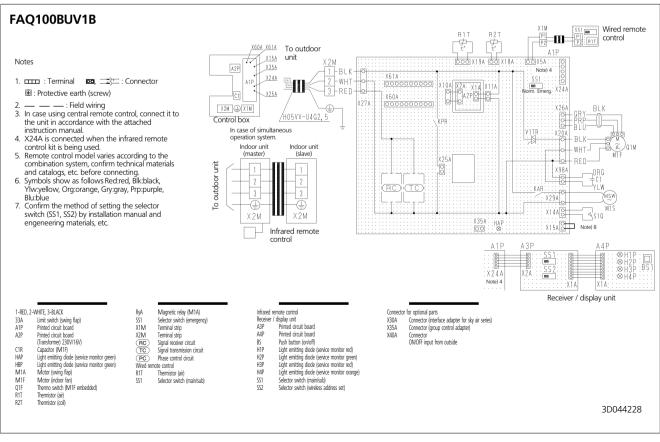




### 5 Wiring diagrams

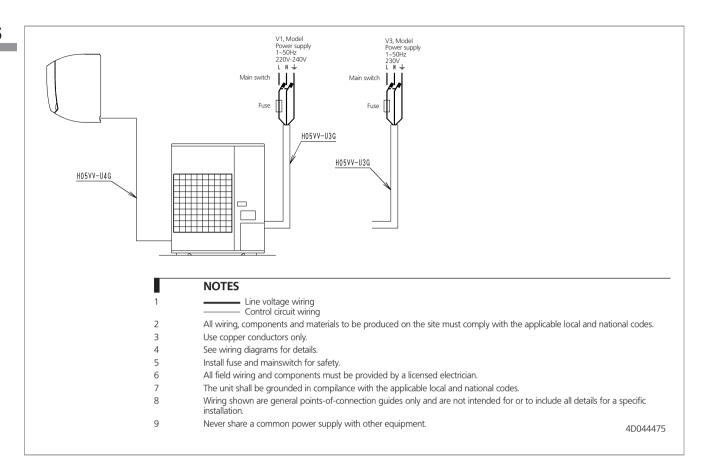






### 5 Wiring diagrams





### Sound levels

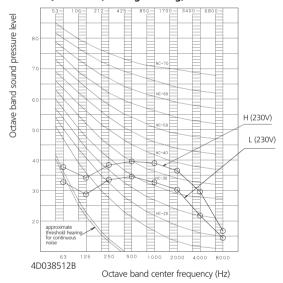
#### 6-1 Sound level data



		Sound pressure lev			
	23	0V		Sound power level	
Model	50Hz		50Hz Measuring location		
	Cooling H/L	Heating H/L	, <u>,</u>	Cooling H/L	Heating H/L
FAQ71BUV1B	43/37	43/37		45/41	45/41
FAQ100BUV1B	59/53	59/53	≤ Microphone	61/57	61/57

#### 6-2 Sound pressure spectrum

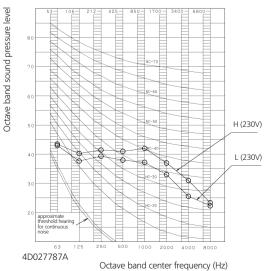
#### FAQ71BUV1B (Cooling/Heating)



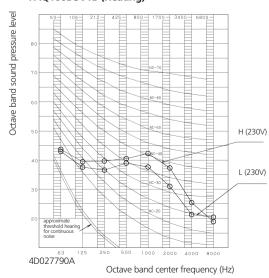
#### Note:

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

#### FAQ100BUV1B (Cooling)



#### FAQ100BUV1B (Heating)



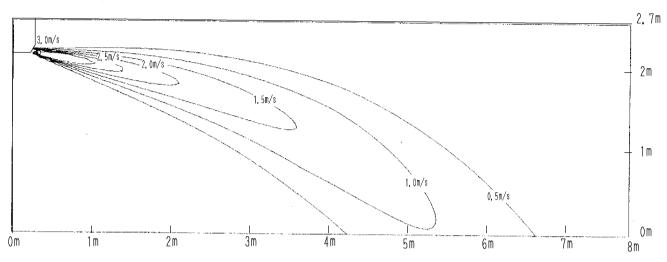


7

#### FAQ71BUV1B

Cooling - air velocity distribution

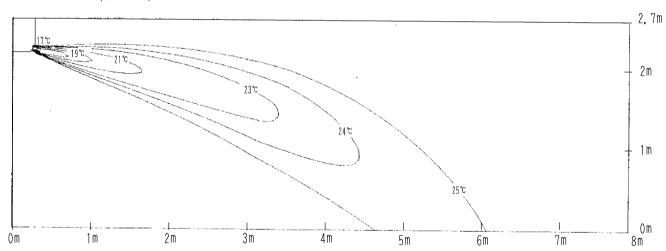
Air flow direction: 10° (downward)



### FAQ71BUV1B

Cooling - air temperature distribution

Air flow direction: 10° (downward)



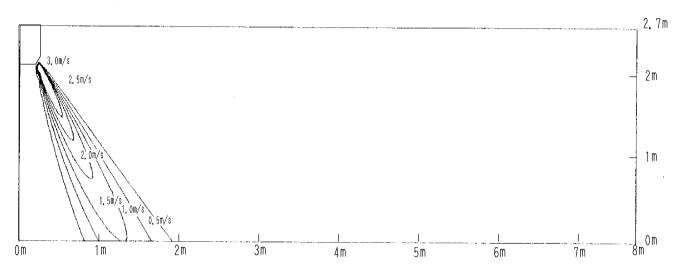
4D039573A



FAQ71BUV1B

Heating - air velocity distribution

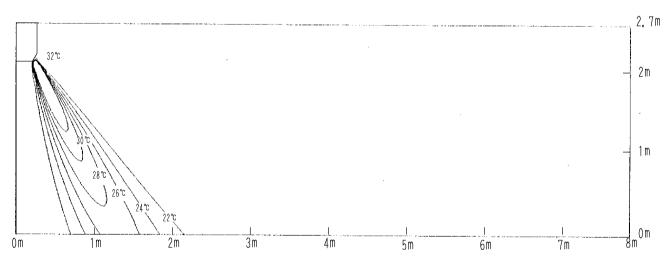
Air flow direction: 65°C (downward)



#### FAQ71BUV1B

Heating - air temperature distribution

Air flow direction: 65°C (downward)



4D039574A

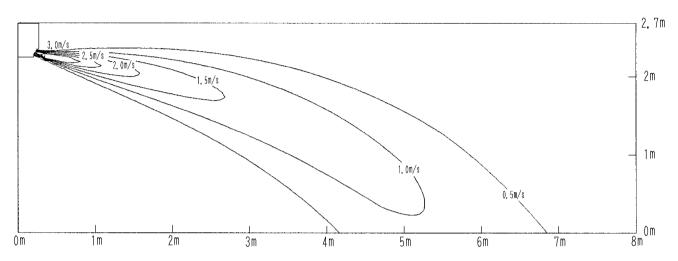


7

#### FAQ100BUV1B

Cooling - air velocity distribution

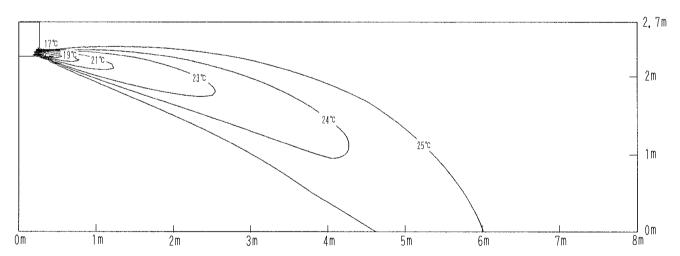
Air flow direction: 10° (downward)



#### FAQ100BUV1B

Cooling - air temperature distribution

Air flow direction: 10° (downward)



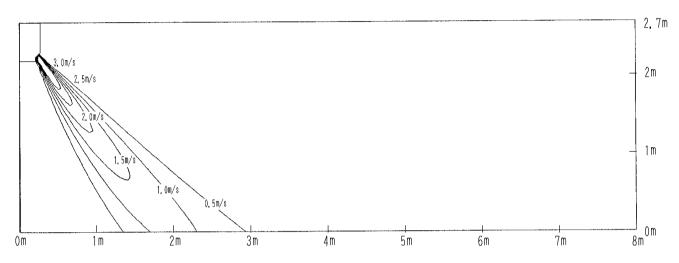
4D028547A



FAQ100BUV1B

Heating - air velocity distribution

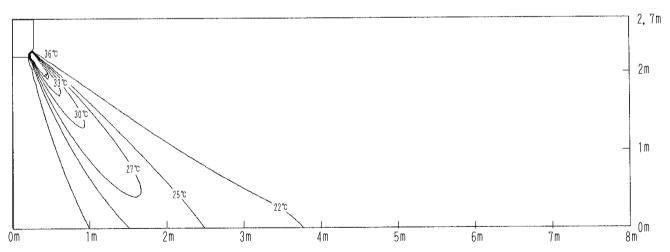
Air flow direction: 65°C (downward)



### FAQ100BUV1B

Heating - air temperature distribution

Air flow direction: 65°C (downward)



4D028548A

### 8 Accessories

### 8–1 Standard accessories



8

8-1

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

### 8–2 Optional accessories

Optional accessories			FAQ71BUV1B	FAQ100BUV1B
Remote control	Wired		BRC1	D527
	Infrared type	Heat pump	BRC7E618	BRC7C510W
		Cooling only	BRC7E619	BRC7C511W
Wiring adapter for electrical appendices (2)*			*KRP	4A51
Installation box for adapter PCB			KRP4A93	-
Central remote control	DCS3	DCS302B51		
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	Interface adapter for Sky Air series			
Remote sensor	KRCS01-1	-		
Drain up kit	K-KDU572CVE	-		
Connector for forced on, forced off	-	EKRORO		

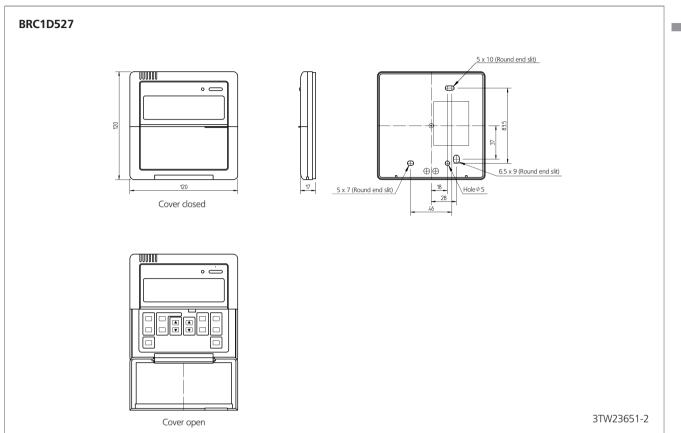
**Note**: 3D044482

<sup>1.</sup> Installation box (KRP4A93) is necessary for each adapter marked\*

### 9 Control systems

### 9–1 Wired remote control





### Safety device settings 10



### FAQ71-100BUV1B

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

DU423-9101K

#### Installation 11

#### Names and functions of parts

- ⓐ Indoor unit
- **(b)** Outdoor unit
- © Infrared remote control
- d Inlet air
- Discharged air
   Air outlet

- Air dutet
   Air flow flap (at air outlet)
   Refrigerant piping, connection electric wire
- (i) Drain pipe
- (i) Air inlet
  - The built-in air filter removes dust and dirt.

Wire to ground from the outdoor unit to prevent electrical shocks.

