

# Air Conditioners

# **Technical Data**







## Air Conditioners

# **Technical Data**





# **TABLE OF CONTENTS**

# BSVQ100-250P8

1	Specifications	2
	Technical Specifications Electrical Specifications	
2	Safety device settings	3
3	Options	3
4	Dimensional drawing & centre of gravity	4
	Dimensional drawing	
	Centre of gravity	6
5	Piping diagram	7
6	Wiring diagram	8
	Wiring diagram	
7	Sound data	
1	Sound pressure spectrum	
	Outly pressure spectrum	ť

# 1 Specifications

1-1 Technical Specifications			BSVQ100P8V1B	BSVQ160P8V1B	BSVQ250P8V1B			
Power input (nominal)	Cooling kW		0.005	0.005	0.005			
	Heating kW		0.005	0.005	0.005			
Max. number of conne	ctable units		•	5	8	8		
Total capacity index of	connectable indoor	unit		20 < x ≤ 100	100 < x ≤ 160	160 < x ≤ 250		
Casing	Material				Galvanised steel			
Dimensions	Unit	Height	mm	207	207	207		
		Width	mm	388	388	388		
		Depth	mm	326	326	326		
Weight	Unit		kg	14.0	14.0	15.0		
Outdoor Unit	Liquid (OD)	Туре		Brazing connection				
		Diameter	mm	9.5	9.5	9.5		
	Gas	Туре			Brazing connection			
		Diameter	mm	15.9	15.9	22.2		
	Discharge Gas	Туре		Brazing connection				
		Diameter	mm	12.7	12.7	19.1		
Indoor Units	Liquid (OD) Type		•	Brazing connection				
		Diameter	mm	9.5	9.5	9.5		
	Gas Type		Brazing connection					
		Diameter	mm	15.9	15.9	22.2		
Sound absorbing thern	nal insulation materia	al	•	Foamed polyurethane, Frame resisting needle felt				
Standard Accessories	Item			Installation manual				
				Attached piping				
				Insulation pipe cover				
					Clamps			
Notes			In case of connection with a 20~50 type indoor unit, match to the size of the field pipe using the attached pipe. Connection between the attached pipe and the field pipe must be brazed.	In case of connecting with indoor unit capaicty index 150 or more and 160 or less, match to the size of the field pipe using the attached pipe. Connection between the attached pipe and the field pipe must be brazed.	In case of connecting with a 200 type indoor unit or capacity index more than 160 and less than 200, match to the size of the field pipe using the attached pipe.  Connection between the attached pipe and the field pipe must be brazed.			

1-2 Electrical Specifications			BSVQ100P8V1B	BSVQ160P8V1B	BSVQ250P8V1B		
Power Supply	Phase			1~			
	Frequency Hz		50	50	50		
	Voltage			220-240			
Voltage range	Minimum	V		-10%			
	Maximum	V	+10%				
Total circuit	Minimum circuit amps (MCA)	Α	0.1	0.1	0.1		
	Maximum Fuse Amps	Α	15	15 15			
Notes			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 x FLA				
			MFA is smaller than or equal to 4 x FLA				
			Next lower standard fuse rating minimum 15A				
			Select wire size based on MCA				
			Instead of a fuse, use a circuit breaker				

### 2 Safety device settings

#### BSVQ-P8 Safety devices Model PC board fuse BSVQ100PV1 250V 3.15A BSVQ160PV1 250V 3.15A BSVQ250PV1 250V 3.15A BSVQ36PVJU 250V 3.15A BSVQ60PVJU 250V 3.15A BSVQ96PVJU 250V 3.15A 4D057956B

# 3 Options

### BSVQ-P8

### **OPTION LIST**

No	Item	BSVQ100P BSVQ160P BSVQ250		BSVQ250P	
1	PCB for multi tenant	DTA114A61			
2	Sound reduction for BSVQ box	EKBSVQLNP (see note 2)			

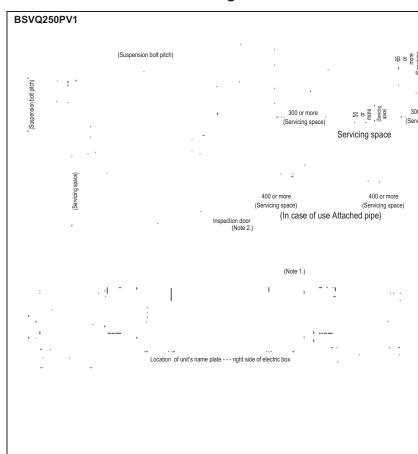
4TW31159-1A

### NOTE

- 1 All options are kits.
- 2 Only available for standard BSVQ boxes (not possible for central BSV4Q). Allows to reduce operating sound of BSVQ-box (requires 1 sound kit per BSVQ-box).

### 4 Dimensional drawing & centre of gravity

### 4 - 1 Dimensional drawing



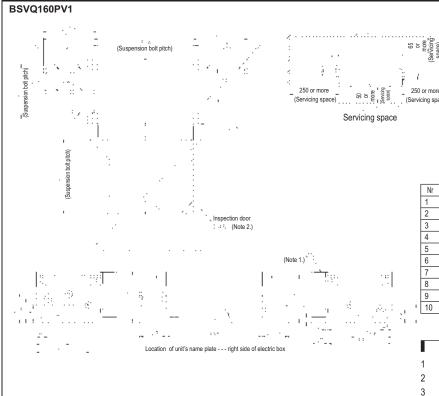
Nr	Name	Description
1	Suction gas pipe connection port	ø22.2mm brazing connection
2	HP/LP gas pipe connection port	ø19.1mm brazing connection
3	Liquid pipe connection port	ø9.5mm brazing connection
4	Gas pipe connection port	ø22.2mm brazing connection
5	Liquid pipe connection port	ø9.5mm brazing connection
6	Electric box (note 1.)	
7	Suspension brackets	M8 ~M10
8	Grounding terminal	M4
9	Attached pipe (1) (Note. 3)	ø19.1mm brazing connection
10	Attached pipe (2) (Note. 3)	ø15.9mm brazing connection

#### Notes

- 1 Electric box can also be fixed on the other side of the unit.
- Be sure to install a inspection door at electric box side.
- 3 Attached pipe (1) and attached pipe (2) is used in case of connecting with indoor capacity index more than 160 and less than 200 In case of connecting one indoor unit of 200 type, only gas pipe connection port need Attached pipe (1).
- 4 Small sound will be made when changing over the motor operated valve, which may be disturbing. Do not install it at the place such as bedroom under roof.

350 or more

3D056012A



Nr	Name	Description
1	Suction gas pipe connection port	ø15.9mm brazing connection
2	HP/LP gas pipe connection port	ø12.7mm brazing connection
3	Liquid pipe connection port	ø9.5mm brazing connection
4	Gas pipe connection port	ø15.9mm brazing connection
5	Liquid pipe connection port	ø9.5mm brazing connection
6	Electric box (note 1.)	
7	Suspension brackets	M8 ~M10
8	Grounding terminal	M4
9	Attached pipe (1) (Note. 3)	ø19.1mm brazing connection
10	Attached pipe (2) (Note. 3)	ø15.9mm brazing connection

(In case of use Attached pipe)

### Notes

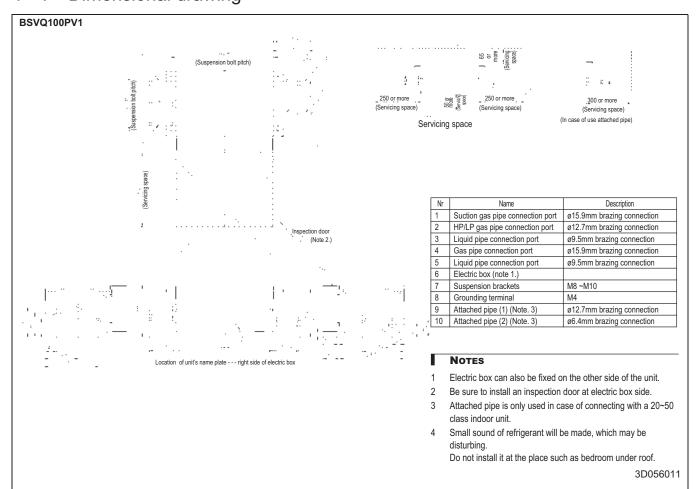
- 1 Electric box can also be fixed on the other side of the unit.
- 2 Be sure to install an inspection door at electric box side.
- 3 Attached pipe is only used in case of connecting with indoor unit capacity index 150 or more and 160 or less.
- 4 Small sound of refrigerant will be made, which may be disturbing.

Do not install it at the place such as bedroom under roof.

3D058004

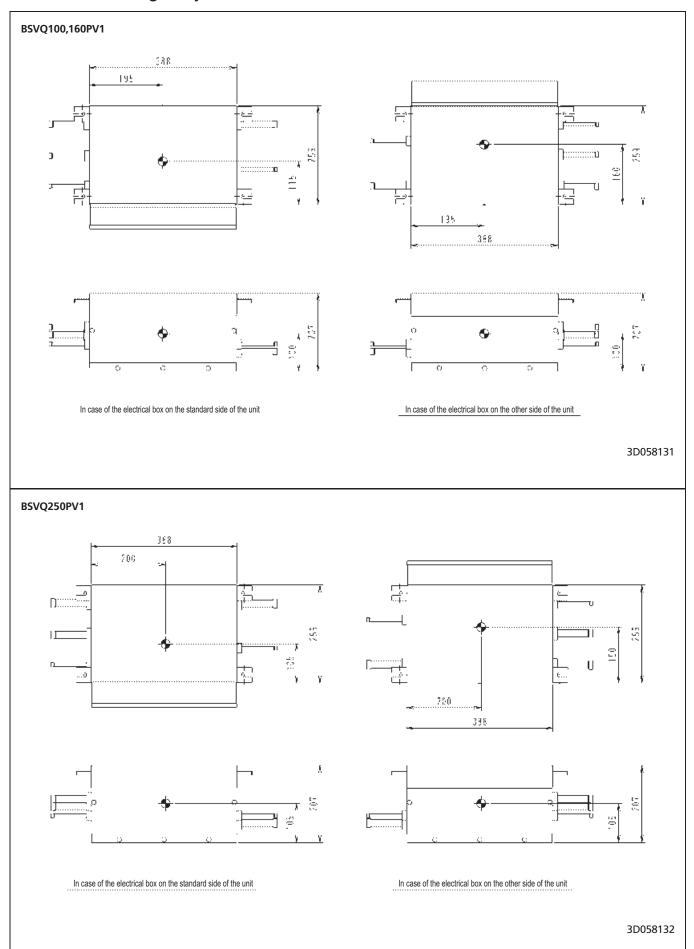
### 4 Dimensional drawing & centre of gravity

### 4 - 1 Dimensional drawing

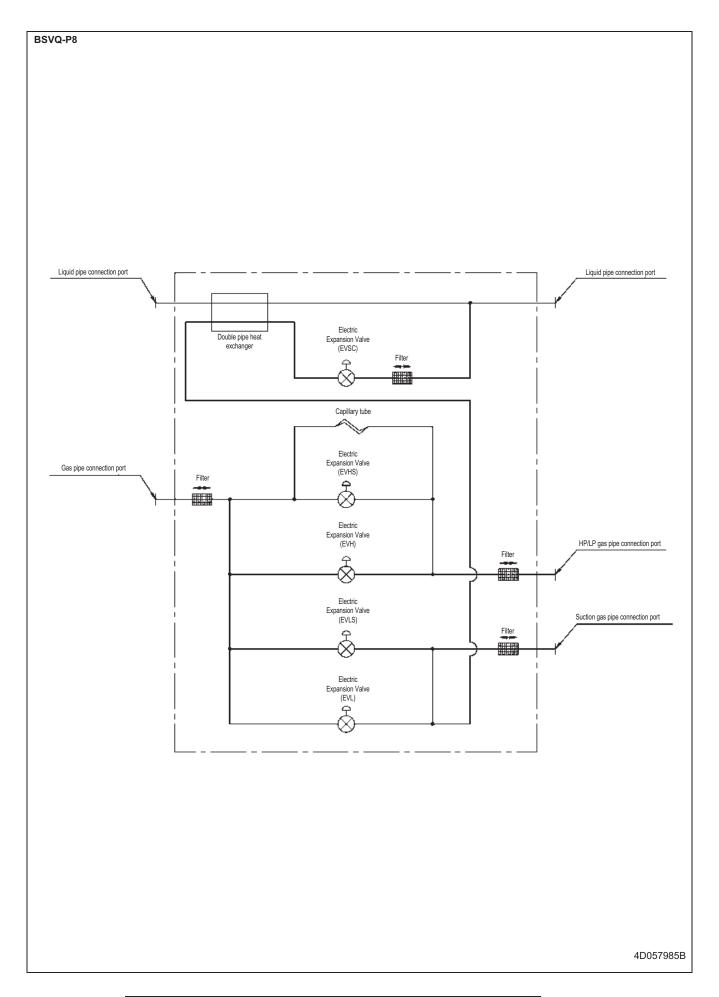


# 4 Dimensional drawing & centre of gravity

# 4 - 2 Centre of gravity



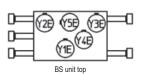
# 5 Piping diagram



### 6 Wiring diagram

#### Wiring diagram 6 - 1

# BSVQ-P8B BSVQ100P BSVQ160P BSVQ250P X2AOO OOO X38A Y2EM 6 X5. Y3EM 6 X6A Y4EM 6 X7A DS1 DS2 ∏F1U To IN/D unit To OUT/D un F1 F2 F1 F2 RED



A1P	Printed circuit board	X1M	Terminal strip (power)	Y5E	Electronical expansion valve (main suction)
DS1, DS2	Dip switch	X1M (A1P)	Terminal strip (control)	Z1C	Noise filter (ferrite core)
F1U	Fuse (T, 3.15A, 250V)	X2M	Terminal strip (C/H selector)		
F2U	Field fuse	Y1E	Electronical expansion valve (sub cool)		Connector for optional parts
HAP	Light emitting diode (service monitor green)	Y2E	Electronical expansion valve (sub discharge)	X2A	Connector (wiring external control adapter for outdoor)
PS	Switching power supply	Y3E	Electronical expansion valve (sub suction)	X38A	Connector (adapter for multi tenant)
Q1DI	Earth leak detector	Y4E	Electronical expansion valve (main discharge)		

F2U

: Terminal strip : Live Colors: BLU Blue : Connector RED Red : Neutral 00

-0-: Terminal : Field wiring **=III**:

(1) : Protective earth (screw)

3TW31796-1

### NOTES

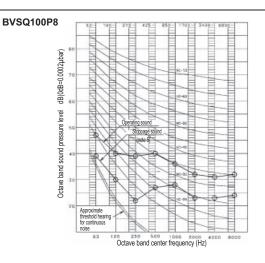
- This wiring diagram applies to the BS unit only.
- When using the COOL/HEAT selector (optional accessory), connect it to terminals A, B and C on X2M.
- As for wiring to the IN/D unit (F1) (F2) and OUT/D unit (F1)-(F2) on X1M (A1P), refer to the installation manual.
- Use copper conductors only.
- Dip switch (DS1-2) initial settings are as follows.



For using dip switch (DS1-2), refer to the installation manual or to the 'service label' on de el.compo.box cover.

#### 7 Sound data

#### 7 - 1 Sound pressure spectrum



4D058945

Stoppage

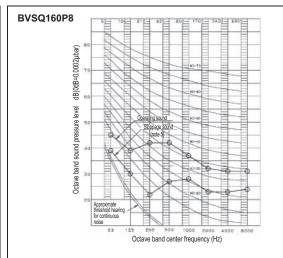
sound

sound

### NOTE

- Over All (dB): (B, G, N is already rectified)
- Operating conditions:
  - Power source: 220-240V 50Hz
  - Standard condition (JIS)
- 3 Measuring place: Anechoic chamber.
- Operation noise differs with operation and ambient conditions.
- In case of other unit operating in the same system, operating sound will be generated, ever if indoor unit connected to BS unit is stopped.
- Location of microphone.





4D058953

Stoppage sound

sound

### NOTE

3

- Over All (dB): (B, G, N is already rectified)
- 2 Operating conditions:
  - Power source: 220-240V 50Hz
    - Standard condition (JIS)
  - Measuring place: Anechoic chamber.
- Operation noise differs with operation and ambient conditions.
- In case of other unit operating in the same system, operating sound will be generated, ever if indoor unit connected to BS unit is stopped.
- Location of microphone.



BVSQ250P8	525 1015 8125 4315 8425 1700F 34025 8800F
<u>_</u> "	
grig	
000 70	A P P P P P P P P P P P P P P P P P P P
3=0.	BAR BAR
dB(0dB=0.0002µbar)	
	NACK FILL
Octave band sound pressure level	
en so	Operating sound Stoppage sound
ress	(note d)
d pu	
nos	PAR PAR
and	11月月月日11日11日
ave b	1110000
000	
30	Approximate threshold hearing
	threshold hearing for continuous
	noise
	Octave band center frequency (Hz)

4D058946

Stoppage

sound

Operation

sound

### NOTE

- Over All (dB): (B, G, N is already rectified)
- 2 Operating conditions:
  - Power source: 220-240V 50Hz
  - Standard condition (JIS)
- Measuring place: Anechoic chamber.
- Operation noise differs with operation and ambient conditions.
- In case of other unit operating in the same system, operating sound will be generated, ever if indoor unit connected to BS unit is stopped.
- Location of microphone.





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.







The present publication is drawn up by way of information only and does not constitute an offer binding upon Daikin Europe N.V. Dalkin Europe N.V. has compiled the content of this publication to the best of its knowledge. No express or implied warranty is given for the completeness, accuracy, reliability or fitness for particular purpose of its content and the products and services presented therein. Specifications are subject to change without prior notice. Dalkin Europe N.V. explicitly rejects any liability for any direct or indirect damage, in the broadest sense, arising from or related to the use and/or interpretation of this publication. All content is copyrighted by Dalkin Europe N.V.

Daikin products are distributed by:



 $\mathsf{VRV}^{\mathbf{m}}$  products are not within the scope of the Eurovent certification programme.