DAIKIN

technical data

air conditioning systems

BS box

BSVQ-MV1

VRV II

VRV-WII

TABLE OF CONTENTS

BS box

1 Specifications

1 - 1 Technical specifications

BSVQ-MV1				100	160	250
TOTAL CAPACITY INDEX OF CONNECTABLE INDOOR UNIT				≤ 100	100 < X ≤ 160	160 < X ≤ 250
MAXIMUM NUMBER OF CONNECTABLE INDOOR UNITS				5	8	5
NOMINAL INPUT	Cooling		W	21	21	21
	Heating		W	21	21	21
DIMENSIONS			mm	185x310x280		
WEIGHT			kg	9	9	10
CASING				galvanised steel plate		
PIPING CONNECTIONS	Indoor unit	Liquid	mm	9.5 (flare) *1	9.5 (flare)	9.5 (flare)
		Gas	mm	15.9 (flare) *1	15.9 (flare)	22.2 (flange) *2
	Outdoor unit	Liquid	mm	9.5 (flare) *1	9.5 (flare)	9.5 (flare)
		Suction gas	mm	15.9 (flare) *1	15.9 (flare)	22.2 (flange) *2
		Discharge gas	mm	12.7 (flare) *1	12.7 (flare)	19.1 (brazing) *3
SOUND ABSORBING THERMAL INSULATION MATERIAL				flame and heat resistant foamed polyethylene		

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NOTES

1 If the total capacity of all indoor units connected to the system is less than 7,1kW, connect the attached pipe to the field pipe. (Braze the connection between the attached pipe and the field pipe)
2 Use the field flanged pipe. Also with a 200 class indoor unit, connect the attached reducer to the field pipe. (Braze the connection between the attached pipe and field pipe)
3 Use the attached pipe
4 Information was not available at the time of publication
5 Please note that connectable indoor unit for BSVQ250M is from size 50 onwards. This means that indoor size 20 to 40 should NOT be connected to BSVQ250M. The explanation of possible trouble is that there is mainly a problem with the refrigerant side: if only this BSVQ is in heating, and all the other BSVQ are in cooling , there is a high risk of liquid back to the suction side (by insufficient evaporation of liquid used for extra sub-cool). If such operation of BSVQ250M runs for a while with an indoor thermostat-on of index 40 or less, it can result in compressor failure. The communication itself will work as the BSVQ does not know its size, so it can not check if indoor index is correct or not.
6 BS boxes cannot be installed upside down
7 In case of sound sensitive application, please contact your local daikin reprensentative for more details and recommandations

1 - 2 Electrical specifications

BSVQ-MV1			100	160	250
CURRENT	Minimum circuit amps (MCA)	A	0.2		
	Maximum fuse amps (MFA)	A	15		
POWER SUPPLY		V1	1~, 50Hz, 220-240V		
VOLTAGE RANGE	Min ~ Max		198 ~ 264		

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NOTES

1 Voltage range: units are suitable for use on electrical systems where voltage supplied to units terminals is not below or above listed range limits.
2 Maximum allowable voltage unbalance between phases is 2 %
3 MCA / MFA:
MCA = 1.25 x FLA
MFA ≤ 4 x FLA
(Next lower standard fuse rating. Min. 15A)
4 Select wire size based on the MCA
5 Instead of fuse, use circuit breaker
6 For more details concerning conditional connections, see http://www.daikineurope.com/extranet, select "Daikin Documentation" and select "conditional connection", "the requested product type" and "English" from the drop down lists, click the search button.
Finally, click on the document title of your choice.

1 - 3 Safety device settings

BSVQ-MV1	100	160	250
PC BOARD FUSE	250V, 5A		

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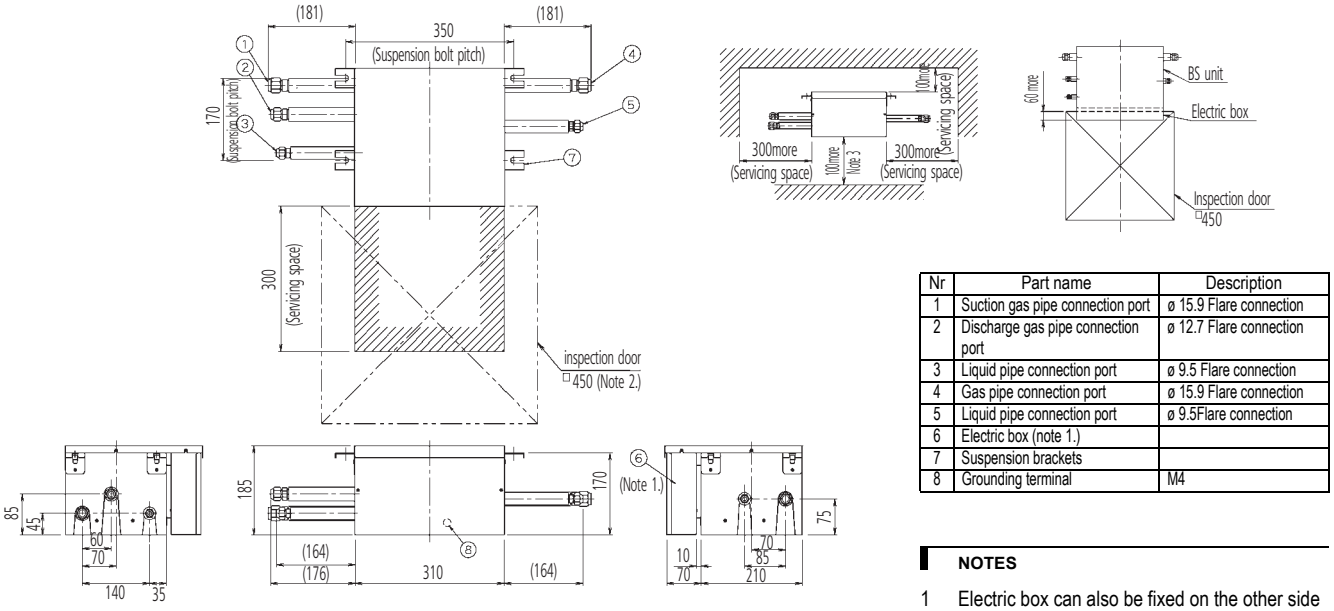
2 Accessories

BSVQ-MV1	100	160	250
COOL/HEAT SELECTOR	KRC19-26A		
FIXING BOX	KJB111A		

3 Dimensions

3 - 1 Dimensional drawings

BSVQ100,160MV1



Nr	Part name	Description
1	Suction gas pipe connection port	ø 15.9 Flare connection
2	Discharge gas pipe connection port	ø 12.7 Flare connection
3	Liquid pipe connection port	ø 9.5 Flare connection
4	Gas pipe connection port	ø 15.9 Flare connection
5	Liquid pipe connection port	ø 9.5Flare connection
6	Electric box (note 1.)	
7	Suspension brackets	
8	Grounding terminal	M4

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 Install a servicing space in the bottom of electric

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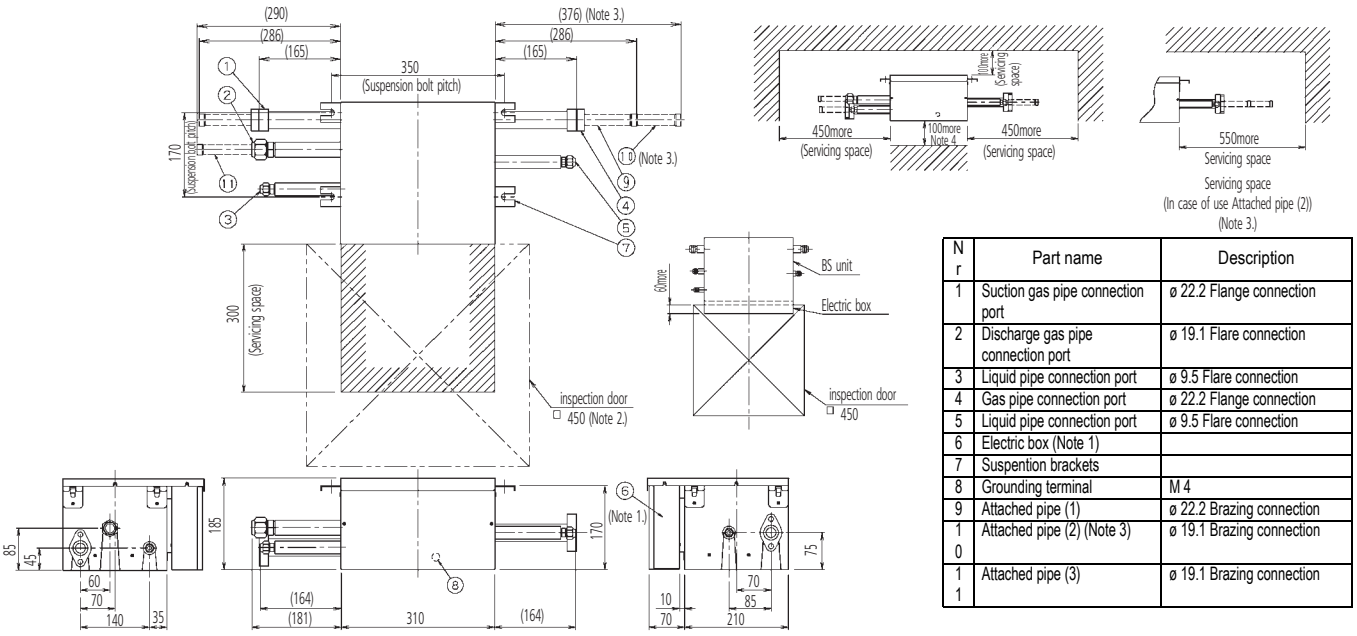
BSVQ250MV1



Nr	Part name	Description
1	Suction gas pipe connection port	ø 22.2 Flange connection
2	Discharge gas pipe connection port	ø 19.1 Flare connection
3	Liquid pipe connection port	ø 9.5 Flare connection
4	Gas pipe connection port	ø 22.2 Flange connection
5	Liquid pipe connection port	ø 9.5 Flare connection
6	Electric box (Note 1)	
7	Suspention brackets	
8	Grounding terminal	M 4
9	Attached pipe (1)	ø 22.2 Brazing connection
10	Attached pipe (2) (Note 3)	ø 19.1 Brazing connection
11	Attached pipe (3)	ø 19.1 Brazing connection

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

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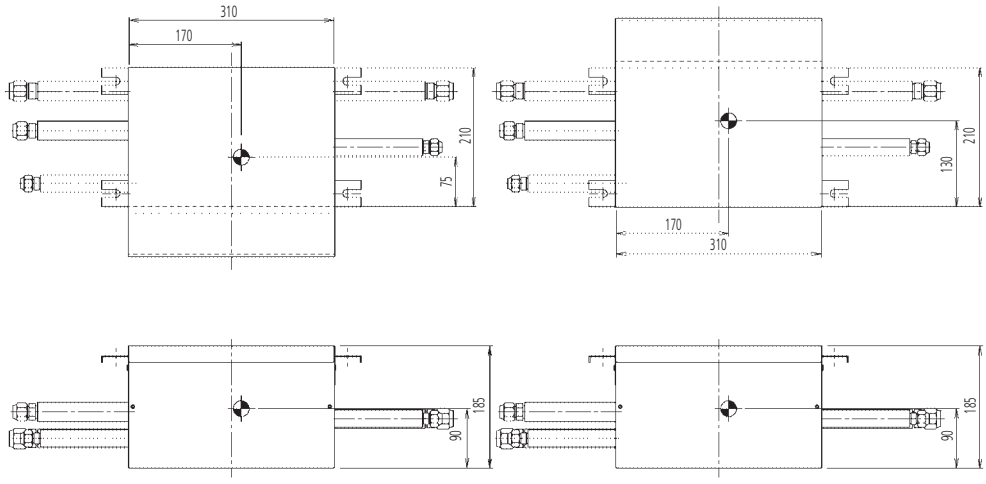
3 Dimensions

3 - 2 Centre of gravity

BSVQ100,160MV1



In case the electric box is mounted on the standard side of the unit

In case the electric box is mounted on the other side of the unit

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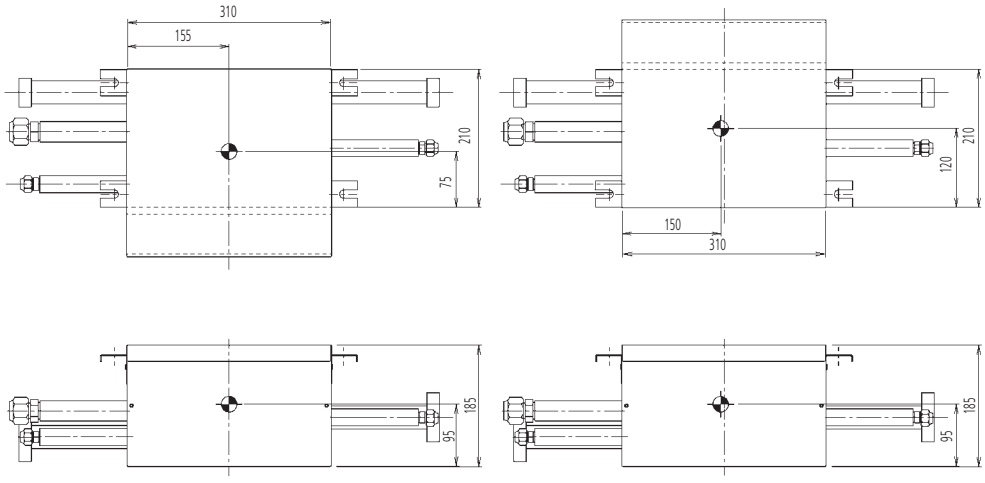
BSVQ250MV1



In case the electric box is mounted on the standard side of the unit

In case the electric box is mounted on the other side of the unit

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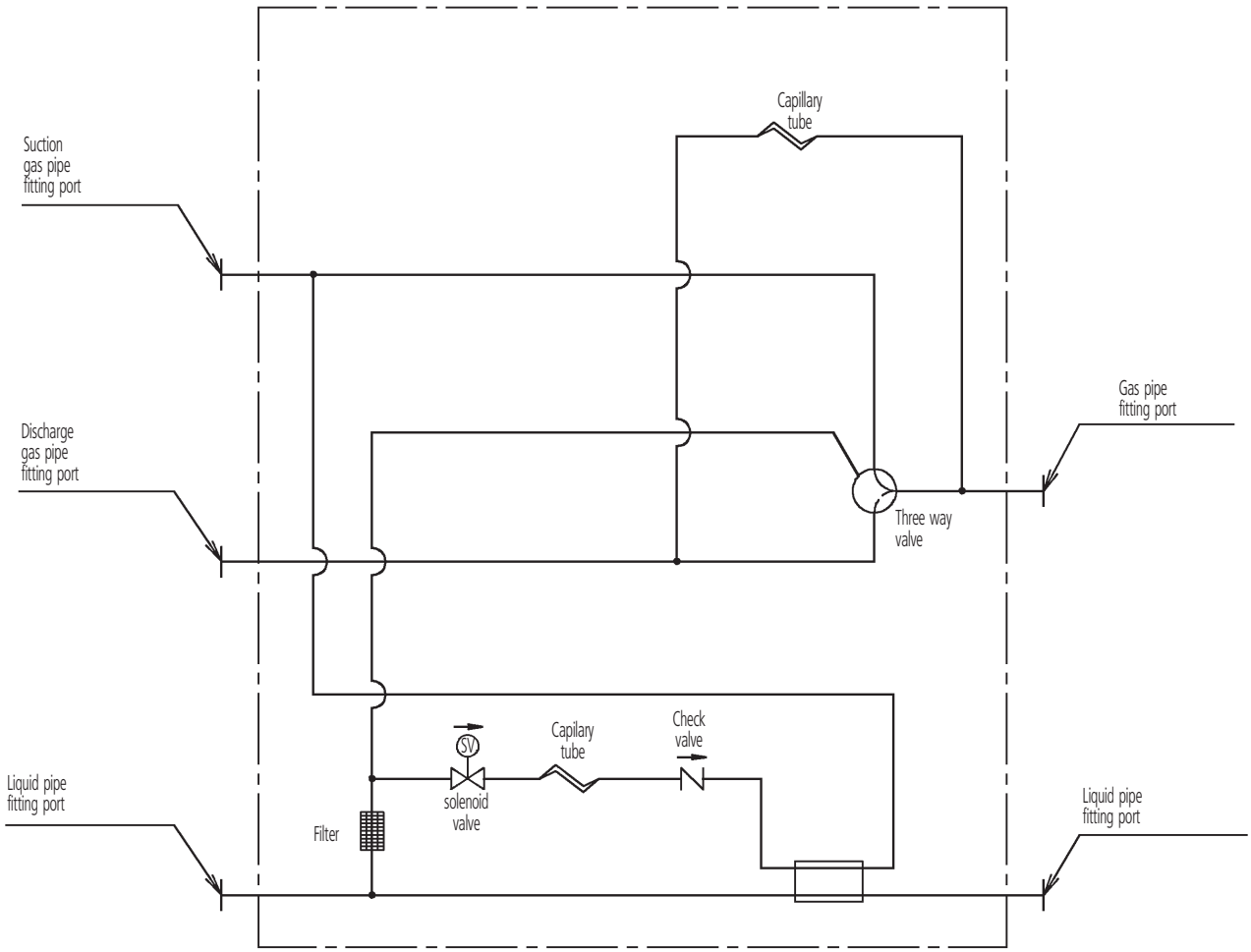
4 Piping diagram

BSVQ-MV1



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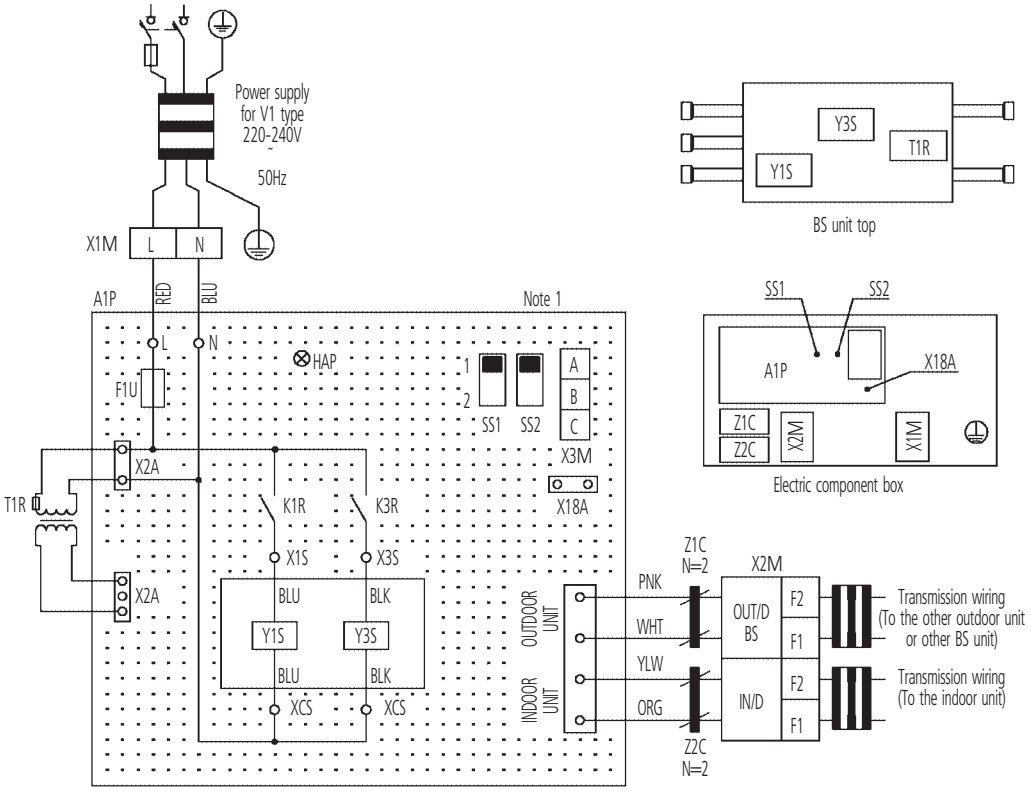
5 Wiring diagram

BSVQ-MV1



L-RED	N-BLUE				
A1P	Printed circuit board	T1R	Transformer (220-240V/20V)	Y3S	4 way valve (Discharge line)
F1U	Fuse (B, 250V, 5A,)	X1M	Terminal strip (Power)	Connector for optional parts	
HAP	Light emitting diode (Service monitor-green)	X2M	Terminal strip (Control)	X18A	Conntector (Wiring external control adaptor for outdoor unit)
K1R, 3R	Magnetic relay	X3M	Terminal strip (C/H Selector)		
SS1, 2	Selector switch (Selection of remote controlller)	Y1S	Solenoid valve (Liquid line)	Z1C, 2c	Noise filter (Ferite core)

: Field wiring
: Connector
: Wire clamp
: Terminal

COLORS : BLK : Black ORG : Orange
BLU : Blue RED : Red
PNK : Pink WHT : White
YLW : Yellow

NOTES

1 When using the cool/heat selector (optional accessory), connect it to terminals A, band C on X3M (A1P).
In the case, set the selector switch SS1 & SS2 on the A1P according to below drawing.

2 As for wiring to the IN/D F1&F2 and OUT/D, BS F1&F2 on X2M, refer to

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2

VRV II
VRV-W II

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.

CE Daikin units comply with the European regulations that guarantee the safety of the product.

VRV products are not within the scope of the Eurovent certification programme.

Daikin equipment is designed for comfort applications. For use in other applications, please contact your local Daikin representative.

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