

Air Conditioners

# **Technical Data**



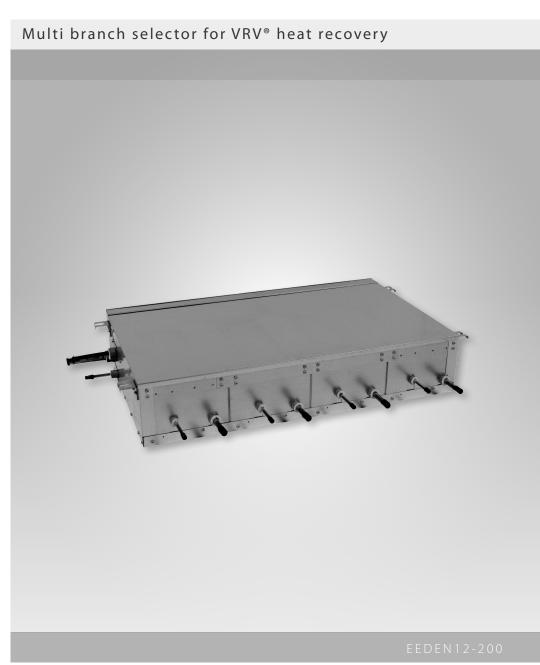




#### Air Conditioners

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#### BSV4Q100PV

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#### 1 Features

- Faster installation thanks to a reduced number of brazing points and wiring
- Allows individual cool / heat switching for up to 4 groups of indoor units
- Maximum design flexibility because individual and multi boxes can be combined in one system
- Low built-in height
- · No drain piping needed

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#### 2 Specifications

| 2-1 Technical Specifications                                  |              |           |            |            | BSV4Q100PV                                       |  |  |
|---------------------------------------------------------------|--------------|-----------|------------|------------|--------------------------------------------------|--|--|
| Power input                                                   | Cooling      | Nom.      |            | kW         | 0.020                                            |  |  |
|                                                               | Heating      | Nom.      |            | kW         | 0.020                                            |  |  |
| Maximum number of connectable indoor units                    |              |           |            |            | 24                                               |  |  |
| Maximum number of connectable indoor units per branch         |              |           |            |            | 6                                                |  |  |
| Number of branches                                            |              |           |            |            | 4                                                |  |  |
| Maximum capacity index of connectable indoor units            |              |           |            |            | 400                                              |  |  |
| Maximum capacity index of connectable indoor units per branch |              |           | r branch   |            | 100                                              |  |  |
| Casing                                                        | Material     |           |            |            | Galvanised steel plate                           |  |  |
| Dimensions                                                    | Unit         | HeightxWi | idthxDepth | mm         | 209x1,053x635                                    |  |  |
| Weight                                                        | Unit kg      |           | kg         | 60         |                                                  |  |  |
| Piping connections                                            | Outdoor unit | Liquid    | Туре       |            | Brazing connection                               |  |  |
|                                                               |              |           | OD         | mm         | 12.7                                             |  |  |
|                                                               |              | Gas       | Туре       |            | Brazing connection                               |  |  |
|                                                               |              |           | OD         | mm         | 28.6                                             |  |  |
|                                                               |              | Discharge | Туре       |            | Brazing connection                               |  |  |
|                                                               |              | gas       | OD mm 19.1 |            | 19.1                                             |  |  |
|                                                               | Indoor unit  | Liquid    | Туре       |            | Brazing connection                               |  |  |
|                                                               |              |           | OD mm      |            | 9.5                                              |  |  |
|                                                               |              | Gas       | Туре       |            | Brazing connection                               |  |  |
|                                                               |              |           | OD         | OD mm 15.9 |                                                  |  |  |
| Sound absorbing thermal insulation                            |              |           |            |            | Foamed polyurethane, frame resisting needle felt |  |  |

Standard Accessories : Clamps; Standard Accessories : Insulation pipe cover; Standard Accessories : Attached piping;

Standard Accessories: Installation manual;

| 2-2 Electrical Specifications |                            |      |   | BSV4Q100PV                               |  |
|-------------------------------|----------------------------|------|---|------------------------------------------|--|
| Power supply                  | Phase                      |      |   | 1~                                       |  |
|                               | Voltage                    |      | V | 220-240                                  |  |
|                               | Voltage range              | Min. | % | -10                                      |  |
|                               |                            | Max. | % | 10                                       |  |
| Total circuit                 | Minimum circuit amps (MCA) |      |   | 0.5                                      |  |
|                               | Maximum fuse amps (MFA) A  |      | А | 15                                       |  |
| Notes                         |                            |      |   | Instead of a fuse, use a circuit breaker |  |

#### Notes

- (1) 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.
- (2) In case the joint diameter does not fit on the triple piping side, a reducer is needed (field supply)
- (3) Insulators are necessary (field supply) for the triple piping side
- (4) Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.
- (5) Maximum allowable voltage range variation between phases is 2%.
- (6) MCA/MFA: MCA = 1.25 x FLA
- (7) MFA  $\leq$  4 x FLA
- (8) Next lower standard fuse rating minimum 15A
- (9) Select wire size based on the value of MCA
- (10) Instead of a fuse, use a circuit breaker

### 3 Safety device settings

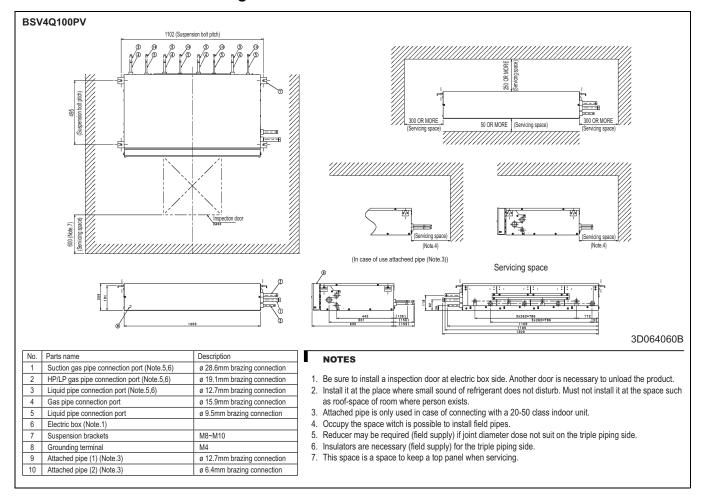
### 3 - 1 Safety Device Settings

| BSV4Q100PV<br>BSV6Q100PV |            |                |         |
|--------------------------|------------|----------------|---------|
|                          | Model      | Safety devices |         |
|                          | Model      | PC board fuse  |         |
|                          | BSV4Q100PV | 250V 3.15A     |         |
|                          | BSV6Q100PV | 250V 3.15A     |         |
|                          |            |                | 4D06414 |
|                          |            |                |         |

**VDAIKIN** • Accessories • Multi branch selector for VRV<sup>®</sup> heat recovery

#### 4 Dimensional drawings

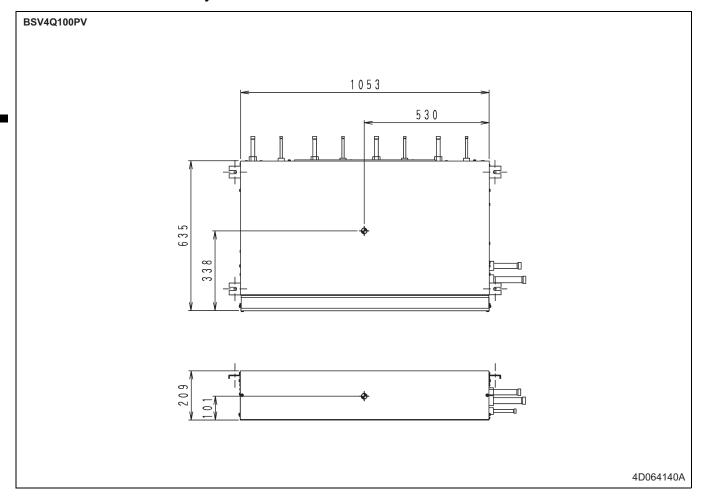
#### 4 - 1 Dimensional Drawings



### 5 Centre of gravity

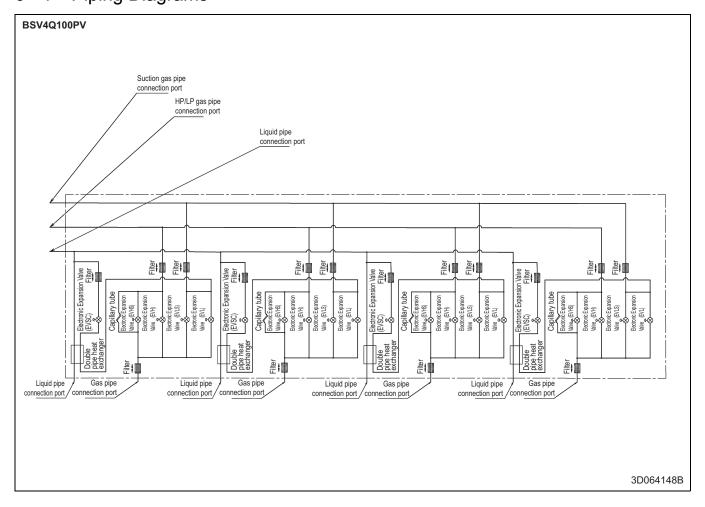
## 5 - 1 Centre of Gravity

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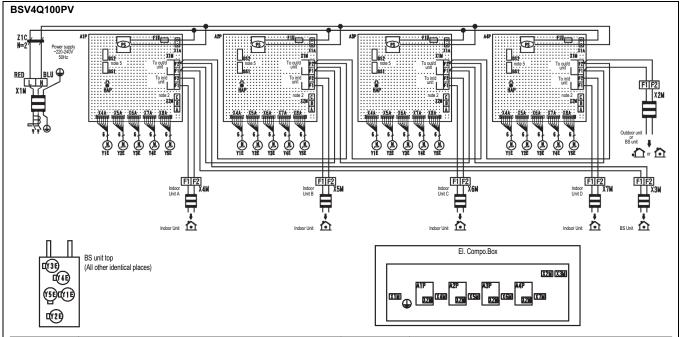
#### 6 Piping diagrams

#### 6 - 1 Piping Diagrams



#### 7 Wiring diagrams

#### 7 - 1 Wiring Diagrams - Single Phase



| A1P (Unit A)  |                                       | X2M (A1P~A6P) | Terminal strip (C/H selector)                 |
|---------------|---------------------------------------|---------------|-----------------------------------------------|
| A1P (Unit B)  | Printed circuit board (Indoor unit B) | X1M           | Terminal strip (power)                        |
| A1P (Unit C)  | Printed circuit board (Indoor unit C) | X2M           | Terminal strip (control)                      |
| A1P (Unit D)  | Printed circuit board (Indoor unit D) | Y1E           | Electronical expansion valve (sub cool)       |
| DS1, DS2      | Dip switch                            | Y2E           | Electronical expansion valve (sub discharge)  |
| F1U           | Fuse (T, 3.15A, 250V)                 | Y3E           | Electronical expansion valve (sub suction)    |
| HAP           | Flashing lamp (service monitor green) | Y4E           | Electronical expansion valve (main discharge) |
| PS            | Switching power supply (A1P~A6P))     | Y5E           | Electronical expansion valve (main suction)   |
| X1M (A1P~A6P) | Terminal strip (control)              | Z1C           | Noise filter (ferrite core)                   |

: Terminal strip Colors: BLU Blue
: Connector RED Red

=□□= : Field wiring

: Protective earth (screw)

3D063928B

#### NOTES

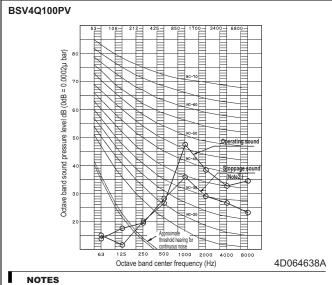
- 1 This wiring diagram applies to the BS unit only.
- 2 When using the COOL/HEAT selector (optional accessory), connect it to terminals A, B and C on X2M(A1P~A6P).
- 3 As for wiring to the X2M~X9M(control), refer to the installation manual.
- 4 Use copper conductors only.
- 5 Dip switch (DS1-2) initial settings are as follows.



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

#### 8 Sound data

#### 8 - 1 Sound Pressure Spectrum



- 1. Over All (dB): (B,G,N is already rectified)
- 2. Operating conditions: Power source: 220-240V 50 Hz Standard condition (JIS)
- Operating Stoppage Scale 48 38 44
- 3. Measuring place: Anechoic chamber
- 4. 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.
- 5. 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.







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

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