

**DRAFT** 

# INVERTER MULTI-SPLIT SYSTEM RESIDENTIAL AIR CONDITIONERS

(Split system, air to air heat pump type)

(OUTDOOR UNIT)

SCM40ZJ-S

**45ZJ-S** 

**50ZJ-S** 

**71ZJ-S** 

In this DATA BOOK, the outdoor units only is shown. Please see the '10 · SCM-DB-092D concerning the indoor units.



MITSUBISHI HEAVY INDUSTRIES, LTD.

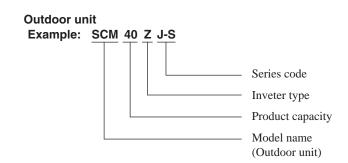
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#### **■**Table of models

| Model  | 20 | 25 | 35 | 50 | 60 |
|--|----|----|----|----|----|
| Wall mounted type (SRK**ZJX-S)                             | 0  | 0  | 0  | 0  | 0  |
| Wall mounted type (SRK**ZJ-S)                              | 0  | 0  | 0  | 0  |    |
| Floor standing type (SRF)                                  |    | 0  | 0  | 0  |    |
| Ceiling concealed type (SRR)                               |    | 0  | 0  | 0  | 0  |
| Ceiling cassette-4way compact type (FDTC)                  |    | 0  | 0  | 0  | 0  |
| Outdoor unit to be combined (FDC)  SCM40ZJ-S,45ZJ-S,50ZJ-S |    |    |    |    |    |

#### ■How to read the model name



#### 1. SPECIFICATIONS

#### Adapted to RoHS directive

|  |                        |                               |  | Model  | SCM40ZJ-S   |
|--|------------------------|-------------------------------|--|--------|---|
| Item   |                        |                               |  |        |   |
| Cooling capacity (1  |                        |                               |  | W      | 4000 (1800 (Min.)~5900 (Max.))  |
| Heating capacity (1)   |                        |                               |  | W      | 4500 (1400 (Min.)~6900 (Max.))  |
| Power supply   | ,                      |                               |  |        | 1 Phase, 220~240 V, 50Hz  |
|  | Power                  |                               | Cooling  | kW     | 0.84 ( 0.49~1.90 )  |
|  | consum                 | ption                         | Heating  |        | 0.90 ( 0.47~2.30 )  |
|  | Running                | 9                             | Cooling  |        | 3.9 / 3.7 / 3.5 (220/ 230/ 240 V)   |
|  | current                |                               | Heating  | A      | 4.1 / 4.0 / 3.8 (220/ 230/ 240 V)   |
| Operation  | Inrush c               | current                       |  |        | 4.1 / 4.0 / 3.8 (220/ 230/ 240 V)   |
| data (1)   | COP                    |                               | Cooling  |        | 4.76  |
| data (1)   | COF                    |                               | Heating  |        | 5.00  |
|  |                        | Cooling                       | Sound level  | dB (A) | 47  |
|  | Noise                  | Cooling                       | Power level  | dB     | 60  |
|  | level                  |                               | Sound level  | dB (A) | 48  |
|  |                        | Heating                       | Power level  | dB     | 62  |
| Exterior dimensions  | s (Height              | x Width x [                   | Depth)   | mm     | 640 x 850 x 290   |
| Exterior appearanc   | · · ·                  |                               | ·  |        | Stucco white  |
| (Munsell color)  |                        |                               |  |        | (4.2Y 7.5/1.1) near equivalent  |
| Net weight   |                        |                               |  | kg     | 47  |
| - · · · · · · · · · · · · · · · · · · ·                        | Compre                 | essor type                    | & Q'tv   |        | RM-T5113MDE2 (Twin rotary type) x 1   |
|  | <u> </u>               | (Starting m                   |  | kW     | 1.4 (Line starting)   |
|  | Refriger               |                               |  | Q.     | 0.45 (DIAMOND FREEZE MA68)  |
| Refrigerant  | Refriger               |                               |  | kg     | R410A 2 (Pre-Charged up to the piping length of 30m)  |
| equipment  | Heat exchanger         |                               |  | ı.g    | M fins & inner grooved tubing   |
|  | Refrigerant control    |                               |  |        | Capillary tubes + Electronic expansion valve  |
|  | Device control         |                               |  |        | Microcomputer control   |
|  |                        |                               |  |        | Propeller fan x 1   |
| Air la a a allia a   | Fan type & Q'ty  Motor |                               |  | W      | 34  |
| Air handling equipment   | IVIOLOI                |                               | Cooling  | VV     | 40.0  |
| equipment  | Air flow               |                               | Cooling  | CMM    | 40.0  |
| Ob   0 . : +   |                        |                               | Heating  |        |   |
| Shock & vibration a  | lbsorber               |                               |  |        | Cushion rubber (for compressor)   |
| Electric heater  |                        |                               |  |        | Crank case heater (220V 20W)  |
| Safety devices   |                        |                               |  |        | Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection |
|  |                        |                               |  | mm     | Liquid line: φ6.35 (1/4") × 2   |
|  | Retriger               | Refrigerant piping size (O.D) |  |        | Gas line: φ9.52 (3/8") × 2  |
|  | Connec                 | onnecting method              |  |        | Flare connecting  |
|  |                        | on for pipin                  |  |        | Necessary (Both sides), independent   |
| Installation   |                        | for one ind                   |  |        | Max. 25   |
| data   |                        | ngth for all                  |  |        | Max. 30   |
|  | Vertical               |                               | erence between                                       | m      | Max. 15 (Outdoor unit is higher) Max. 15 (Outdoor unit is higher)   |
|  |                        |                               |  |        |   |
| Height difference of the indoor units Recommended breaker size |                        | Α                             | Max. 25<br>25  |        |   |
| Size x Core number   |                        | A                             | 1.5mm <sup>2</sup> x 4 cores (Including earth cable) |        |   |
| Connection wiring  |                        |                               |  |        | , ,   |
| Connecting method Accessories (included)                       |                        |                               | Terminal block (Screw fixing type)                   |        |   |
| Accessories (Includ  | ieu)                   |                               |  |        | Installation sheet, Elbow, Grommet  |
| Indoor unit to be combined                                     |                        |                               |  |        | SRK20,25,35ZJX-S<br>SRK20,25,35ZJ-S<br>SRF25,35ZJX-S<br>SRR25,35ZJ-S<br>FDTC25,35VD   |
| Number of connect  | able indo              | or units                      |  |        | 2   |
| Total of indoor unit   |                        |                               |  | kW     | Max. 6  |
|  |                        |                               | t the following con                                  | 100    |   |

Note (1) The data are measured at the following conditions.

The pipe length for one indoor unit is 7.5m.

| Item      | Indoor air temperature |      | Outdoor air | temperature | Standards          |  |
|-----------|------------------------|------|-------------|-------------|--------------------|--|
| Operation | DB                     | WB   | DB          | WB          | Staridards         |  |
| Cooling   | 27°C                   | 19°C | 35°C        | 24°C        | 100 T1 110 0 0010  |  |
| Heating   | 20°C                   | _    | 7°C         | 6°C         | ISO-T1, JIS C 9612 |  |

- (2) This air-conditioner is manufactured and tested in conformity with the ISO.
  (3) The operation data are applied to the 220/230/240V districts respectively.
  (4) The refrigerant quantity to be charged includes the refrigerant in 30m connecting piping. (Purging is not required even for the short piping.)

RWC000Z235

#### Adapted to **RoHS** directive

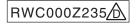
|  |                               |                 |  | Model                              | SCM45ZJ-S   |
|--|-------------------------------|-----------------|--|------------------------------------|---|
| Item   |                               |                 |  |                                    | 301414320-3   |
| Cooling capacity (                                   | 1)                            |                 |  | W                                  | 4500 (1800 (Min.)~6400 (Max.))  |
| Heating capacity (1)                                 |                               |                 |  | W                                  | 5600 (1400 (Min.)~7400 (Max.))  |
| Power supply   |                               |                 |  |                                    | 1 Phase, 220~240 V, 50Hz  |
|  | Power                         |                 | Cooling  | kW                                 | 1.04 ( 0.49~2.14 )  |
|  | consumption                   |                 | Heating  | LVV                                | 1.20 ( 0.47~2.57 )  |
|  | Running                       |                 | Cooling  |                                    | 4.8 / 4.6 / 4.4 (220/ 230/ 240 V)   |
|  | current                       |                 | Heating  | Α                                  | 5.5 / 5.3 / 5.1 (220/ 230/ 240 V)   |
| 0 "  | Inrush o                      | current         |  |                                    | 5.5 / 5.3 / 5.1 (220/ 230/ 240 V)   |
| Operation  | COD                           |                 | Cooling  |                                    | 4.33  |
| data (1)   | COP                           |                 | Heating  |                                    | 4.67  |
|  |                               |                 | Sound level  | dB (A)                             | 47  |
|  | Noise                         | Cooling         | Power level  | dB                                 | 60  |
|  | level                         |                 | Sound level  | dB (A)                             | 49  |
|  |                               | Heating         | Power level  | dB                                 | 62  |
| Exterior dimension                                   | ns (Height                    | x Width x [     | Depth)   | mm                                 | 640 x 850 x 290   |
| Exterior appearance                                  |                               |                 |  |                                    | Stucco white  |
| (Munsell color)                                      |                               |                 |  |                                    | (4.2Y 7.5/1.1) near equivalent  |
| Net weight   |                               |                 |  | kg                                 | 47  |
|  | Compre                        | essor type      | & Q'tv   |                                    | RM-T5113MDE2 (Twin rotary type) x 1   |
|  |                               | (Starting m     |  | kW                                 | 1.4 (Line starting)   |
|  | Refrige                       | <u> </u>        |  | Q.                                 | 0.45 (DIAMOND FREEZE MA68)  |
| Refrigerant  | Refrige                       |                 |  | kg                                 | R410A 2 (Pre-Charged up to the piping length of 30m)  |
| equipment  |                               | changer         |  | 9                                  | M fins & inner grooved tubing   |
|  | Refrigerant control           |                 |  |                                    | Capillary tubes + Electronic expansion valve  |
|  | Device                        |                 |  |                                    | Microcomputer control   |
|  |                               | Fan type & Q'ty |  |                                    | Propeller fan x 1   |
| Air handling   | Motor                         |                 |  | W                                  | 34  |
| equipment  | IVIOLOI                       |                 | Cooling  | **                                 | 40.0  |
| oquipinioni  | Air flow                      | 1               | Heating  | CMM                                | 40.0  |
| Shock & vibration                                    | aheorher                      |                 | Treating   |                                    | Cushion rubber (for compressor)   |
| Electric heater                                      | <u> </u>                      |                 |  |                                    | Crank case heater (220V 20W)  |
| Licotrio ricator                                     |                               | -               |  |                                    | Compressor overheat protection, Overcurrent protection,   |
| Safety devices                                       |                               |                 |  |                                    | Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection |
|  | Refrigerant piping size (O.D) |                 |  |                                    | Liquid line: φ6.35 (1/4") × 2   |
|  | heirige                       | rant piping     | SIZE (U.D)   | mm                                 | Gas line: φ 9.52 (3/8") × 2   |
|  | Connec                        | cting metho     | od   |                                    | Flare connecting  |
|  | Insulation                    | on for pipir    | g  |                                    | Necessary (Both sides), independent   |
| Installation   | Length                        | for one ind     | oor unit   |                                    | Max. 25   |
| data   | Total le                      | ngth for all    | rooms  |                                    | Max. 30   |
|  | 1                             | height diff     | erence between                                       | m                                  | Max. 15 (Outdoor unit is higher)<br>Max. 15 (Outdoor unit is lower)   |
|  |                               |                 | of the indoor units                                  |                                    | Max. 25   |
| Recommended breaker size                             |                               | Α               | 25   |                                    |   |
| Size x Core number                                   |                               | - ' '           | 1.5mm <sup>2</sup> x 4 cores (Including earth cable) |                                    |   |
| Connection wiring Connecting method                  |                               |                 |  | Terminal block (Screw fixing type) |   |
| Accessories (inclu                                   |                               |                 | -  |                                    | Installation sheet, Elbow, Grommet  |
| Indoor unit to be combined                           |                               |                 |  |                                    | SRK20,25,35ZJX-S<br>SRK20,25,35ZJ-S<br>SRF25,35ZJX-S<br>SRR25,35ZJ-S<br>FDTC25,35VD   |
| Number of connec                                     | table indo                    | oor units       |  |                                    | 2   |
| Total of indoor uni                                  | ts                            |                 |  | kW                                 | Max. 7  |
| Note (1) The data are measured at the following con- |                               |                 |  | ditions                            | The pipe length for one indoor unit is 7.5m.  |

Note (1) The data are measured at the following conditions.

The pipe length for one indoor unit is 7.5m.

|           | Item | Indoor air temperature |      | Outdoor air | temperature | Standards          |
|-----------|------|------------------------|------|-------------|-------------|--------------------|
| Operation |      | DB                     | WB   | DB          | WB          | Standards          |
| Cooling   |      | 27°C                   | 19°C | 35°C        | 24°C        | ISO-T1, JIS C 9612 |
| Heating   |      | 20°C                   | _    | 7°C         | 6°C         | 150-11, 315 6 9612 |

- (2) This air-conditioner is manufactured and tested in conformity with the ISO.
  (3) The operation data are applied to the 220/230/240V districts respectively.
  (4) The refrigerant quantity to be charged includes the refrigerant in 30m connecting piping. (Purging is not required even for the short piping.)



#### Adapted to **RoHS** directive

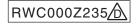
| Item                                 |                                |                   |                                    | Model                                    | SCM50ZJ-S   |
|--------------------------------------|--------------------------------|-------------------|------------------------------------|--|---|
| Cooling capacity (                   | 1)                             |                   |                                    | W  | 5000 (1800 (Min.)~7100 (Max.))  |
| Heating capacity (1)                 |                                |                   |                                    | W  | 6000 (1400 (Min.)~7500 (Max.))  |
| Power supply                         |                                |                   |                                    | VV                                       | 1 Phase, 220~240 V, 50Hz  |
| rower supply                         |                                |                   | Cooling                            |  | 1.08 (0.50~2.15)  |
|                                      | Power consumption              |                   |                                    | kW                                       | ,   |
|                                      |                                | -                 | Heating                            |  | 1.31 (0.48~2.58)  |
|                                      | Runnin                         | _                 | Cooling                            |  | 5.0 / 4.7 / 4.5 (220/ 230/ 240 V)   |
|                                      | current                        |                   | Heating                            | Α  | 6.0 / 5.8 / 5.5 (220/ 230/ 240 V)   |
| Operation                            | Inrush                         | current           | T =                                |  | 6.0 / 5.8 / 5.5 (220/ 230/ 240 V)   |
| data (1)                             | COP                            |                   | Cooling                            |  | 4.63  |
| . ,                                  |                                | _                 | Heating                            |  | 4.58  |
|                                      |                                | Cooling           | Sound level                        | dB (A)                                   | 49  |
|                                      | Noise                          | Cooming           | Power level                        | dB                                       | 62  |
|                                      | level                          | Heating           | Sound level                        | dB (A)                                   | 52  |
|                                      |                                | пеашу             | Power level                        | dB                                       | 65  |
| Exterior dimension                   | s (Height                      | x Width x [       | Depth)                             | mm                                       | 640 x 850 x 290   |
| Exterior appearance                  | ce                             |                   |                                    |  | Stucco white  |
| (Munsell color)                      |                                |                   |                                    |  | ( 4.2Y 7.5/1.1 ) near equivalent  |
| Net weight                           |                                |                   |                                    | kg                                       | 48  |
|                                      | Compre                         | essor type        | & Q'tv                             |  | RM-T5113MDE2 (Twin rotary type) x 1   |
|                                      | <u> </u>                       | (Starting m       |                                    | kW                                       | 1.4 (Line starting)   |
|                                      | Refrige                        | <u> </u>          |                                    | e  | 0.45 (DIAMOND FREEZE MA68)  |
| Refrigerant                          |                                |                   |                                    | kg                                       | R410A 2.5 (Pre-Charged up to the piping length of 40m)  |
| equipment                            | Refrigerant (4)                |                   |                                    | Ng                                       | M fins & inner grooved tubing   |
|                                      | Heat exchanger                 |                   |                                    |  |   |
|                                      | Refrigerant control            |                   |                                    |  | Capillary tubes + Electronic expansion valve  |
|                                      | Device control                 |                   |                                    |  | Microcomputer control   |
|                                      | Fan type & Q'ty                |                   |                                    |  | Propeller fan x 1   |
| Air handling                         | Motor                          | •                 |                                    | W  | 34  |
| equipment                            | Air flow                       | ,                 | Cooling                            | СММ                                      | 41.0  |
|                                      | 7                              |                   | Heating                            | 0  | 41.0  |
| Shock & vibration                    | absorber                       |                   |                                    |  | Cushion rubber (for compressor)   |
| Electric heater                      |                                |                   |                                    |  | Crank case heater (220V 20W)  |
| Safety devices                       |                                |                   |                                    |  | Compressor overheat protection, Overcurrent protection, Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection |
|                                      | Pofrigorant piping size (O.D.) |                   |                                    | mm                                       | Liquid line: $\phi$ 6.35 (1/4") × 3   |
|                                      | Refrigerant piping size (O.D)  |                   | 111111                             | Gas line: $\phi$ 9.52 (3/8") × 3         |   |
|                                      | Connec                         | Connecting method |                                    |  | Flare connecting  |
|                                      | Insulati                       | on for pipir      | g                                  |  | Necessary (Both sides), independent   |
| Installation                         | Length                         | for one ind       | oor unit                           |  | Max. 25   |
| data                                 | Total le                       | ngth for all      | rooms                              |  | Max. 40   |
|                                      | Vertical                       |                   | erence between                     | m  | Max. 15 (Outdoor unit is higher)<br>Max. 15 (Outdoor unit is lower)   |
|                                      |                                |                   | of the indoor units                |  | Max. 25   |
| Recommended bre                      |                                |                   | of the indoor drifts               | ^  | 25  |
| Recommended bre                      |                                |                   |                                    | Α  |   |
| Connection wiring Size x Core number |                                |                   |                                    | 1.5mm² x 4 cores (Including earth cable) |   |
| Connecting method                    |                                |                   | Terminal block (Screw fixing type) |  |   |
| Accessories (includ                  | aea)                           |                   |                                    |  | Union : $(\phi 9.52 \rightarrow \phi 12.7) \times 1$ , Installation sheet, Elbow, Grommet   |
| Indoor unit to be combined           |                                |                   |                                    |  | SRK20,25,35,50ZJX-S<br>SRK20,25,35,50ZJ-S<br>SRF25,35,50ZJX-S<br>SRR25,35,50ZJ-S<br>FDTC25,35,50VD  |
| Number of connec                     | table indo                     | oor units         |                                    |  | Min. 2~Max. 3   |
| Total of indoor unit                 |                                |                   |                                    | kW                                       | Max. 8.5  |
|                                      |                                | moneurod o        | at the following cor               |  | The pipe length for one indoor unit is 7.5m.  |

Note (1) The data are measured at the following conditions.

The pipe length for one indoor unit is 7.5m.

|           | Item | Indoor air temperature |      | Outdoor air | temperature | Standards          |
|-----------|------|------------------------|------|-------------|-------------|--------------------|
| Operation |      | DB                     | WB   | DB          | WB          | Standards          |
| Cooling   |      | 27°C                   | 19°C | 35°C        | 24°C        | ISO-T1, JIS C 9612 |
| Heating   |      | 20°C                   | _    | 7°C         | 6°C         | 150-11, 315 6 9612 |

- (2) This air-conditioner is manufactured and tested in conformity with the ISO.
  (3) The operation data are applied to the 220/230/240V districts respectively.
  (4) The refrigerant quantity to be charged includes the refrigerant in 40m connecting piping. (Purging is not required even for the short piping.)



#### Adapted to **RoHS** directive

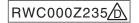
| Item  |                                |                                |   | Model                              | SCM71ZJ-S   |
|---|--------------------------------|--------------------------------|---|------------------------------------|---|
| Cooling capacity (  | 1)                             |                                |   | W                                  | 7100 (1800 (Min.)~8800 (Max.))  |
| Heating capacity (1)  |                                |                                |   | W                                  | 8600 (1500 (Min.) ~ 9400 (Max.))  |
| Power supply  |                                |                                |   | VV                                 | 1 Phase, 220~240 V, 50Hz  |
| rower supply  | Power                          |                                | Cooling   |                                    | 1.74 ( 0.48~2.75 )  |
|   | consumption                    |                                |   | kW                                 | 2.00 ( 0.60~3.35 )  |
|   |                                | -                              | Heating   |                                    | ,   |
|   | Runnin                         | _                              | Cooling   |                                    | 8.0 / 7.6 / 7.3 (220/ 230/ 240 V)   |
|   | current                        |                                | Heating   | Α                                  | 9.2 / 8.8 / 8.4 (220/ 230/ 240 V)   |
| Operation   | Inrush                         | current                        | 10 "  |                                    | 9.2 / 8.8 / 8.4 (220/ 230/ 240 V)   |
| data (1)  | COP                            |                                | Cooling   |                                    | 4.08  |
|   |                                | 1                              | Heating   |                                    | 4.30  |
|   |                                | Cooling                        | Sound level   | dB (A)                             | 52  |
|   | Noise                          | J                              | Power level   | dB                                 | 65  |
|   | level                          | Heating                        | Sound level   | dB (A)                             | 54  |
|   |                                | rioding                        | Power level   | dB                                 | 66  |
| Exterior dimension  | ns (Height                     | x Width x [                    | Depth)  | mm                                 | 750 x 880 x 340   |
| Exterior appearan   | ce                             |                                |   |                                    | Stucco white  |
| (Munsell color)   |                                |                                |   |                                    | (4.2Y 7.5/1.1) near equivalent  |
| Net weight  |                                |                                |   | kg                                 | 62  |
|   | Compre                         | essor type                     | & Q'ty  |                                    | RM-T5118MDE2 (Twin rotary type) x 1   |
|   | Motor                          | (Starting m                    | nethod)   | kW                                 | 1.4 (Line starting)   |
|   | Refrige                        | rant oil                       |   | l                                  | 0.675 (DIAMOND FREEZE MA68)   |
| Refrigerant   | Refrige                        | rant (4)                       |   | kg                                 | R410A 3.15 (Pre-Charged up to the piping length of 40m)   |
| equipment   | Heat exchanger                 |                                |   |                                    | M fins & inner grooved tubing   |
|   | Refrigerant control            |                                |   |                                    | Capillary tubes + Electronic expansion valve  |
|   |                                | control                        | •   |                                    | Microcomputer control   |
|   |                                | e & Q'ty                       |   |                                    | Propeller fan x 1   |
| Air bandling  | Motor                          |                                | W   | 86                                 |   |
| Air handling equipment  | IVIOLOI                        |                                | Cooling   | VV                                 | 56.0  |
| equipment   | Air flow                       | 1                              |   | CMM                                | 56.0  |
| Charle 9 vibration  | ahaarhar                       |                                | Heating   |                                    |   |
| Shock & vibration Electric heater   | absorber                       |                                |   |                                    | Cushion rubber (for compressor)  Crank case heater (220V 20W)   |
| Electric fleater  |                                |                                |   |                                    | Compressor overheat protection, Overcurrent protection,   |
| Safety devices  |                                |                                |   |                                    | Frost protection, Serial signal error protection, Outdoor fan motor error protection, Heating & Cooling overload protection |
|   | Pofrigorant piping size (O.D.) |                                |   | mm                                 | Liquid line: $\phi$ 6.35 (1/4") × 4   |
|   | Refrigerant piping size (O.D)  |                                | mm  | Gas line: $\phi$ 9.52 (3/8") × 4   |   |
|   | Connec                         | cting metho                    | od  |                                    | Flare connecting  |
|   | Insulati                       | on for pipir                   | g   |                                    | Necessary (Both sides), independent   |
| Installation  | Length                         | for one ind                    | oor unit  |                                    | Max. 25   |
| data  | Total le                       | ngth for all                   | rooms   |                                    | Max. 70   |
|   |                                | l height diff<br>r unit and ir | erence between  | m                                  | Max. 20 (Outdoor unit is higher)<br>Max. 20 (Outdoor unit is lower)   |
|   |                                |                                | of the indoor units   | 1                                  | Max. 25   |
| Recommended br  |                                |                                | or the mader and  | Α                                  | 25  |
| Recommended breaker size  Connection wiring Size x Core number  Connecting method |                                |                                | 1.5mm <sup>2</sup> x 4 cores (Including earth cable)  |                                    |   |
|   |                                |                                |   | Terminal block (Screw fixing type) |   |
|   |                                |                                | Union : $(\phi 9.52 \rightarrow \phi 12.7) \times 2$ , Installation sheet, Elbow, Grommet × 2                       |                                    |   |
| Accessories (included)  Indoor unit to be combined                                |                                |                                | SRK20,25,35,50,60ZJX-S  SRK20,25,35,50ZJ-S  SRF25,35,50ZJ-S  SRF25,35,50ZJ-S  SRF25,35,50,60ZJ-S  FDTC25,35,50,60VD |                                    |   |
| Number of connec  | table inde                     | oor units                      |   |                                    | Min. 2~Max. 4   |
| Total of indoor uni   |                                |                                |   | kW                                 | Max. 12.5   |
| Total of indoor units  Note (1) The data are measured at the following cor        |                                |                                |   |                                    | The pipe length for one indoor unit is 7.5m.  |

Note (1) The data are measured at the following conditions.

The pipe length for one indoor unit is 7.5m.

| Item      | Indoor air temperature |      | Outdoor air | temperature | Standards          |  |
|-----------|------------------------|------|-------------|-------------|--------------------|--|
| Operation | DB                     | WB   | DB          | WB          | Standards          |  |
| Cooling   | 27°C                   | 19°C | 35°C        | 24°C        | 100 T1 110 0 0010  |  |
| Heating   | 20°C                   | _    | 7°C         | 6°C         | ISO-T1, JIS C 9612 |  |

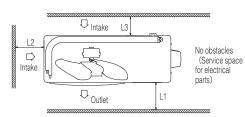
- (2) This air-conditioner is manufactured and tested in conformity with the ISO.
  (3) The operation data are applied to the 220/230/240V districts respectively.
  (4) The refrigerant quantity to be charged includes the refrigerant in 40m connecting piping. (Purging is not required even for the short piping.)



# Models SCM40ZJ-S, 45ZJ-S

(1) It must not be surrounded by walls on four sides. (2) The unit must be fixed with anchor bolts. An anchor bolt must not protrude more than 15mm. (3) Where the unit is subjected to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction. (4) Leave 1.2m or more space above the unit. (5) A wall in front of the blower outlet must not exceed the unit's height.

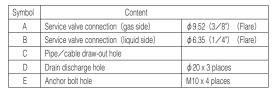
(6) The model name label is attached on the service panel.

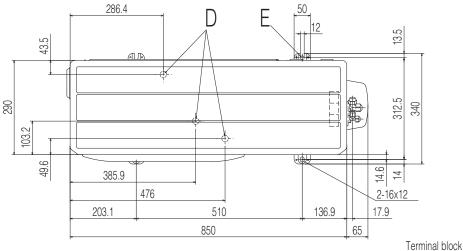




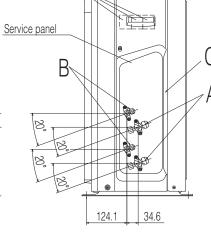
| Examples of Installation  Dimensions |     |
|--------------------------------------|-----|
| L1                                   | 600 |
| L2                                   | 100 |
| L3                                   | 100 |

Unit:mm





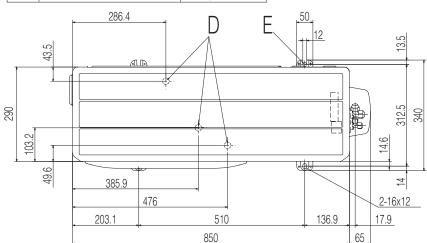
640 42.7 42.7 211 100.3 15



Note

6

| Symbol | Content                                |                      |
|--------|--|----------------------|
| Α      | Service valve connection (gas side)    | φ9.52 (3/8") (Flare) |
| В      | Service valve connection (liquid side) | φ6.35 (1/4") (Flare) |
| С      | Pipe/cable draw-out hole               |                      |
| D      | Drain discharge hole                   | φ 20 x 3 places      |
| Е      | Anchor bolt hole                       | M10 x 4 places       |
|        | 286.4                                  | D I                  |

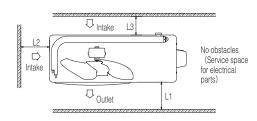


#### Note

- (1) It must not be surrounded by walls on four sides.
- (2) The unit must be fixed with anchor bolts. An anchor bolt
- must not protrude more than 15mm.

  (3) Where the unit is subjected to strong winds, lay it in such a direction that the blower outlet faces perpendicularly to the dominant wind direction.
- (4) Leave 1.2m or more space above the unit.
- (5) A wall in front of the blower outlet must not exceed the unit's height.

  (6) The model name label is attached on the service panel.



Minimum installation space

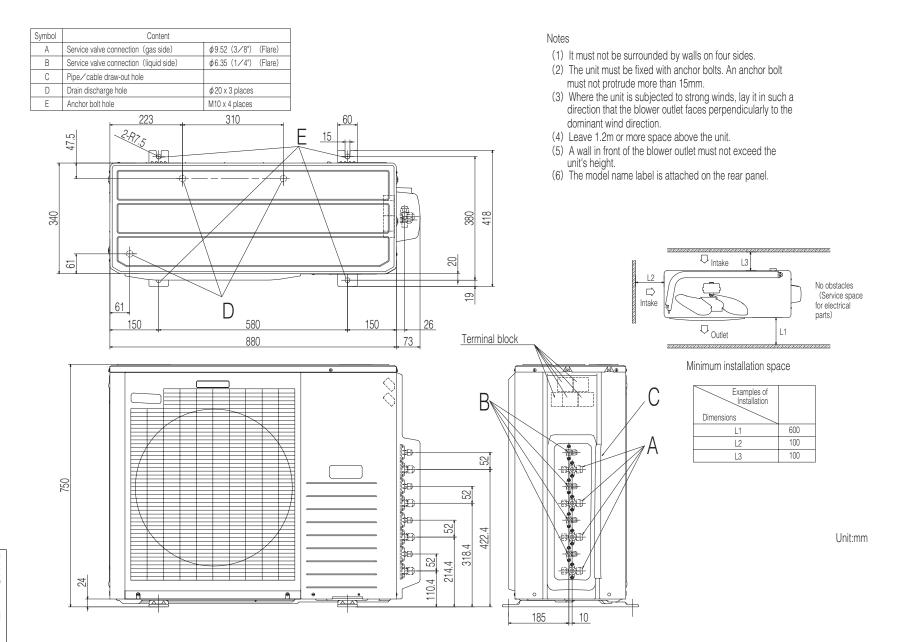
| Examples of Installation  Dimensions |     |
|--------------------------------------|-----|
| L1                                   | 600 |
| L2                                   | 100 |
| L3                                   | 100 |

Unit:mm

|     |         | block |
|-----|---------|-------|
|     | Service | panel |
|     |         | [     |
|     | 42.7    |       |
| 640 |         | 20° [ |
|     |         | 120   |
|     |         | 1     |
| 12  | 000.33  | 200   |
| + ‡ |         | ٤     |

124.1 34.6

RWC000Z233



RWC000Z229

 $\infty$ 

Indication lamp Color Function Led e (1) Red Warning lamp Self diagnosis function by led e 1 Time flash Current cut 2 Time flash Trouble of outdoor unit 3 Time flash Over current 4 Time flash Transmission error 5 Time flash Over heat of compressor 6 Time flash Error of signal transmission 7 Time flash Lock of compressor 8 Time flash Sensor error (Except discharge pipe sensor) Outdoor fan motor error Light on Four sec light

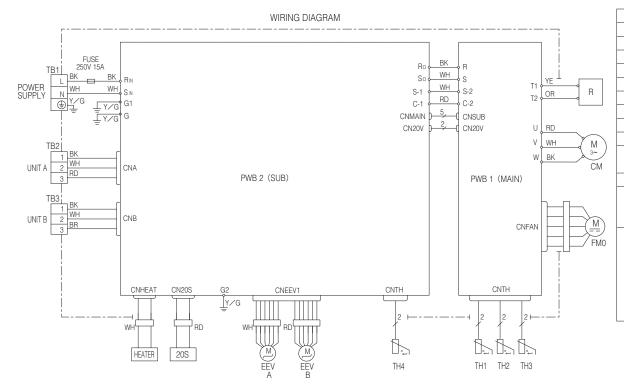
Caution • When the compressor does not run Immediately after hitting on the button, wait for 5 to 10 minutes. (There is possibility of delayed start.)

Discharge pipe sensor error

and

four sec off

· High voltage is produced in the control box. don't touch electrical parts in the control box for 5 minutes after cutting power supply.



#### Color Marks

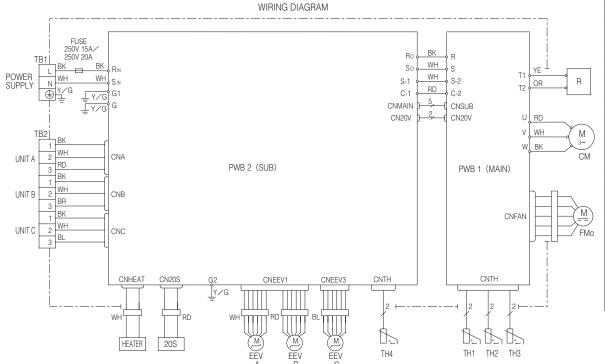
| Mark | Color  | Mark | Color        |
|------|--------|------|--------------|
| BK   | Black  | YE   | Yellow       |
| RD   | Red    | Y/G  | Yellow/Green |
| WH   | White  |      |              |
| OR   | Orange |      |              |
| BR   | Brown  |      |              |

#### Meaning of Marks

| Item        | Description              | Item    | Description                 |
|-------------|--------------------------|---------|-----------------------------|
| CNA-CN20S   | 20S Connector            |         | Reactor                     |
| 20S         | 4 Way valve (coil)       | TB1-TB3 | Terminal block              |
| CM          | Compressor motor         | Th1     | Heat exchanger sensor       |
| EEV A,EEV B | Electric expansion valve |         | (outdoor unit)              |
|             | (coil)                   | Th2     | Outdoor air temp. sensor    |
| FMo         | Fan motor                | Th3     | Discharge pipe temp. sensor |
| HEATER      | Crank case heater        | Th4     | Suction pipe temp. sensor   |

9

'10 • SCM-DB-093D



| Indication lamp |                         | Color                        | Function       |  |
|-----------------|-------------------------|------------------------------|----------------|--|
| Led e (1)       |                         | Red                          | Warning lamp   |  |
| Self dia        | gno                     | sis function by le           | ed e           |  |
| 1 Time flash    | С                       | urrent cut                   |                |  |
| 2 Time flash    | Tr                      | ouble of outdoor             | unit           |  |
| 3 Time flash    | 0                       | ver current                  |                |  |
| 4 Time flash    | Τr                      | Transmission error           |                |  |
| 5 Time flash    | Over heat of compressor |                              |                |  |
| 6 Time flash    |                         | Error of signal transmission |                |  |
| 7 Time flash    |                         | Lock of compressor           |                |  |
| 8 Time flash    |                         | Sensor error                 |                |  |
|                 | (                       | Except discharge             | e pipe sensor) |  |
| Light on        | Outdoor fan motor error |                              |                |  |
| Four sec light  |                         |                              |                |  |
| and             | D                       | ischarge pipe se             | nsor error     |  |
| four sec off    |                         |                              |                |  |
| 0 14.0          |                         |                              |                |  |

- Caution When the compressor does not run Immediately after hitting on the button,wait for 5 to 10 minutes. (There is possibility of delayed start.)
  - High voltage is produced in the control box. don't touch electrical parts in the control box for 5 minutes after cutting power supply.

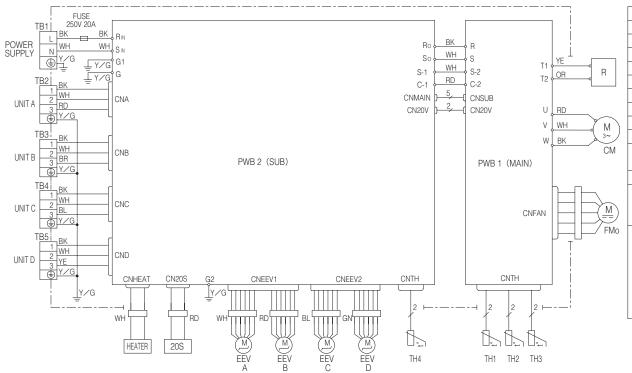
#### Color Marks

| Mark | Color  | Mark | Color        |
|------|--------|------|--------------|
| BK   | Black  | BR   | Brown        |
| BL   | Blue   | YE   | Yellow       |
| RD   | Red    | Y/G  | Yellow/Green |
| WH   | White  |      |              |
| OR   | Orange |      |              |

#### Meaning of Marks

| Item        | Description              | Item    | Description                 |
|-------------|--------------------------|---------|-----------------------------|
| CNA-CN20S   | N20S Connector           |         | Reactor                     |
| 20S         | 4 Way valve (coil)       | TB1,TB2 | Terminal block              |
| CM          | Compressor motor         | Th1     | Heat exchanger sensor       |
| EEV A,EEV B | Electric expansion valve |         | (outdoor unit)              |
| EEV C       | (coil)                   | Th2     | Outdoor air temp. sensor    |
| FMo         | Fan motor                | Th3     | Discharge pipe temp. sensor |
| HEATER      | Crank case heater        | Th4     | Suction pipe temp. sensor   |

'10 • SCM-DB-093D



|   | Indication lamp    |                                | Color                        | Function                 |  |
|---|--------------------|--------------------------------|------------------------------|--------------------------|--|
|   | Led e (1)          |                                | Red                          | Warning lamp             |  |
|   | Self dia           | gno                            | sis function by le           | ed e                     |  |
|   | 1 Time flash       | С                              | urrent cut                   |                          |  |
|   | 2 Time flash       | Tr                             | ouble of outdoor             | unit                     |  |
|   | 3 Time flash       | 0                              | ver current                  |                          |  |
|   | 4 Time flash       | Transmission error             |                              |                          |  |
|   | 5 Time flash       | Over heat of compressor        |                              |                          |  |
| ١ | 6 Time flash E     |                                | Error of signal transmission |                          |  |
| 1 | 7 Time flash       | Lo                             | ock of compresso             | or                       |  |
|   | 8 Time flash       | S                              | ensor error                  |                          |  |
|   |                    | (Except discharge pipe sensor) |                              |                          |  |
|   | Light on           | 0                              | Outdoor fan motor error      |                          |  |
|   | Four sec light     |                                |                              |                          |  |
|   | and                | D                              | ischarge pipe se             | nsor error               |  |
|   | four sec off       |                                |                              |                          |  |
|   | Caution • When the | CO                             | mpressor does n              | ot run Immediately after |  |

Caution • When the compressor does not run Immediately after hitting on the button, wait for 5 to 10 minutes. (There is possibility of delayed start.)

 High voltage is produced in the control box. don't touch electrical parts in the control box for 5 minutes after cutting power supply.

#### Color Marks

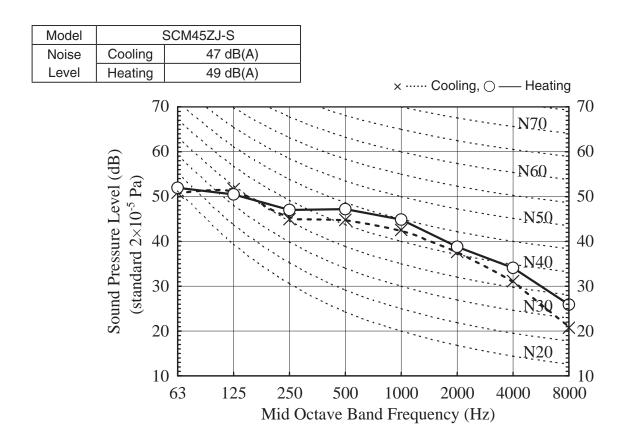
| Mark | Color  | Mark | Color        |
|------|--------|------|--------------|
| BK   | Black  | RD   | Red          |
| BL   | Blue   | WH   | White        |
| BR   | Brown  | YE   | Yellow       |
| GN   | Green  | Y/G  | Yellow/Green |
| OR   | Orange |      |              |

#### Meaning of Marks

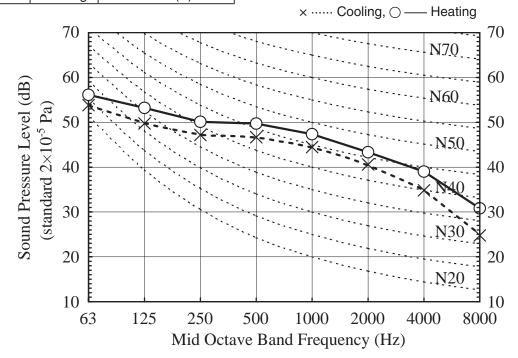
| Item        | Description              | Item           | Description                 |
|-------------|--------------------------|----------------|-----------------------------|
| CNA-CN20S   | Connector                | R              | Reactor                     |
| 20S         | 4 Way valve (coil)       | TB1 <b>~</b> 5 | Terminal block              |
| CM          | Compressor motor         | Th1            | Heat exchanger sensor       |
| EEV A,EEV B | Electric expansion valve |                | (outdoor unit)              |
| EEV C,EEV D | (coil)                   | Th2            | Outdoor air temp. sensor    |
| FMo         | Fan motor                | Th3            | Discharge pipe temp. sensor |
| HEATER      | Crank case heater        | Th4            | Suction pipe temp. sensor   |

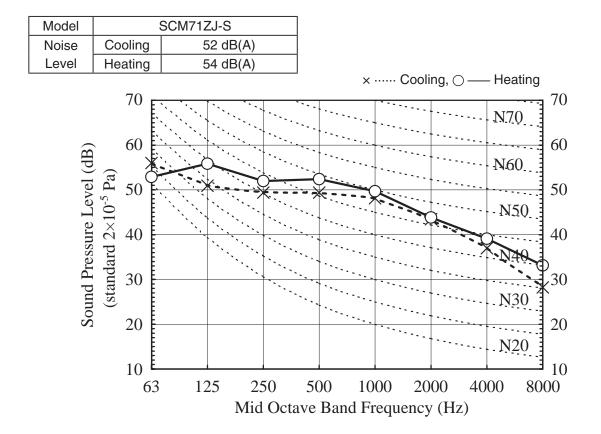
#### 4. NOISE LEVELS

| Model |  | SCM40ZJ-S  |                              |
|-------|--|------------|------------------------------|
| Noise | Cooling  | 47 dB(A)   |                              |
| Level | Heating  | 48 dB(A)   | × ······ Cooling,  — Heating |
|       | Sound Pressure Level (dB) (standard 2×10 <sup>-5</sup> Pa)  (standard 2×10 <sup>-5</sup> Pa) | 63 125 250 | N70                          |
|       | 2  | 63 125 250 | N20 10                       |

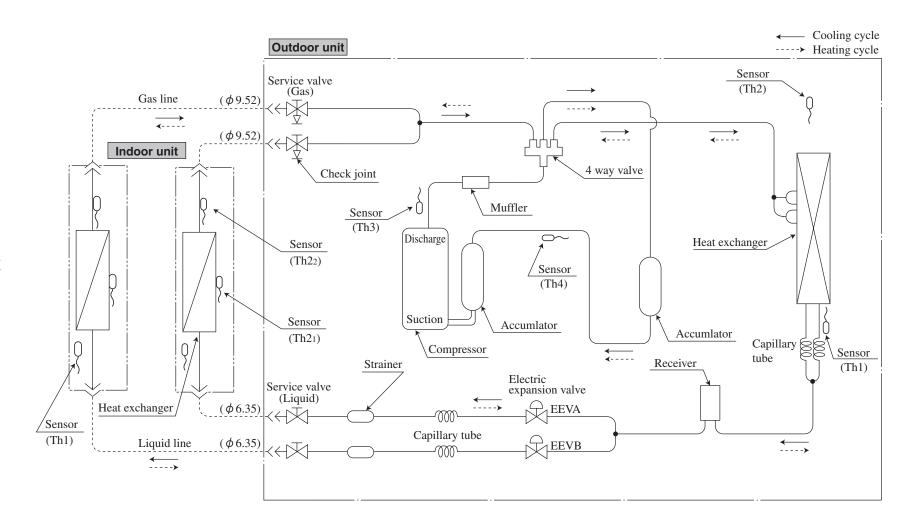


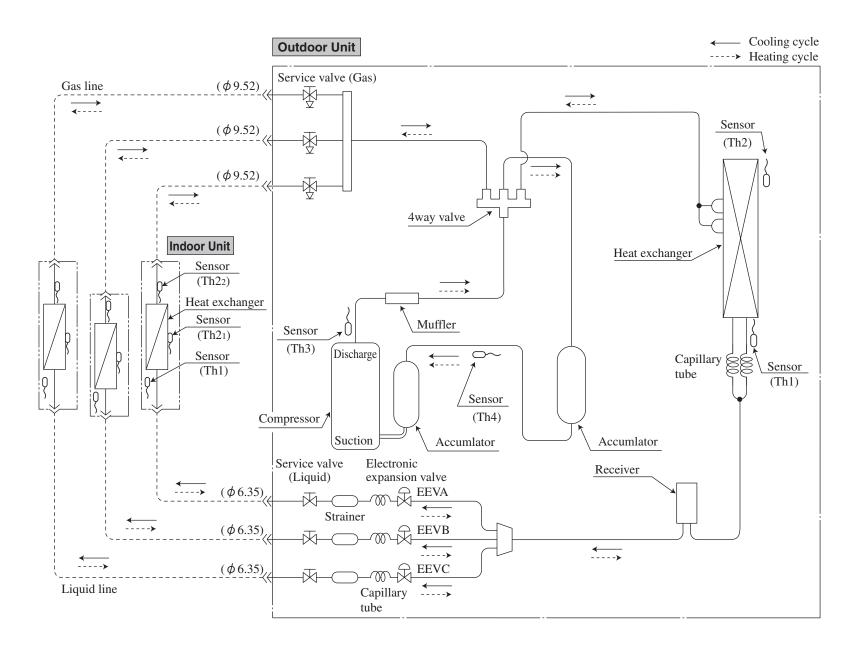
| Model | SCM50ZJ-S |          |  |  |
|-------|-----------|----------|--|--|
| Noise | Cooling   | 49 dB(A) |  |  |
| Level | Heating   | 52 dB(A) |  |  |

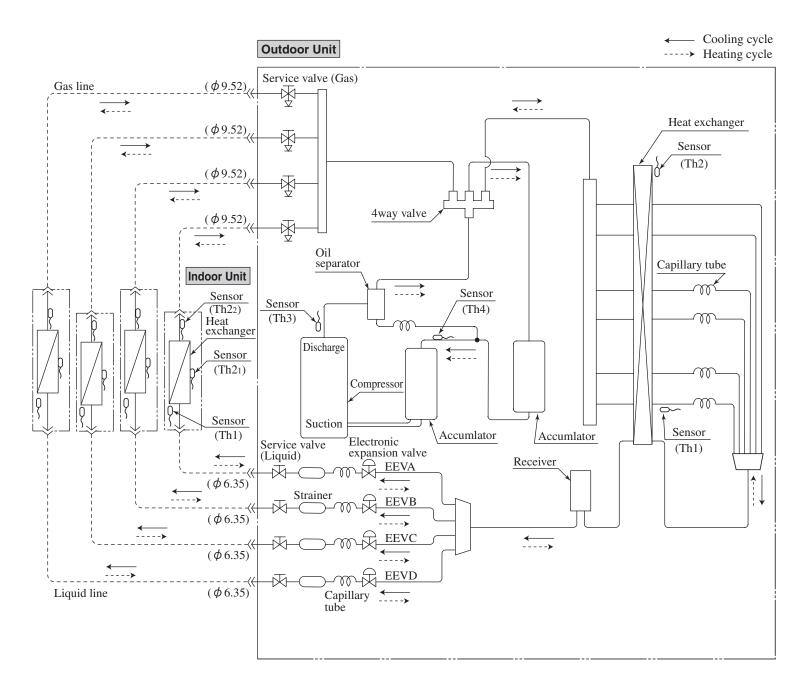




# '10 • SCM-DB-093D







#### 6. APPLICATION DATAS

(1) Models SCM40ZJ-S, 45ZJ-S

RPC012A915

MULTI TYPE AIR CONDITIONER R410A REFRIGERANT USED

 This installation manual deals with outdoor units and general installation specifications only. For indoor units, refer to the respective installation manuals supplied with the units. • When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences between indoor and outdoor units, power supply voltage and etc.) and installation spaces.

#### SAFETY PRECAUTIONS

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
- The precautions described below are divided into **MARNING** and **CAUTION**. The matters with possibilities leading to serious consequences such as death or serious personal injury due to erroneous handling are listed in the **WARNING** and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in ACAUTION. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to
- the user according to the owner's manual.
- Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.
- For installing qualified personnel, take precautions in respect to themselves by using suitable protective clothing, groves, etc., and then perform the installation works
- Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- . If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning:







Provide proper earthing

#### · Installation must be carried out by the qualified

If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.

Install the system in full accordance with the instruction manual.

Incorrect installation may cause bursts, personal injury,

water leaks, electric shocks and fire

- Be sure to use only for household and residence.

  If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.
- Use the original accessories and the specified components for installation.

  If parts other than those prescribed by us are used, It may

cause water leaks, electric shocks, fire and personal injury.

- Install the unit in a location with good support.

  Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.
- Ensure the unit is stable when installed, so that it can withstand earthquakes and strong winds.

  Unsuitable installation locations can cause the unit to fall
- and cause material damage and personal injury Ventilate the working area well in the event of refrigerant leakage during installation.

  If the refrigerant comes into contact with naked flames,
- poisonous gas is produced. • Use the prescribed pipes, flare nuts and tools for

Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant

riangle warning

 Tighten the flare nut by torque wrench with specified method. If the flare nut were tightened with excess torque, this r cause burst and refrigerant leakage after a long period.

. Do not open the operation valves for liquid line and gas line until completed refrigerant piping work, air tightness test and evacuation.

If the compressor is operated in state of opening operation

valves before completed connection of refrigerant piping work, air can be sucked into refrigerant circuit, which can cause bust or personal injury due to anomalously high pressure in the refrigerant.

The electrical installation must be carried out by the qualified electrician in accordance with "the norm for electrical work" and "national wiring regulation", and the system must be connected to the dedicated

circuit.
Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks and fire

Be sure to shut off the power before starting electrical Failure to shut off the power can cause electric shocks, unit

failure or incorrect function of equipment.

Be sure to use the cables conformed to safety standard and cable ampacity for power distribution

Unconformable cables can cause electric leak, anomalous heat production or fire.

This appliance must be connected to main power supply by means of a circuit breaker or switch e:16A) with a contact separation of at least 3mm Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks. Loose connections or cable mountings can cause

anomalous heat production or fire.

Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service

panel correctly.
Incorrect installation may result in overheating and fire.
Be sure to fix up the service panels.

Incorrect fixing can cause electric shocks or fire due to intrusion of dust or water

Be sure to switch off the power supply in the event of installation, inspection or servicing.

If the power supply is not shut off, there is a risk of electric shocks, unit failure or personal injury due to the unexpected

Stop the compressor before disconnecting refrigerant

pipes in case of pump down operation.

If disconnecting refrigerant pipes in state of opening operation valves before compressor stopping, air can be sucked, which can cause burst or personal injury due to

anomalously high pressure in the refrigerant circuit
Only use prescribed optional parts. The installation
must be carried out by the qualified installer. If you install the system by yourself, it can cause serious trouble such as water leaks, electric shocks, fire.



#### Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.

If air enters in the refrigerant circuit, the pressure in the refrigerant circuit becomes too high, which can cause burst and personal injury.

Do not processing, splice the power cord, or share a

socket with other power plugs.

This may cause fire or electric shock due to defecting contact, defecting insulation and over-current etc.

Do not bundling, winding or processing for the pocord. Or, do not deforming the power plug due to tread it.

This may cause fire or heating.

Do not run the unit with removed panels or protections.

Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn o

Do not perform any change of protective device itself or its setup condition.

The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.



• Carry out the electrical work for ground lead with care.

Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting. **⚠** CAUTION



 Use the circuit breaker with sufficient breaking capacity.

If the breaker does not have sufficient breaking capacity, it

can cause the unit malfunction and fire Earth leakage breaker must be installed If the earth leakage breaker is not installed, it can cause electric shocks.

- Install isolator or disconnect switch on the nowe supply wiring in accordance with the local codes and
- After maintenance, all wiring, wiring ties and the like. should be returned to their original state and wiring route, and the necessary clearance from all metal
- route, and the necessary clearance from all metal parts should be secured.

   Secure a space for installation, inspection and maintenance specified in the manual. Insufficient space can result in accident such as personal injury due to falling from the installation place.

Take care when carrying the unit by hand.

If the unit weights more than 20kg, it must be carried by two or more persons. Do not carry by the plastic straps, always

use the carry handle when carrying the unit by hand. Use ploves to minimize the risk of cuts by the aluminum fins Dispose of any packing materials correctly.

Any remaining packing materials can cause personal injury as it contains nails and wood. And to avoid danger of suffocation, be sure to keep the plastic wrapper away from children and to dispose after tear it up.

Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.

Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.

When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example; Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.



#### 

- · Locations where carbon fiber, metal powder or any
- powder is floating.

   Locations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can
- Vehicles and ships.
  Locations where cosmetic or special sprays are often used.
- · Locations with direct exposure of oil mist and steam such
- as kitchen and machine plant.

   Locations where any machines which generate high frequency harmonics are used.
- Locations with salty atmospheres such as coastlines.
   Locations with heavy snow (If installed, be sure to provide
- base flame and snow hood mentioned in the manual) Locations where the unit is exposed to chimney smoke
- Locations at high altitude (more than 1000m high).
  Locations with ammonic atmospheres.
- · Locations where heat radiation from other heat source can
- affect the unit
- Locations without good air circulation.
   Locations with any obstacles which can prevent inlet and outlet air of the unit.
- Locations where short circuit of air can occur (in case of multiple units installation).

  Locations where strong air blows against the air outlet of outdoor unit.

It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire

- Do not install the outdoor unit in the locations listed
- Locations where discharged hot air or operating sound of the outdoor unit can bother neighborhood.
   Locations where outlet air of the outdoor unit blows
- directly to plants.

  Locations where vibration can be amplified and transmitted due to insufficient strength of structure.
- Locations where vibration and operation sound generated by the outdoor unit can affect seriously (on the wall or at the place near bed room).
- Locations where an equipment affected by high harmonics is placed (TV set or radio receiver is placed within 1m).
- Locations where drainage cannot run off safely.

  It can affect surrounding environment and cause a claim.

#### **CAUTION**

- Do not install the unit near the location where leakage of combustible gases can occur.

  If leaked gases accumulate around the unit, it can cause
- Do not install the unit where corrosive gas (such as sulfurous acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are

handled.
Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can

cause fire.

Do not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.

Equipment such as inverters, standby generators, medical high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions

and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.

Do not install the outdoor unit in a location where insects and small animals can inhabit.

Insects and small animals can enter the electric parts and cause damage or fire. Instruct the user to keep the surroundings clean

Do not use the base flame for outdoor unit which is corroded or damaged due to long periods of operation.

Using an old and damage base flame can cause the unit falling down and cause personal injury.

Do not use any materials other than a fuse with the

correct rating in the location where fuses are to be

used.
Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.

. Do not touch any buttons with wet hands

It can cause electric shocks.

Do not touch any refrigerant pipes with your hands

when the system is in operation.

During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury

- Do not touch the suction or aluminum fin on the outdoor unit.
  This may cause injury.
- Do not put anything on the outdoor unit and operating

This may cause damage the objects or injury due to falling to the object.

#### Check before installation work

- . Model name and power source
- · Refrigerant piping length
- · Piping, wiring and miscellaneous small parts
- Indoor unit installation manual

|   | Accessories for outdoor unit      | Q'ty |
|---|-----------------------------------|------|
|   | Grommet (Heat pump type only)     | 1    |
| 2 | Drain elbow (Heat pump type only) | 1    |

| Option parts |                              | O'ty  | Dity I I Necessary tools for the installation work L |   | 9   | Wrench key (Hexagon) [4m/m]                         |
|--------------|------------------------------|-------|--|---|-----|---|
|              |                              | C ty  |  |   | 10  | Vacuum pump   |
| (a)          | Sealing plate                | 1     | 1  | Plus headed driver                          | 11  | Vacuum pump adapter (Anti-reverse flow type)        |
| 6            | Sleeve                       | 1     | 2  | Knife                                       | l'' | (Designed specifically for R410A)                   |
| 0            | Inclination plate            | 1     | 3  | Saw   | 12  | Gauge manifold (Designed specifically for R410A)    |
| 0            | Putty                        | 1     | 4  | Tape measure                                | 13  | Charge hose (Designed specifically for R410A)       |
|              | Drain hose (extension hose)  | 4     | 5  | Hammer                                      | 14  | Flaring tool set (Designed specifically for R410A)  |
|              | hose)                        | '     | 6  | Spanner wrench                              | 15  | Gas leak detector (Designed specifically for R410A) |
| A            | Piping cover (for insulation | 1     | 7  | Torque wrench [14.0~62.0N·m (1.4~6.2kgf·m)] | 16  | Gauge for projection adjustment (Used when flare is |
| M            | of connection piping)        | _ ' _ | 8  | Hole core drill (65mm in diameter)          | 10  | made by using conventional flare tool)              |

#### SELECTION OF INSTALLATION LOCATION

#### Install at location that meets the following conditions after getting approval from the customer.

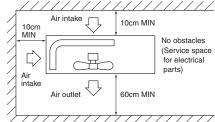
- Where the following installation space is available, and where air does not gather.
- Where rain and sunlight do not directly hit the unit, and where there is enough air circulation.
- Also, where the unit cannot be buried by snow. a location which can sustain the weight of the unit, and where noises and vibrations are not
- Where blasts of cold or hot air and noise do not bother the neighbors. • Where the unit does not receive heat radiation from other heat sources.
- Where there are no obstructions (animals, plants, etc.) to the suction inlet and blowing outlet.
- Where water may drain out.
- \* Please avoid the following locations.
- Where there is constant exposure to harsh winds such as the top floors of a building. Also, locations with exposure to salty air.
- Where there are oil splashes, vapor, and smoke.
- Where there are possibilities of flammable gas leaks.

1 Installation Space (on a flat surface)

©Blowing out port and suction port on the back side of the unit can be installed at a distance of 10cm from walls.

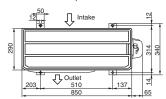
In case the barrier is 1.2m or above in height, or is overhead, the sufficient space between the unit and wall shall be secured.

OWhen the unit is installed, the space of the following dimension and above shall be secured.

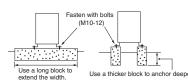


#### Installation

1 Anchor bolt fixed position



2 Notabilia for installation



- In installing the unit, fix the unit's legs with bolts specified on the left.
- The protrusion of an anchor bolt on the front side must be kept within 15 mm.
- Securely install the unit so that it does not fall over during earthquakes or strong winds, etc.
- Refer to the above illustrations for information regarding concrete foundations.
- Install the unit in a level area. (With a gradient of 5 mm or less.)

Improper installation can result in a compressor failure, broken piping within the unit and abnormal noise generation.

#### **INSTALLATION OF OUTDOOR UNIT**

#### (Drainage)

- There are 2 holes in the bottom panel of the outdoor unit to drain condensation.
- Install the outdoor unit so it will be horizontal.
  Also, secure the legs of the unit to a firm foundation to prevent any instabilities.
- Secure it firmly so the unit will not fall during earthquakes and from sudden gusts of wind.
   In areas where the temperatures drop below 0°C for several continuous days, do not install a drain elbow. (water discharge could stop due to freezing.)

### Connection of the power supply cable and the connecting cables for indoor and outdoor units.

- This multi-type room air conditioner receives its power from outside
- To ensure correct connections, mark each ends of the cables with number. A and B. It is important to use the same number the corresponding cables and pipes.
- An earth leakage breaker and a circuit breaker must be installed.
   Their capacities are 25A.
- ①Remove the service panel. (Remove the screw of the service panel.)
- Remove the terminal cover. (Remove the screw of the terminal cover.)

  3 Connect the power supply cable and the connection wire securely to the terminal block.

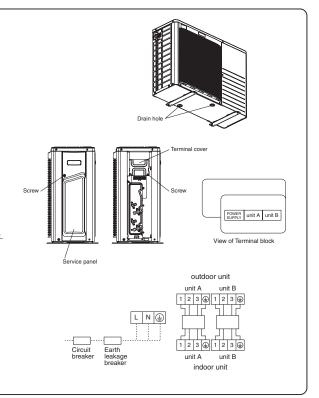
(POWER SUPPLY CODE)

CENELEC code for cables requiring fields cables. H05RNR3G4.0

(INTERCONNECTING WIRING CODE)

CENELEC code for cables requiring fields cables. H05RNR4G1.5

- 1) In wiring, make sure that the wire terminal numbers of outdoor unit terminal block are match to the wire terminal numbers of indoor unit terminal block.
- 2) Terminal number A of the outdoor unit is used for A indoor unit and terminal number B for B indoor unit respectively.
- 4) After connecting the wire, use wiring clamps to secure the wiring.
- 5Fit the terminal cover and the service panel.

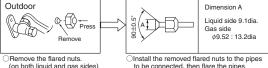


#### **CONNECTION OF REFRIGERANT PIPINGS**

#### [Connection of pipes]

#### NOTE

- Cover the pipes with tape so that dust and sand do not enter the pipe until they are connected
- When connecting the pipes to the outdoor unit, be careful about the discharge of fluorocarbon
- Make sure to match the pipes between the indoor unit and the outdoor unit with the correct operation valves

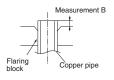


#### **⚠** CAUTION

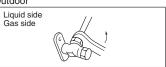
Do not apply refrigerating machine oil to the flared surface.

|                         | Measure                    | ement B (mm)                  |               |  |  |
|-------------------------|----------------------------|-------------------------------|---------------|--|--|
| Copper pipe<br>diameter | Clutch typr flare tool for | Conventional (R22) flare tool |               |  |  |
| ularrielei              | R410A                      | Clutch type                   | Wing nut type |  |  |
| φ6.35                   | 0.0~0.5                    | 1.0~1.5                       | 1.5~2.0       |  |  |
| φ9.52                   | 0.0~0.5                    | 1.0~1.5                       | 1.5~2.0       |  |  |

Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use. If a conventional flare tool is used, please use copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.



#### Connection Outdoor



**⚠** CAUTION

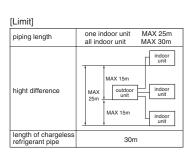
Otherwise, the flared nuts may crack depending on the conditions and refrigerant leak may occur.

Do not apply excess torque to the flared nuts.

OConnect the pipes on both liquid and gas sides Tighten the nuts to the following torque. Liquid side :  $14.0 \sim 18.0 \text{N} \cdot \text{m} (1.4 \sim 1.8 \text{kgf} \cdot \text{m})$ Gas side ( $\phi$ 9.52):  $33.0 \sim 42.0 \text{N} \cdot \text{m} (3.3 \sim 4.2 \text{kgf} \cdot \text{m})$ 

#### Gas Leakage Test

●Ensure that there are no gas leaks from the pipe joints by using a leak detector or soap water



#### **AIR PURGING**

NOTE: Fully open the operation valves (on both liquid and gas sides) after completing air purging.

- Since the system uses service ports differing in diameter from those found on the conventional models, a charge hose (for R22) presently in use is not applicable. Please use one designed specifically for R410A.
- Remove the cap on both gas and liquid sides before starting operation.
- After completing the operation, do not forget to tighten the cap (gas may leak).

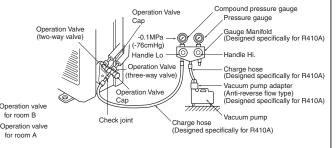
#### **Procedure**

- (1) Secure all flare nuts on both indoor and outdoor sides to prevent leaks from the pipes.
- (2) Connect the operation valves, charge hose, manifold valve and vacuum pump as shown in the right figure.
- (3) Fully open the handle Lo for the manifold valve, and pump a vacuum for 15 minutes. Ensure that the meter is indicating -0.1MPa (-76cmHg).
- After vacuuming, fully open the operation valve (both liquid and gas sides) with a hexagon wrench.



- (5) Remove the charge hose from service port.
- (6) Repeat the above steps (1) ~ (5) for all connected indoor units.
- (7) Ensure that there are no gas leaks from the joints in the indoor and outdoor units.

- Please use an anti-reverse flow type vacuum pump adapter so as to prevent vacuum pump oil from running back into the system. Oil running back into an air-conditioning system may cause the refrigerant cycle to break down.
- Conduct air purging for all connected indoor units

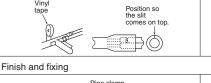


curely tighten the operation valve cap and the check joint blind nut after adjustment

| Operation valve size<br>(mm) | Operation valve cap<br>tightening torque (N·m) | Check joint blind nut<br>tightening torque (N·m) |
|------------------------------|--|--|
| φ 6.35 (1/4")                | 20~30  | 10~12  |
| φ 9.52 (3/8")                | 20~30  | 10~12  |

#### **HEAT INSULATION FOR JOINTS**

#### Heat insulation for joints



Cover the joint with

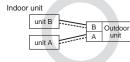


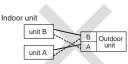
Apply exterior tape and shape along the place where the pipes will be routed. Secure to the wall with a pipe clamp. Be careful not to damage the pipes and the wires.

#### **BEWARE OF WRONG CONNECTIONS IN REFRIGERANT PIPING AND WIRING**

- Make sure to match the piping and wiring from each unit to the
- Be careful because if connections are wrong, normal operation cannot be achieved and may damage the compressor

#### [Correct connections] [Example of wrong connections] Piping ----- Wiring





#### **EARTHING WORK**

- O Earth work shall be carried out without fail in order to prevent electric shock and noise generation.
- The connection of the earth cable to the following substances causes dangerous failures, therefore it shall never be done. (City water pipe, Town gas pipe, TV antenna, lightning conductor, telephoneline, etc.)

#### **TEST RUN AND HANDLING INSTRUCTIONS**

#### Installation test check points

Check the following points again after completion of the installation, and before

Conduct a test run again and ensure that the unit operates properly.

At the same time, explain to the customer how to use the unit and how to take care of the unit following the installation manual.

If the compressor does not operate after the operation has started, wait for 5-10

minutes. (This may be due to delayed start.)
(Three-minutes restart preventive timer)
When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3minutes. This is to protect the unit and it is not a malfunction

#### After installation

- The power supply voltage is correct as the rating.

  No gas leaks from the joints of the operation valve.

  Power cables and crossover wires are securely fixed to the terminal board.
- Each indoor and outdoor unit is properly connected (no wrong wiring or piping).
- Operation valve is fully open.

  Refrigerant has been additionally charged (when the total pipe length exceeds
- the refrigerant charged pipe length).
  The pipe joints for indoor and outdoor pipes have been insulated.
- Earthing work has been conducted properly

#### Test run

- Air conditioning and heating are normal. No abnormal noise.
- Water drains smoothly.
- Protective functions are not working.
- Operation of the unit has been explained to the customer.
- The remote control is normal.

#### Operation of indicator lamps

| INDICATION LAMP                       | COLOR                                  | FUNCTION              |  |  |  |  |
|---------------------------------------|--|-----------------------|--|--|--|--|
| LED E (1)                             | RED                                    | WARNING LAMP          |  |  |  |  |
| SELI                                  | SELF DIAGNOSIS FUNCTION BY LED E       |                       |  |  |  |  |
| 1 TIME FLASH                          | CURRENT CUT                            |                       |  |  |  |  |
| 2 TIME FLASH                          | TROUBLE OF OUTDOOR UNI                 | T                     |  |  |  |  |
| 3 TIME FLASH                          | OVER CURRENT                           |                       |  |  |  |  |
| 4 TIME FLASH                          | TRANSMISSION ERROR IN OUTDOOR UNIT PCB |                       |  |  |  |  |
| 5 TIME FLASH                          | OVER HEAT OF COMPRESSOR                |                       |  |  |  |  |
| 6 TIME FLASH                          | ERROR OF SIGNAL TRANSMISSION           |                       |  |  |  |  |
| 7 TIME FLASH                          | LOCK OF COMPRESSOR                     |                       |  |  |  |  |
| 8 TIME FLASH                          | SENSOR ERROR (EXCEPT D                 | ISCHARGE PIPE SENSOR) |  |  |  |  |
| LIGHT ON                              | OUTDOOR FAN MOTOR ERR                  | OR                    |  |  |  |  |
| FOUR SEC LIGHT<br>AND<br>FOUR SEC OFF | DISCHARGE PIPE SENSOR E                | RROR                  |  |  |  |  |

#### (2) Model SCM50ZJ-S

#### (3) Model SCM71ZJ-S

RPC012A913 A

MULTI TYPE AIR CONDITIONER R410A REFRIGERANT USED

• This installation manual deals with outdoor units and general installation specifications only. For indoor units, refer to manual No. '10 · SCM-DB-092D.

• When install the unit, be sure to check whether the selection of installation place, power supply specifications, usage limitation (piping length, height differences betwindoor and outdoor units, power supply voltage and etc.) and installation spaces.

#### SAFETY PRECAUTIONS

- We recommend you to read this "SAFETY PRECAUTIONS" carefully before the installation work in order to gain full advantage of the functions of the unit and to avoid malfunction due to mishandling.
  • The precautions described below are divided into **A WARNING** and **A CAUTION**. The
- matters with possibilities leading to serious consequences such as death or serious prinjury due to erroneous handling are listed in the AWARNING and the matters with possibilities leading to personal injury or damage of the unit due to erroneous handling including probability leading to serious consequences in some cases are listed in **ACAUTION**. These are very important precautions for safety. Be sure to observe all of them without fail.
- Be sure to confirm no anomaly on the equipment by commissioning after completed installation and explain the operating methods as well as the maintenance methods of this equipment to

- the user according to the owner's manual.

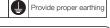
   Keep the installation manual together with owner's manual at a place where any user can read at any time. Moreover if necessary, ask to hand them to a new user.

  • For installing qualified personnel, take precautions in respect to themselves by using suitable
- protective clothing, groves, etc., and then perform the installation works.

  Please pay attention not to fall down the tools, etc. when installing the unit at the high position.
- If unusual noise can be heard during operation, consult the dealer.
- Symbols which appear frequently in the text have the following meaning









#### · Installation must be carried out by the qualified

If you install the system by yourself, it may cause serious trouble such as water leaks, electric shocks, fire and personal injury, as a result of a system malfunction.

Install the system in full accordance with the

Install the system in full accordance with the instruction manual. Incorrect installation may cause bursts, personal injury, water leaks, electric shocks and fire.

Be sure to use only for household and residence. If this appliance is installed in inferior environment such as machine shop and etc., it can cause malfunction.

Use the original accessories and the specified components for installation.

If parts other than those prescribed by us are used, it may cause water leaks, electric shocks, fire and personal injury.

cause water leaks, electric shocks, fire and personal injury.

cause water lears, electric shocks, lire and personal injury.

Install the unit in a location with good support.

Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.

Ensure the unit is stable when installed, so that it can withstand earthquakes and strong winds.

Unsuitable installation locations can cause the unit to fall and cause material damage and personal injury.

• Ventilate the working area well in the event of refrigerant leakage during installation.

If the refrigerant comes into contact with naked flames, respectively early in productions.

poisonous gas is produced. Use the prescribed pipes, flare nuts and tools for

Using existing parts (for R22 or R407C) can cause the unit failure and serious accidents due to burst of the refrigerant circuit.

Ensure that no air enters in the refrigerant circuit when the unit is installed and removed.

If air enters in the refrigerant circuit, the pressure in the

refrigerant circuit becomes too high, which can cause burst

and personal injury.

Do not processing, splice the power cord, or share a socket with other power plugs.

This may cause fire or electric shock due to defecting

• Tighten the flare nut by torque wrench with specified If the flare nut were tightened with excess torque, this may cause burst and refrigerant leakage after a long period.

⚠ WARNING

cause ourst and reingerant learkage after a long period.

Do not open the operation valves for liquid line and
gas line until completed refrigerant piping work, air
tightness test and evacuation.

If the compressor is operated in state of opening operation
valves before completed connection of refrigerant piping work, air can be sucked into refrigerant circuit, which can cause bust or personal injury due to anomalously high pressure in the refrigerant.

pressure in the reingerain.

The electrical installation must be carried out by the qualified electrician in accordance with "the norm for electrical work" and "national wiring regulation", and the system must be connected to the dedicated

Power supply with insufficient capacity and incorrect function done by improper work can cause electric shocks

· Be sure to shut off the power before starting electrical work.
Failure to shut off the power can cause electric shocks, unit

Failure or incorrect function of equipment.

Be sure to use the cables conformed to safety standard and cable ampacity for power distribution

Unconformable cables can cause electric leak, anomalous

heat production or fire This appliance must be connected to main power

supply by means of a circuit breaker or switch (fuse:16A) with a contact separation of at least 3mm. Do not bundling, winding or processing for the power cord. Or, do not deforming the power plug due to

tread it.

This may cause fire or heating

 Do not run the unit with removed panels or protections.
 Touching rotating equipments, hot surfaces or high voltage parts can cause personal injury due to entrapment, burn or electric shocks.

 Use the prescribed cables for electrical connection, tighten the cables securely in terminal block and relieve the cables correctly to prevent overloading the terminal blocks.

Loose connections or cable mountings can cause anomalous heat production or fire

Arrange the wiring in the control box so that it cannot be pushed up further into the box. Install the service panel correctly.

Incorrect installation may result in overheating and fire.

Be sure to fix up the service panels.

Incorrect fixing the service panels.

Incorrect fixing can cause electric shocks or fire due to intrusion of dust or water.

Be sure to switch off the power supply in the event of installation, inspection or servicing.

If the power supply is not shut off, there is a risk of electric

shocks, unit failure or personal injury due to the unexpected

Stop the compressor before disconnecting refrigerant pipes in case of pump down operation.

pipes in case of pump down operation.

If disconnecting refrigerant pipes in state of opening operation valves before compressor stopping, air can be sucked, which can cause burst or personal injury due to anomalously high pressure in the refrigerant circuit

Only use prescribed optional parts. The installation must be carried out by the qualified installer.

If you install the system by yourself, it can cause serious trouble such as water leaks, electric shocks, fire.



contact, defecting insulation and over-current etc.

Do not perform any change of protective device itself

or its setup condition.
The forced operation by short-circuiting protective device of pressure switch and temperature controller or the use of non specified component can cause fire or burst.



• Carry out the electrical work for ground lead with care.

Do not connect the ground lead to the gas line, water line, lightning conductor or telephone line's ground lead. Incorrect grounding can cause unit faults such as electric shocks due to short-circuiting.



 Use the circuit breaker with sufficient breaking capacity capacity.

If the breaker does not have sufficient breaking capacity, it can cause the unit malfunction and fire.

Earth leakage breaker must be installed.

If the earth leakage breaker is not installed, it can cause electric shocks.

Install isolator or disconnect switch on the power supply wiring in accordance with the local codes and regulations.

 After maintenance, all wiring, wiring ties and the like,
 should be returned to their original state and wiring route, and the necessary clearance from all metal parts should be secured. Secure a space for installation, inspection and maintenance specified in the manual.

Insufficient space can result in accident such as personal injury due to falling from the installation place.

#### **⚠** CAUTION

- Take care when carrying the unit by hand.
- Take care when carrying the unit by hand.
   If the unit weights more than 20kg, it must be carried by two or more persons. Do not carry by the plastic straps, always use the carry handle when carrying the unit by hand. Use glowes to minimize the risk of cuts by the aluminum fins.
   Dispose of any packing materials correctly.
   Any remaining packing materials can cause personal injury as it contains nails and wood. And to avoid danger of suffocation, be sure to keep the plastic wrapper away from children and to dispose after tear it up.
   Be sure to insulate the refrigerant pipes so as not to condense the ambient air moisture on them.
- condense the ambient air moisture on them.
  Insufficient insulation can cause condensation, which can lead to moisture damage on the ceiling, floor, furniture and any other valuables.
- When perform the air conditioner operation (cooling When perform the air conditioner operation (cooling or drying operation) in which ventilator is installed in the room. In this case, using the air conditioner in parallel with the ventilator, there is the possibility that drain water may backflow in accordance with the room lapse into the negative pressure status. Therefore, set up the opening port such as incorporate the air into the room that may appropriate to ventilation (For example; Open the door a little). In addition, just as above, so set up the opening port if the room lapse into negative pressure status due to register of the wind for the high rise apartment etc.



#### • Do not install the unit in the locations listed below.

- Locations where carbon fiber, metal powder or any
- Docations where any substances that can affect the unit such as sulphide gas, chloride gas, acid and alkaline can
- Vehicles and ships · Locations where cosmetic or special sprays are often
- useu.

  Locations with direct exposure of oil mist and steam such as kitchen and machine plant.

  Locations where any machines which generate high
- frequency harmonics are used. Locations with salty atmospheres such as coastlines.
   Locations with heavy snow (If installed, be sure to provide
- base flame and snow hood mentioned in the manual).

- Locations where the unit is exposed to chimney smoke.
   Locations at high allitude (more than 1000m high).
   Locations with ammonic atmospheres.
   Locations where heat radiation from other heat source can affect the unit
- Locations without good air circulation
- Locations with any obstacles which can prevent inlet and outlet air of the unit.
   Locations where short circuit of air can occur (in case of multiple units installation).
   Locations where strong air blows against the air outlet of
- outdoor unit. It can cause remarkable decrease in performance, corrosion and damage of components, malfunction and fire
- Do not install the outdoor unit in the locations listed below.
- · Locations where discharged hot air or operating sound of the outdoor unit can bother neighborhood.
   Locations where outlet air of the outdoor unit blows directly to plants.
- Locations where vibration can be amplified and
- Locations where vioration can be amplified and transmitted due to insufficient strength of structure.
   Locations where vibration and operation sound generated by the outdoor unit can affect seriously (on the wall or at the place near bed room).
   Locations where an equipment affected by high harmonics

- is placed (TV set or radio receiver is placed within 1m).

   Locations where drainage cannot run off safely.
  It can affect surrounding environment and cause a claim.

#### • Do not install the unit near the location where leakage of combustible gases can occur. If leaked gases accumulate around the unit, it can cause

Do not install the unit where corrosive gas (such as sulfurous acid gas etc.) or combustible gas (such as thinner and petroleum gases) can accumulate or collect, or where volatile combustible substances are

Corrosive gas can cause corrosion of heat exchanger, breakage of plastic parts and etc. And combustible gas can

Po not install nor use the system close to the equipment that generates electromagnetic fields or high frequency harmonics.

Equipment such as inverters, standby generators, medical

high frequency equipments and telecommunication equipments can affect the system, and cause malfunctions

# 

and breakdowns. The system can also affect medical equipment and telecommunication equipment, and obstruct its function or cause jamming.

Do not install the outdoor unit in a location where

insects and small animals can inhabit. Insects and small animals can enter the electric parts and

cause damage or fire. Instruct the user to keep the surroundings clean.

Do not use the base flame for outdoor unit which is corroded or damaged due to long periods of operation.

Using an old and damage base flame can cause the unit falling down and cause personal injury.

Do not use any materials other than a fuse with the correct rating in the location where fuses are to be

Connecting the circuit with copper wire or other metal thread can cause unit failure and fire.

- . Do not touch any buttons with wet hands.

It can cause electric shocks.

Do not touch any refrigerant pipes with your hands when the system is in operation.

During operation the refrigerant pipes become extremely hot or extremely cold depending the operating condition, and it can cause burn injury or frost injury.

Do not touch the suction or aluminum fin on the outdoor unit.

This may cause injury.

- Do not put anything on the outdoor unit and operating

This may cause damage the objects or injury due to falling to the object

#### Check before installation work

- · Model name and power source
- Refrigerant piping length
- Piping, wiring and miscellaneous small parts
  Indoor unit installation manual

|     | Accessories for outdoor unit  D Grommet (Heat pump type only) D Drain elbow (Heat pump type only) Variable diameter joint |   |  |  |
|-----|---|---|--|--|
| 1   | Grommet (Heat pump type only)   | 2 |  |  |
| 2   | Drain elbow (Heat pump type only)   | 1 |  |  |
| 3   | Variable diameter joint $\phi$ 9.52⇒ $\phi$ 12.7  | 2 |  |  |
| Not | o: Provide flore pute when using the variable   | ^ |  |  |

diameter joint (for  $\phi$ 12.7).

|     | Option parts                 | Q'ty  |   | Necessary tools for the installation work   | 9    | Wrench key (Hexagon) [4m/m]                         |
|-----|------------------------------|-------|---|---|------|---|
|     | Option parts                 | G ty  |   | Necessary tools for the installation work   | 10   | Vacuum pump   |
| a   | Sealing plate                | 1     | 1 | Plus headed driver                          | 11   | Vacuum pump adapter (Anti-reverse flow type)        |
| 6   | Sleeve                       | 1     | 2 | Knife                                       | l''' | (Designed specifically for R410A)                   |
| 0   | Inclination plate            | 1     | 3 | Saw   | 12   | Gauge manifold (Designed specifically for R410A)    |
| (d  | Putty                        | 1     | 4 | Tape measure                                | 13   | Charge hose (Designed specifically for R410A)       |
| (e) | Drain hose (extension        | 4     | 5 | Hammer                                      | 14   | Flaring tool set (Designed specifically for R410A)  |
| 6   | hose)                        | '     | 6 | Spanner wrench                              | 15   | Gas leak detector (Designed specifically for R410A) |
| Œ   | Piping cover (for insulation | 1     | 7 | Torque wrench [14.0~62.0N·m (1.4~6.2kgf·m)] | 16   | Gauge for projection adjustment (Used when flare is |
| Ľ   | of connection piping)        | _ ' _ | 8 | Hole core drill (65mm in diameter)          | 10   | made by using conventional flare tool)              |

**CAUTION** • This model requires a minimum of 2 indoor units

#### SELECTION OF INSTALLATION LOCATION

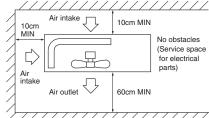
#### Install at location that meets the following conditions after getting approval from the customer.

- Where the following installation space is available, and where air does not gather.
- Where rain and sunlight do not directly hit the unit, and where there is enough air circulation.
- Also, where the unit cannot be buried by snow.
   a location which can sustain the weight of the unit, and where noises and vibrations are not
- Where blasts of cold or hot air and noise do not bother the neighbors.
- Where the unit does not receive heat radiation from other heat sources
- Where there are no obstructions (animals, plants, etc.) to the suction inlet and blowing outlet.
- Where water may drain out.
- \* Please avoid the following locations.
- Where there is constant exposure to harsh winds such as the top floors of a building. Also, locations with exposure to salty air.
- Where there are oil splashes, vapor, and smoke.
- Where there are possibilities of flammable gas leaks.

- 1 Installation Space (on a flat surface)
  - ©Blowing out port and suction port on the back side of the unit can be installed at a distance of 10cm from walls.

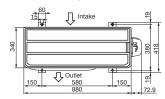
In case the barrier is 1.2m or above in height. or is overhead, the sufficient space between the unit and wall shall be secured.

OWhen the unit is installed, the space of the following dimension and above shall be secured

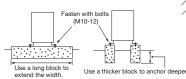


#### Installation

1) Anchor bolt fixed position



2 Notabilia for installation



- In installing the unit, fix the unit's legs with bolts specified on the left.
- The protrusion of an anchor bolt on the front side must be kept within 15 mm.
- Securely install the unit so that it does not fall over during earthquakes or strong winds, etc.
- $\bullet$  Refer to the above illustrations for information regarding concrete foundations.
- Install the unit in a level area. (With a gradient of 5 mm or less.)

Improper installation can result in a compressor failure, broken piping within the unit and abnormal noise generation.

#### **INSTALLATION OF OUTDOOR UNIT**

#### Drainage )

- There are 3 holes in the bottom panel of the outdoor unit to drain condensation.
- Install the outdoor unit so it will be horizontal.
- Also, secure the legs of the unit to a firm foundation to prevent any instabilities.
   Secure it firmly so the unit will not fall during earthquakes and from sudden gusts of wind.
- In areas where the temperatures drop below 0°C for several continuous days, do not install a drain elbow. (water discharge could stop due to freezing.)

#### Connection of the power supply cable and the connecting cables for indoor and outdoor units.

- This multi-type room air conditioner receives its power from outside.
- To ensure correct connections, mark each ends of the cables with number, A to D. It is important to use the same number the corresponding cables and pipes.
- An earth leakage breaker and a circuit breaker must be installed. Their capacities are 25A.
- (1) Remove the service panel. (Remove the 2 sets screws of the service panel.)
- ②Remove the terminal cover.(Remove the 2 sets screws of the terminal cover.)
- 3 Connect the power supply cable and the connection wire securely to the terminal block.

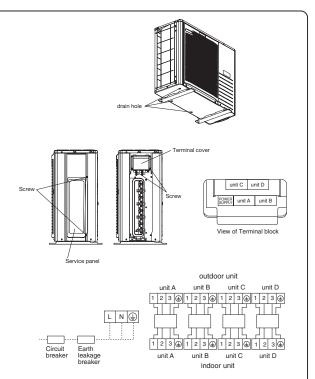
(POWER SUPPLY CODE)

CENELEC code for cables requiring fields cables. H05RNR3G4.0 (INTERCONNECTING WIRING CODE)

CENELEC code for cables requiring fields cables. H05RNR4G1.5

- 1) In wiring, make sure that the wire terminal numbers of outdoor unit terminal
- block are match to the wire terminal numbers of indoor unit terminal block.

  2) Terminal number A of the outdoor unit is used for A indoor unit and terminal number B for B indoor unit respectively.
- After connecting the wire, use wiring clamps to secure the wiring.
- 5Fit the terminal cover and the service panel.



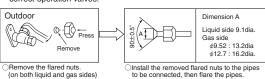
#### **CONNECTION OF REFRIGERANT PIPINGS**

- Regarding the change in the sizes of gas side pipes (usage of the variable joints); If a 5.0, 6.0 kw class indoor unit (gas side pipe 12.7) is going to be connected to the operation valves (9.52), variable joints available as accessories must be applied to the gas side operation valves.
- Securely fit the copper packing between the operation valve and the variable diameter joint to prevent shifting.

#### [Connection of pipes]

#### NOTE

- Cover the pipes with tape so that dust and sand do not enter the pipe until they are connected.
- When connecting the pipes to the outdoor unit, be careful about the discharge of fluorocarbon gas or oil.
- Make sure to match the pipes between the indoor unit and the outdoor unit with the correct operation valves



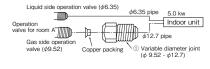
Remove the flared nuts. (on both liquid and gas sides)

#### **⚠** CAUTION

Do not apply refrigerating machine oil to the flared surface.

#### [Examples of use of variable diameter joints]

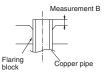
Connection of indoor unit of Class 5.0 to A unit.



| 0           | Measure                    | ement B (mm)                |               |  |
|-------------|----------------------------|-----------------------------|---------------|--|
| Copper pipe | Clutch type flare tool for | Conventional (R22) flare to |               |  |
| diameter    | R410A                      | Clutch type                 | Wing nut type |  |
| $\phi$ 6.35 | 0.0~0.5                    | 1.0~1.5                     | 1.5~2.0       |  |
| φ9.52       | 0.0~0.5                    | 1.0~1.5                     | 1.5~2.0       |  |
| φ12.7       | 0.0~0.5                    | 1.0~1.5                     | 2.0~2.5       |  |

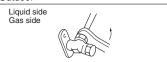
Use a flare tool designed for R410A or a conventional flare tool. Please note that measurement B (protrusion from the flaring block) will vary depending on the type of a flare tool in use.

If a conventional flare tool is used, please use a copper pipe gauge or a similar instrument to check protrusion so that you can keep measurement B to a correct value.



#### Connection

#### Outdoor



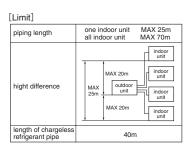
**⚠** CAUTION

Do not apply excess torque to the flared nuts. Otherwise, the flared nuts may crack depending on the conditions and refrigerant leak may occur.

- OConnect the pipes on both liquid and gas sides. Tighten the nuts to the following torque.
- Liquid side :  $14.0 \sim 18.0 \text{N} \cdot \text{m} (1.4 \sim 1.8 \text{kgf} \cdot \text{m})$ Gas side ( $\phi$ 9.52):  $33.0 \sim 42.0 \text{N} \cdot \text{m} (3.3 \sim 4.2 \text{kgf} \cdot \text{m})$ ( $\phi$ 12.7):  $49.0 \sim 61.0 \text{N} \cdot \text{m} (4.9 \sim 6.1 \text{kgf} \cdot \text{m})$
- When the total refrigerant pipe lenght for all the rooms exceeds the lenght of the uncharged pipe (40m), additional refrigerant is required. (If 40m or less, additional charge is not required.) Additional charge amount per meter = 20g/m

#### Gas Leakage Test

●Ensure that there are no gas leaks from the pipe joints by using a leak detector or soap water.



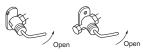
#### **AIR PURGING**

NOTE: Fully open the operation valves (on both liquid and gas sides) after completing air purging.

- Since the system uses service ports differing in diameter from those found on the conventional models, a charge hose (for R22) presently in use is not applicable. Please use one designed specifically for R410.A.
- Remove the cap on both gas and liquid sides before starting operation.
- After completing the operation, do not forget to tighten the cap (gas may leak).

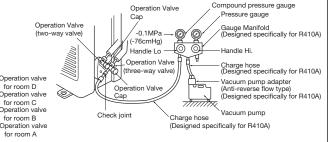
#### **Procedure**

- (1) Secure all flare nuts on both indoor and outdoor sides to prevent leaks from the pipes.
  Connect the operation valves, charge hose, manifold
- valve and vacuum pump as shown in the right figure.
  (3) Fully open the handle Lo for the manifold valve, and
- pump a vacuum for 15 minutes. Ensure that the meter
- is indicating -0.1MPa (-76cmHg).
  (4) After vacuuming, fully open the operation valve (both liquid and gas sides) with a hexagon wrench.



- (5) Remove the charge hose from service port.
- (6) Repeat the above steps (1) ~ (5) for all connected indoor units.
- (7) Ensure that there are no gas leaks from the joints in the indoor and outdoor units.

- Please use an anti-reverse flow type vacuum pump adapter so as to prevent vacuum pump oil from running back into the system. Oil running back into an air-conditioning system may cause the refrigerant cycle to break down.
- Conduct air purging for all connected indoor units.



Securely tighten the operation valve cap and the check joint blind nut after adjustment.

| Operation valve size<br>(mm) | Operation valve cap<br>tightening torque (N·m) | Check joint blind nut<br>tightening torque (N·m) |
|------------------------------|--|--|
| φ6.35 (1/4")                 | 20~30  |  |
| φ 9.52 (3/8")                | 20~30  | 10~12  |
| φ 12.7 (1/2")                | 25~35  |  |
|                              |  |  |

#### **5 HEAT INSULATION FOR JOINTS** Heat insulation for joints Position so the slit comes on top Cover the joint with insulation material for the indoor unit and tape it.

Finish and fixing



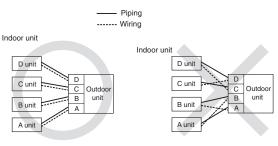
Apply exterior tape and shape along the place where the pipes will be routed. Secure to the wall with a pipe clamp. careful not to damage the

#### **BEWARE OF WRONG CONNECTIONS IN** REFRIGERANT PIPING AND WIRING.

- Make sure to match the piping and wiring from each unit to the outdoor unit.
- Be careful because if connections are wrong, normal operation cannot be achieved and may damage the compressor

#### [Correct connections]

[Example of wrong connections]



#### **EARTHING WORK**

- Earth work shall be carried out without fail in order to prevent electric shock and noise generation.
- The connection of the earth cable to the following substances causes dangerous failures, therefore it shall never be done. (City water pipe, Town gas pipe, TV antenna, lightning conductor, telephoneline, etc.)

#### 6 **TEST RUN AND HANDLING INSTRUCTIONS**

#### Installation test check points

Check the following points again after completion of the installation, and before turning on the power.

Conduct a test run again and ensure that the unit operates properly.

At the same time, explain to the customer how to use the unit and how to take care of the unit following the installation manual.

If the compressor does not operate after the operation has started, wait for 5-10 minute. (This pow he does not operate after the operation has started, wait for 5-10 minute.)

in the compressor does not operate after the operation has started, want for 5-10 minutes. (This may be due to delayed start.) (Three-minute restart preventive timer) When the air conditioner is restarted or when changing the operation, the unit will not start operating for approximately 3minutes. This is to protect the unit and it is not a malfunction.

#### After installation

- The power supply voltage is correct as the rating.
- No gas leaks from the joints of the operation valve.

  Power cables and crossover wires are securely fixed to the terminal board.

  Each indoor and outdoor unit is properly connected (no wrong wiring or piping).
- Operation valve is fully open.
  Refrigerant has been additionally charged (when the total pipe length exceeds
- the refrigerant charged pipe length).
  The pipe joints for indoor and outdoor pipes have been insulated.
- Earthing work has been conducted properly

#### Test run

- Air conditioning and heating are normal. No abnormal noise.
- Water drains smoothly.

- Protective functions are not working.

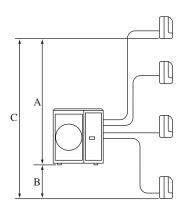
  Operation of the unit has been explained to the customer.
  - The remote control is normal.

#### Operation of indicator lamps

| INDICATION LAMP                       | COLOR                        | FUNCTION             |  |  |  |
|---------------------------------------|------------------------------|----------------------|--|--|--|
| LED E (1)                             | RED                          | WARNING LAMP         |  |  |  |
| SELF DIAGNOSIS FUNCTION BY LED E      |                              |                      |  |  |  |
| 1 TIME FLASH                          | CURRENT CUT                  |                      |  |  |  |
| 2 TIME FLASH                          | TROUBLE OF OUTDOOR UNI       | Т                    |  |  |  |
| 3 TIME FLASH                          | OVER CURRENT                 |                      |  |  |  |
| 4 TIME FLASH                          | TRANSMISSION ERROR IN O      | UTDOOR UNIT PCB      |  |  |  |
| 5 TIME FLASH                          | OVER HEAT OF COMPRESSOR      |                      |  |  |  |
| 6 TIME FLASH                          | ERROR OF SIGNAL TRANSMISSION |                      |  |  |  |
| 7 TIME FLASH                          | LOCK OF COMPRESSOR           |                      |  |  |  |
| 8 TIME FLASH                          | SENSOR ERROR (EXCEPT DI      | SCHARGE PIPE SENSOR) |  |  |  |
| LIGHT ON                              | OUTDOOR FAN MOTOR ERRO       | OR                   |  |  |  |
| FOUR SEC LIGHT<br>AND<br>FOUR SEC OFF | DISCHARGE PIPE SENSOR E      | RROR                 |  |  |  |

#### 7. RANGE OF USAGE & LIMITATIONS

| Item                         |                                 | Models          | SCM40ZJ-S  | SCM45ZJ-S     | SCM50ZJ-S    | SCM71ZJ-S    |  |
|------------------------------|---------------------------------|-----------------|--|---------------|--------------|--------------|--|
| Indoor intake a              | ir temperature                  | Cooling         | Approximately 18 to 32°C                                 |               |              |              |  |
| (Upper, lower li             | (Upper, lower limits) Heating   |                 |  | Approximately | / 15 to 30°C |              |  |
| Outdoor air tem              | Outdoor air temperature Cooling |                 |  | Approximately | √-15 to 43°C |              |  |
| (Upper, lower li             | mits)                           | Heating         |  | Approximately | -15 to 24°C  |              |  |
| Indoor units that can be     | Number of con                   | nected units    | 2 u  | nits          | 2 to 3 units | 2 to 4 units |  |
| used in combination          | Total of indoor Ur              | nits (class kW) | 6.0kW  | 7.0kW         | 8.5kW        | 12.5kW       |  |
| Total length for             | all rooms                       |                 | Max. 30m Max. 40m  |               |              | Max. 70m     |  |
| Length for one               | indoor unit                     |                 | Max. 25m   |               |              |              |  |
| Difference in height between | When indoor un outdoor unit (A) | it is above     | Max. 15m   |               |              | Max. 20m     |  |
| indoor and outdoor units     | When indoor un outdoor unit (B) | it is below     |  | Max. 20m      |              |              |  |
| Difference in he             | ight between ind                | oor units (C)   | Max. 25m   |               |              |              |  |
| Compressor stop/start        | 1 cycle time                    |                 | 6 min or more (from stop to stop or from start to start) |               |              |              |  |
| frequency                    | Stop time                       |                 | 3 min or more  |               |              |              |  |
| _                            | Voltage fluctua                 | ition           | Within ±10% of rated voltage                             |               |              |              |  |
| Power source voltage         | Voltage drop d                  | uring start     | Within ±15% of rated voltage                             |               |              |              |  |
|                              | Interval unbala                 | nce             | Within ±3% of rated voltage                              |               |              |              |  |



#### 8. TABLE OF INDOOR UNIT COMBINATIONS

- The combinations of the indoor units is indicated by numbers. They are read as follows. (Example) SRK20ZJX-S→20 SRK25ZJX-S→25
- The capacity of the indoor units is shown by rooms. If this exceeds the maximum capacity of the outdoor unit, the demand capacity will be proportionally distributed.
- If units are to be combined, use the table below to make the proper selection.

#### · Number of connectable indoor units

|     | SCM40ZJ-S | SCM45ZJ-S | SCM50ZJ-S | SCM71ZJ-S |
|-----|-----------|-----------|-----------|-----------|
| MIN | 2         | 2         | 2         | 2         |
| MAX | 2         | 2         | 3         | 4         |

#### (1) Model SCM40ZJ-S

(a) Indoor unit SRK\*\*ZJX-S models only

#### <Cooling>

|  | _       |             | Cooli              | ng capacit | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|--|---------|-------------|--------------------|------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| combin   |         | Room capaci | cooling<br>ty (kW) | Tota       | al capacity ( | (kW) | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
| İ  |         | Α           | В                  | Min.       | Standard      | Max. | İ     |           |        |      |             |        |
|  | 20      | 2.0         | -                  | 1.8        | 2.0           | 2.8  | 490   | 530       | 880    | 2.4  | 2.3         | 2.2    |
| 1<br>room  | 25      | 2.5         | -                  | 1.8        | 2.5           | 3.4  | 490   | 670       | 1040   | 3.1  | 2.9         | 2.8    |
| 100111   | 35      | 3.5         | -                  | 1.8        | 3.5           | 3.9  | 490   | 970       | 1200   | 4.5  | 4.3         | 4.1    |
|  | 20 + 20 | 2.00        | 2.00               | 3.0        | 4.0           | 5.7  | 560   | 840       | 1750   | 3.9  | 3.7         | 3.5    |
|  | 20 + 25 | 2.00        | 2.50               | 3.0        | 4.5           | 5.9  | 560   | 1040      | 1900   | 4.8  | 4.6         | 4.4    |
| _  | 20 + 35 | 1.89        | 3.31               | 3.0        | 5.2           | 5.9  | 560   | 1430      | 1900   | 6.6  | 6.3         | 6.0    |
| 100111   | 25 + 25 | 2.50        | 2.50               | 3.0        | 5.0           | 5.9  | 560   | 1280      | 1900   | 5.9  | 5.6         | 5.4    |
| 1 2 2 3 3 2 2 room 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | 25 + 35 | 2.17        | 3.03               | 3.0        | 5.2           | 5.9  | 560   | 1430      | 1900   | 6.6  | 6.3         | 6.0    |

#### <Heating>

| Indoor unit combination |         | Heati | ng capacity        | y (kW) |               | Power | consumpti | on (W)   | Stan | dard currer | nt (A) |      |
|-------------------------|---------|-------|--------------------|--------|---------------|-------|-----------|----------|------|-------------|--------|------|
|                         |         |       | heating<br>ty (kW) | Tota   | al capacity ( | kW)   | Min.      | Standard | Max. | 220V        | 230V   | 240V |
|                         |         | Α     | В                  | Min.   | Standard      | Max.  |           |          |      |             |        |      |
|                         | 20      | 3.0   | -                  | 1.4    | 3.0           | 3.7   | 470       | 750      | 1070 | 3.4         | 3.3    | 3.2  |
| l 1                     | 25      | 3.4   | -                  | 1.4    | 3.4           | 4.2   | 470       | 920      | 1210 | 4.2         | 4.0    | 3.9  |
| 100111                  | 35      | 4.5   | -                  | 1.4    | 4.5           | 5.0   | 470       | 1210     | 1450 | 5.6         | 5.3    | 5.1  |
|                         | 20 + 20 | 2.25  | 2.25               | 2.0    | 4.5           | 6.9   | 530       | 900      | 2300 | 4.1         | 4.0    | 3.8  |
| l .                     | 20 + 25 | 2.49  | 3.11               | 2.0    | 5.6           | 6.9   | 530       | 1200     | 2300 | 5.5         | 5.3    | 5.1  |
| _                       | 20 + 35 | 2.11  | 3.69               | 2.0    | 5.8           | 6.9   | 530       | 1290     | 2300 | 5.9         | 5.7    | 5.4  |
| 100111                  | 25 + 25 | 2.90  | 2.90               | 2.0    | 5.8           | 6.9   | 530       | 1290     | 2300 | 5.9         | 5.7    | 5.4  |
| 2 20 20 25 25           | 25 + 35 | 2.42  | 3.38               | 2.0    | 5.8           | 6.9   | 530       | 1290     | 2300 | 5.9         | 5.7    | 5.4  |

#### (b) Indoor unit except SRK\*\*ZJX-S models

#### <Cooling>

|                    |         |      | Cooli              | ng capacity | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|--------------------|---------|------|--------------------|-------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| Indoor (<br>combin |         |      | cooling<br>ty (kW) | Tota        | al capacity ( | (kW) | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|                    |         | Α    | В                  | Min.        | Standard      | Max. |       |           |        |      |             |        |
|                    | 20      | 2.0  | -                  | 1.8         | 2.0           | 2.7  | 490   | 560       | 880    | 2.6  | 2.5         | 2.4    |
| 1<br>room          | 25      | 2.5  | -                  | 1.8         | 2.5           | 3.2  | 490   | 710       | 1040   | 3.3  | 3.1         | 3.0    |
| room               | 35      | 3.5  | -                  | 1.8         | 3.5           | 3.7  | 490   | 1030      | 1200   | 4.7  | 4.5         | 4.3    |
|                    | 20 + 20 | 2.00 | 2.00               | 3.0         | 4.0           | 5.6  | 560   | 880       | 1750   | 4.0  | 3.9         | 3.7    |
|                    | 20 + 25 | 2.00 | 2.50               | 3.0         | 4.5           | 5.8  | 560   | 1090      | 1900   | 5.0  | 4.8         | 4.6    |
| 2<br>room          | 20 + 35 | 1.89 | 3.31               | 3.0         | 5.2           | 5.8  | 560   | 1500      | 1900   | 6.9  | 6.6         | 6.3    |
|                    | 25 + 25 | 2.50 | 2.50               | 3.0         | 5.0           | 5.8  | 560   | 1340      | 1900   | 6.2  | 5.9         | 5.6    |
|                    | 25 + 35 | 2.17 | 3.03               | 3.0         | 5.2           | 5.8  | 560   | 1500      | 1900   | 6.9  | 6.6         | 6.3    |

#### <Heating>

|           |         |      | Heati              | ng capacity | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|-----------|---------|------|--------------------|-------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| combin    |         |      | heating<br>ty (kW) | Tota        | al capacity ( | (kW) | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|           |         | Α    | В                  | Min.        | Standard      | Max. |       |           |        |      |             |        |
|           | 20      | 3.0  | -                  | 1.4         | 3.0           | 3.5  | 470   | 900       | 1070   | 4.1  | 4.0         | 3.8    |
| 1<br>room | 25      | 3.4  | -                  | 1.4         | 3.4           | 4.0  | 470   | 1070      | 1210   | 4.9  | 4.7         | 4.5    |
| 100111    | 35      | 4.5  | -                  | 1.4         | 4.5           | 4.8  | 470   | 1340      | 1450   | 6.2  | 5.9         | 5.6    |
|           | 20 + 20 | 2.25 | 2.25               | 2.0         | 4.5           | 6.7  | 530   | 930       | 2300   | 4.3  | 4.1         | 3.9    |
|           | 20 + 25 | 2.49 | 3.11               | 2.0         | 5.6           | 6.7  | 530   | 1240      | 2300   | 5.7  | 5.4         | 5.2    |
| 2<br>room | 20 + 35 | 2.11 | 3.69               | 2.0         | 5.8           | 6.7  | 530   | 1330      | 2300   | 6.1  | 5.8         | 5.6    |
| 100111    | 25 + 25 | 2.90 | 2.90               | 2.0         | 5.8           | 6.7  | 530   | 1330      | 2300   | 6.1  | 5.8         | 5.6    |
|           | 25 + 35 | 2.42 | 3.38               | 2.0         | 5.8           | 6.7  | 530   | 1330      | 2300   | 6.1  | 5.8         | 5.6    |

ESP-PR-1041

# (2) Model SCM45ZJ-S (a) Indoor unit SRK\*\*ZJX-S models only

#### <Cooling>

|           |         |        | Cooli | ng capacit | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|-----------|---------|--------|-------|------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| Indoor u  |         | Room ( | -     | Tota       | al capacity ( | kW)  | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|           |         | Α      | В     | Min.       | Standard      | Max. |       |           |        |      |             |        |
|           | 20      | 2.0    | -     | 1.8        | 2.0           | 2.8  | 490   | 530       | 880    | 2.4  | 2.3         | 2.2    |
| 1<br>room | 25      | 2.5    | -     | 1.8        | 2.5           | 3.4  | 490   | 670       | 1040   | 3.1  | 2.9         | 2.8    |
| 100111    | 35      | 3.5    | -     | 1.8        | 3.5           | 3.9  | 490   | 970       | 1200   | 4.5  | 4.3         | 4.1    |
|           | 20 + 20 | 2.00   | 2.00  | 3.0        | 4.0           | 5.7  | 560   | 840       | 1750   | 3.9  | 3.7         | 3.5    |
|           | 20 + 25 | 2.00   | 2.50  | 3.0        | 4.5           | 5.9  | 560   | 1040      | 1900   | 4.8  | 4.6         | 4.4    |
| 2         | 20 + 35 | 2.00   | 3.50  | 3.0        | 5.5           | 6.3  | 560   | 1490      | 2110   | 6.8  | 6.5         | 6.3    |
| room      | 25 + 25 | 2.50   | 2.50  | 3.0        | 5.0           | 6.2  | 560   | 1280      | 2050   | 5.9  | 5.6         | 5.4    |
|           | 25 + 35 | 2.42   | 3.38  | 3.0        | 5.8           | 6.4  | 560   | 1740      | 2140   | 8.0  | 7.6         | 7.3    |
|           | 35 + 35 | 2.90   | 2.90  | 3.0        | 5.8           | 6.4  | 560   | 1740      | 2140   | 8.0  | 7.6         | 7.3    |

#### <Heating>

|         |         |      | Heati              | ng capacity | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|---------|---------|------|--------------------|-------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| combina |         |      | heating<br>ty (kW) | Tota        | al capacity ( | kW)  | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|         |         | Α    | В                  | Min.        | Standard      | Max. |       |           |        |      |             |        |
|         | 20      | 3.0  | -                  | 1.4         | 3.0           | 3.7  | 470   | 750       | 1070   | 3.4  | 3.3         | 3.2    |
| room    | 25      | 3.4  | -                  | 1.4         | 3.4           | 4.2  | 470   | 920       | 1210   | 4.2  | 4.0         | 3.9    |
| 100111  | 35      | 4.5  | -                  | 1.4         | 4.5           | 5.0  | 470   | 1210      | 1450   | 5.6  | 5.3         | 5.1    |
|         | 20 + 20 | 2.25 | 2.25               | 2.0         | 4.5           | 7.4  | 530   | 900       | 2570   | 4.1  | 4.0         | 3.8    |
|         | 20 + 25 | 2.49 | 3.11               | 2.0         | 5.6           | 7.4  | 530   | 1200      | 2570   | 5.5  | 5.3         | 5.1    |
| 2       | 20 + 35 | 2.36 | 4.14               | 2.0         | 6.5           | 7.4  | 530   | 1500      | 2570   | 6.9  | 6.6         | 6.3    |
| room    | 25 + 25 | 3.25 | 3.25               | 2.0         | 6.5           | 7.4  | 530   | 1500      | 2570   | 6.9  | 6.6         | 6.3    |
|         | 25 + 35 | 2.71 | 3.79               | 2.0         | 6.5           | 7.4  | 530   | 1500      | 2570   | 6.9  | 6.6         | 6.3    |
|         | 35 + 35 | 3.25 | 3.25               | 2.0         | 6.5           | 7.4  | 530   | 1500      | 2570   | 6.9  | 6.6         | 6.3    |

#### (b) Indoor unit except SRK\*\*ZJX-S models

#### <Cooling>

|         | _       |      | Cooli              | ng capacity | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|---------|---------|------|--------------------|-------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| combina |         |      | cooling<br>ty (kW) | Tota        | al capacity ( | (kW) | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|         |         | Α    | В                  | Min.        | Standard      | Max. |       |           |        |      |             |        |
|         | 20      | 2.0  | -                  | 1.8         | 2.0           | 2.7  | 490   | 560       | 880    | 2.6  | 2.5         | 2.4    |
| 1 room  | 25      | 2.5  | -                  | 1.8         | 2.5           | 3.2  | 490   | 710       | 1040   | 3.3  | 3.1         | 3.0    |
| 100111  | 35      | 3.5  | -                  | 1.8         | 3.5           | 3.7  | 490   | 1030      | 1200   | 4.7  | 4.5         | 4.3    |
|         | 20 + 20 | 2.00 | 2.00               | 3.0         | 4.0           | 5.6  | 560   | 880       | 1750   | 4.0  | 3.9         | 3.7    |
|         | 20 + 25 | 2.00 | 2.50               | 3.0         | 4.5           | 5.8  | 560   | 1090      | 1900   | 5.0  | 4.8         | 4.6    |
| 2       | 20 + 35 | 2.00 | 3.50               | 3.0         | 5.5           | 6.2  | 560   | 1560      | 2110   | 7.2  | 6.9         | 6.6    |
| room    | 25 + 25 | 2.50 | 2.50               | 3.0         | 5.0           | 6.1  | 560   | 1340      | 2050   | 6.2  | 5.9         | 5.6    |
|         | 25 + 35 | 2.42 | 3.38               | 3.0         | 5.8           | 6.3  | 560   | 1820      | 2140   | 8.4  | 8.0         | 7.7    |
|         | 35 + 35 | 2.90 | 2.90               | 3.0         | 5.8           | 6.3  | 560   | 1820      | 2140   | 8.4  | 8.0         | 7.7    |

#### <Heating>

|               | _       |      | Heati              | ng capacit | y (kW)        |      | Power | consumpti | on (W) | Stan | dard currer | nt (A) |
|---------------|---------|------|--------------------|------------|---------------|------|-------|-----------|--------|------|-------------|--------|
| combination ( |         |      | heating<br>ty (kW) | Tota       | al capacity ( | kW)  | Min.  | Standard  | Max.   | 220V | 230V        | 240V   |
|               |         | Α    | В                  | Min.       | Standard      | Max. |       |           |        |      |             |        |
|               | 20      | 3.0  | -                  | 1.4        | 3.0           | 3.5  | 470   | 900       | 1070   | 4.1  | 4.0         | 3.8    |
| 1<br>room     | 25      | 3.4  | -                  | 1.4        | 3.4           | 4.0  | 470   | 1070      | 1210   | 4.9  | 4.7         | 4.5    |
| 100111        | 35      | 4.5  | -                  | 1.4        | 4.5           | 4.8  | 470   | 1340      | 1450   | 6.2  | 5.9         | 5.6    |
|               | 20 + 20 | 2.25 | 2.25               | 2.0        | 4.5           | 7.2  | 530   | 930       | 2570   | 4.3  | 4.1         | 3.9    |
|               | 20 + 25 | 2.49 | 3.11               | 2.0        | 5.6           | 7.2  | 530   | 1240      | 2570   | 5.7  | 5.4         | 5.2    |
| 2             | 20 + 35 | 2.36 | 4.14               | 2.0        | 6.5           | 7.2  | 530   | 1550      | 2570   | 7.1  | 6.8         | 6.5    |
| room 2        | 25 + 25 | 3.25 | 3.25               | 2.0        | 6.5           | 7.2  | 530   | 1550      | 2570   | 7.1  | 6.8         | 6.5    |
|               | 25 + 35 | 2.71 | 3.79               | 2.0        | 6.5           | 7.2  | 530   | 1550      | 2570   | 7.1  | 6.8         | 6.5    |
|               | 35 + 35 | 3.25 | 3.25               | 2.0        | 6.5           | 7.2  | 530   | 1550      | 2570   | 7.1  | 6.8         | 6.5    |

# (3) Model SCM50ZJ-S (a) Indoor unit SRK\*\*ZJX-S models only

#### <Cooling>

|           | _            |      | C                         | cooling ca | pacity (kV | V)            |      | Power | consumpt | on (W) | Stand | dard curre | nt (A) |
|-----------|--------------|------|---------------------------|------------|------------|---------------|------|-------|----------|--------|-------|------------|--------|
| Indoor    |              |      | oom coolii<br>apacity (k\ | •          | Tota       | ıl capacity ( | (kW) | Min.  | Standard | Max.   | 220V  | 230V       | 240V   |
|           |              | Α    | В                         | С          | Min.       | Standard      | max. |       |          |        |       |            |        |
|           | 20           | 2.0  | -                         | -          | 1.8        | 2.0           | 2.8  | 500   | 550      | 900    | 2.5   | 2.4        | 2.3    |
| 1         | 25           | 2.5  | -                         | -          | 1.8        | 2.5           | 3.4  | 500   | 720      | 1070   | 3.3   | 3.2        | 3.0    |
| room      | 35           | 3.5  | -                         | -          | 1.8        | 3.5           | 3.9  | 500   | 1080     | 1230   | 5.0   | 4.7        | 4.5    |
|           | 50           | 5.0  | -                         | -          | 1.8        | 5.0           | 5.5  | 500   | 1700     | 2000   | 7.8   | 7.5        | 7.2    |
|           | 20 + 20      | 2.00 | 2.00                      | -          | 3.0        | 4.0           | 5.7  | 570   | 910      | 1800   | 4.2   | 4.0        | 3.8    |
|           | 20 + 25      | 1.91 | 2.39                      | -          | 3.0        | 4.3           | 5.9  | 570   | 1070     | 1980   | 4.9   | 4.7        | 4.5    |
|           | 20 + 35      | 1.82 | 3.18                      | -          | 3.0        | 5.0           | 6.2  | 570   | 1430     | 2070   | 6.6   | 6.3        | 6.0    |
|           | 20 + 50      | 1.71 | 4.29                      | -          | 3.0        | 6.0           | 6.5  | 570   | 1960     | 2150   | 9.0   | 8.6        | 8.2    |
| 2<br>room | 25 + 25      | 2.35 | 2.35                      | -          | 3.0        | 4.7           | 6.2  | 570   | 1270     | 2070   | 5.8   | 5.6        | 5.3    |
| 100111    | 25 + 35      | 2.21 | 3.09                      | -          | 3.0        | 5.3           | 6.5  | 570   | 1600     | 2150   | 7.3   | 7.0        | 6.7    |
|           | 25 + 50      | 2.00 | 4.00                      | -          | 3.0        | 6.0           | 6.5  | 570   | 1960     | 2150   | 9.0   | 8.6        | 8.2    |
|           | 35 + 35      | 3.00 | 3.00                      | -          | 3.0        | 6.0           | 6.5  | 570   | 1960     | 2150   | 9.0   | 8.6        | 8.2    |
|           | 35 + 50      | 2.47 | 3.53                      | -          | 3.0        | 6.0           | 6.5  | 570   | 1960     | 2150   | 9.0   | 8.6        | 8.2    |
|           | 20 + 20 + 20 | 1.67 | 1.67                      | 1.67       | 3.4        | 5.0           | 7.1  | 690   | 1080     | 2150   | 5.0   | 4.7        | 4.5    |
|           | 20 + 20 + 25 | 1.60 | 1.60                      | 2.00       | 3.4        | 5.2           | 7.1  | 690   | 1160     | 2150   | 5.3   | 5.1        | 4.9    |
|           | 20 + 20 + 35 | 1.49 | 1.49                      | 2.61       | 3.4        | 5.6           | 7.1  | 690   | 1330     | 2150   | 6.1   | 5.8        | 5.6    |
| 3<br>room | 20 + 25 + 25 | 1.54 | 1.93                      | 1.93       | 3.4        | 5.4           | 7.1  | 690   | 1260     | 2150   | 5.8   | 5.5        | 5.3    |
| 100111    | 20 + 25 + 35 | 1.45 | 1.81                      | 2.54       | 3.4        | 5.8           | 7.1  | 690   | 1430     | 2150   | 6.6   | 6.3        | 6.0    |
|           | 25 + 25 + 25 | 1.87 | 1.87                      | 1.87       | 3.4        | 5.6           | 7.1  | 690   | 1330     | 2150   | 6.1   | 5.8        | 5.6    |
|           | 25 + 25 + 35 | 1.76 | 1.76                      | 2.47       | 3.4        | 6.0           | 7.1  | 690   | 1490     | 2150   | 6.8   | 6.5        | 6.3    |

#### <Heating>

|                  |              |      | H         | leating ca | pacity (kV | V)          |      | Power | consumpti | on (W) | Stand | dard curre | nt (A) |
|------------------|--------------|------|-----------|------------|------------|-------------|------|-------|-----------|--------|-------|------------|--------|
| Indoor<br>combin |              |      | oom heati | •          | Tota       | al capacity | (kW) | Min.  | Standard  | Max.   | 220V  | 230V       | 240V   |
|                  |              | Α    | В         | С          | Min.       | Standard    | max. | 1     |           |        |       |            |        |
|                  | 20           | 3.0  | -         | -          | 1.4        | 3.0         | 3.7  | 480   | 820       | 1100   | 3.8   | 3.6        | 3.5    |
| 1                | 25           | 3.4  | -         | -          | 1.4        | 3.4         | 4.2  | 480   | 980       | 1240   | 4.5   | 4.3        | 4.1    |
| room             | 35           | 4.5  | -         | -          | 1.4        | 4.5         | 5.0  | 480   | 1280      | 1490   | 5.9   | 5.6        | 5.4    |
|                  | 50           | 5.8  | -         | -          | 1.4        | 5.8         | 6.2  | 480   | 1740      | 2260   | 8.0   | 7.6        | 7.3    |
|                  | 20 + 20      | 2.95 | 2.95      | -          | 2.0        | 5.9         | 7.3  | 540   | 1480      | 2580   | 6.8   | 6.5        | 6.2    |
|                  | 20 + 25      | 2.67 | 3.33      | -          | 2.0        | 6.0         | 7.3  | 540   | 1530      | 2580   | 7.0   | 6.7        | 6.4    |
|                  | 20 + 35      | 2.29 | 4.01      | -          | 2.0        | 6.3         | 7.3  | 540   | 1620      | 2580   | 7.4   | 7.1        | 6.8    |
| •                | 20 + 50      | 1.89 | 4.71      | -          | 2.0        | 6.6         | 7.3  | 540   | 1710      | 2580   | 7.9   | 7.5        | 7.2    |
| 2<br>room        | 25 + 25      | 3.05 | 3.05      | -          | 2.0        | 6.1         | 7.3  | 540   | 1560      | 2580   | 7.2   | 6.9        | 6.6    |
| 100111           | 25 + 35      | 2.67 | 3.73      | -          | 2.0        | 6.4         | 7.3  | 540   | 1650      | 2580   | 7.6   | 7.2        | 6.9    |
|                  | 25 + 50      | 2.20 | 4.40      | -          | 2.0        | 6.6         | 7.3  | 540   | 1710      | 2580   | 7.9   | 7.5        | 7.2    |
|                  | 35 + 35      | 3.30 | 3.30      | -          | 2.0        | 6.6         | 7.3  | 540   | 1710      | 2580   | 7.9   | 7.5        | 7.2    |
|                  | 35 + 50      | 2.72 | 3.88      | -          | 2.0        | 6.6         | 7.3  | 540   | 1710      | 2580   | 7.9   | 7.5        | 7.2    |
|                  | 20 + 20 + 20 | 2.00 | 2.00      | 2.00       | 3.0        | 6.0         | 7.5  | 600   | 1310      | 2580   | 6.0   | 5.8        | 5.5    |
|                  | 20 + 20 + 25 | 1.91 | 1.91      | 2.38       | 3.0        | 6.2         | 7.5  | 600   | 1400      | 2580   | 6.4   | 6.1        | 5.9    |
| 0                | 20 + 20 + 35 | 1.76 | 1.76      | 3.08       | 3.0        | 6.6         | 7.5  | 600   | 1560      | 2580   | 7.2   | 6.9        | 6.6    |
| 3<br>room        | 20 + 25 + 25 | 1.83 | 2.29      | 2.29       | 3.0        | 6.4         | 7.5  | 600   | 1470      | 2580   | 6.7   | 6.5        | 6.2    |
|                  | 20 + 25 + 35 | 1.70 | 2.13      | 2.98       | 3.0        | 6.8         | 7.5  | 600   | 1620      | 2580   | 7.4   | 7.1        | 6.8    |
|                  | 25 + 25 + 25 | 2.20 | 2.20      | 2.20       | 3.0        | 6.6         | 7.5  | 600   | 1560      | 2580   | 7.2   | 6.9        | 6.6    |
| 2                | 25 + 25 + 35 | 2.06 | 2.06      | 2.88       | 3.0        | 7.0         | 7.5  | 600   | 1690      | 2580   | 7.8   | 7.4        | 7.1    |

#### (b) Indoor unit except SRK\*\*ZJX-S models only

#### <Cooling>

|           | _            |      | C                         | cooling ca | pacity (kV | V)         |      | Power | consumpt | ion (W) | Stand | dard curre | nt (A) |
|-----------|--------------|------|---------------------------|------------|------------|------------|------|-------|----------|---------|-------|------------|--------|
| Indoor    |              |      | oom coolii<br>apacity (k\ | •          | Tota       | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V   |
|           |              | Α    | В                         | С          | Min.       | Standard   | max. |       |          |         |       |            |        |
|           | 20           | 2.0  | -                         | -          | 1.8        | 2.0        | 2.7  | 500   | 580      | 900     | 2.7   | 2.5        | 2.4    |
| 1         | 25           | 2.5  | -                         | -          | 1.8        | 2.5        | 3.2  | 500   | 760      | 1070    | 3.5   | 3.3        | 3.2    |
| room      | 35           | 3.5  | -                         | -          | 1.8        | 3.5        | 3.7  | 500   | 1140     | 1230    | 5.2   | 5.0        | 4.8    |
|           | 50           | 5.0  | -                         | -          | 1.8        | 5.0        | 5.3  | 500   | 1790     | 2000    | 8.2   | 7.9        | 7.5    |
|           | 20 + 20      | 2.00 | 2.00                      | -          | 3.0        | 4.0        | 5.6  | 570   | 950      | 1800    | 4.4   | 4.2        | 4.0    |
|           | 20 + 25      | 1.91 | 2.39                      | -          | 3.0        | 4.3        | 5.8  | 570   | 1110     | 1980    | 5.1   | 4.9        | 4.7    |
|           | 20 + 35      | 1.82 | 3.18                      | -          | 3.0        | 5.0        | 6.1  | 570   | 1490     | 2070    | 6.8   | 6.5        | 6.3    |
|           | 20 + 50      | 1.71 | 4.29                      | -          | 3.0        | 6.0        | 6.3  | 570   | 2040     | 2150    | 9.4   | 9.0        | 8.6    |
| 2<br>room | 25 + 25      | 2.35 | 2.35                      | -          | 3.0        | 4.7        | 6.1  | 570   | 1320     | 2070    | 6.1   | 5.8        | 5.6    |
| 100111    | 25 + 35      | 2.21 | 3.09                      | -          | 3.0        | 5.3        | 6.3  | 570   | 1660     | 2150    | 7.6   | 7.3        | 7.0    |
|           | 25 + 50      | 2.00 | 4.00                      | -          | 3.0        | 6.0        | 6.3  | 570   | 2040     | 2150    | 9.4   | 9.0        | 8.6    |
|           | 35 + 35      | 3.00 | 3.00                      | -          | 3.0        | 6.0        | 6.3  | 570   | 2040     | 2150    | 9.4   | 9.0        | 8.6    |
|           | 35 + 50      | 2.47 | 3.53                      | -          | 3.0        | 6.0        | 6.3  | 570   | 2040     | 2150    | 9.4   | 9.0        | 8.6    |
|           | 20 + 20 + 20 | 1.67 | 1.67                      | 1.67       | 3.4        | 5.0        | 6.9  | 690   | 1120     | 2150    | 5.3   | 5.1        | 4.9    |
|           | 20 + 20 + 25 | 1.60 | 1.60                      | 2.00       | 3.4        | 5.2        | 6.9  | 690   | 1200     | 2150    | 5.7   | 5.4        | 5.2    |
| _         | 20 + 20 + 35 | 1.49 | 1.49                      | 2.61       | 3.4        | 5.6        | 6.9  | 690   | 1370     | 2150    | 6.5   | 6.2        | 5.9    |
| 3<br>room | 20 + 25 + 25 | 1.54 | 1.93                      | 1.93       | 3.4        | 5.4        | 6.9  | 690   | 1300     | 2150    | 6.2   | 5.9        | 5.6    |
| 100111    | 20 + 25 + 35 | 1.45 | 1.81                      | 2.54       | 3.4        | 5.8        | 6.9  | 690   | 1470     | 2150    | 7.0   | 6.7        | 6.4    |
|           | 25 + 25 + 25 | 1.87 | 1.87                      | 1.87       | 3.4        | 5.6        | 6.9  | 690   | 1370     | 2150    | 6.5   | 6.2        | 5.9    |
|           | 25 + 25 + 35 | 1.76 | 1.76                      | 2.47       | 3.4        | 6.0        | 6.9  | 690   | 1540     | 2150    | 7.3   | 7.0        | 6.7    |

#### <Heating>

|                  | _            |      | H         | leating ca | pacity (kV | V)          |      | Power | consumpt | ion (W) | Stand | dard curre | nt (A) |
|------------------|--------------|------|-----------|------------|------------|-------------|------|-------|----------|---------|-------|------------|--------|
| Indoor<br>combin |              |      | oom heati | 5          | Tota       | ıl capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V   |
|                  |              | Α    | В         | С          | Min.       | Standard    | max. | 1     |          |         |       |            |        |
|                  | 20           | 3.0  | -         | -          | 1.4        | 3.0         | 3.5  | 480   | 1020     | 1100    | 4.7   | 4.5        | 4.3    |
| 1                | 25           | 3.4  | -         | -          | 1.4        | 3.4         | 4.0  | 480   | 1180     | 1240    | 5.4   | 5.2        | 5.0    |
| room             | 35           | 4.5  | -         | -          | 1.4        | 4.5         | 4.8  | 480   | 1470     | 1490    | 6.7   | 6.5        | 6.2    |
|                  | 50           | 5.8  | -         | -          | 1.4        | 5.8         | 6.0  | 480   | 1910     | 2260    | 8.8   | 8.4        | 8.0    |
|                  | 20 + 20      | 2.95 | 2.95      | -          | 2.0        | 5.9         | 7.0  | 540   | 1510     | 2580    | 6.9   | 6.6        | 6.4    |
|                  | 20 + 25      | 2.67 | 3.33      | -          | 2.0        | 6.0         | 7.0  | 540   | 1560     | 2580    | 7.2   | 6.9        | 6.6    |
|                  | 20 + 35      | 2.29 | 4.01      | -          | 2.0        | 6.3         | 7.0  | 540   | 1650     | 2580    | 7.6   | 7.2        | 6.9    |
|                  | 20 + 50      | 1.89 | 4.71      | -          | 2.0        | 6.6         | 7.0  | 540   | 1740     | 2580    | 8.0   | 7.6        | 7.3    |
| 2<br>room        | 25 + 25      | 3.05 | 3.05      | -          | 2.0        | 6.1         | 7.0  | 540   | 1590     | 2580    | 7.3   | 7.0        | 6.7    |
| 100111           | 25 + 35      | 2.67 | 3.73      | -          | 2.0        | 6.4         | 7.0  | 540   | 1680     | 2580    | 7.7   | 7.4        | 7.1    |
|                  | 25 + 50      | 2.20 | 4.40      | -          | 2.0        | 6.6         | 7.0  | 540   | 1740     | 2580    | 8.0   | 7.6        | 7.3    |
|                  | 35 + 35      | 3.30 | 3.30      | -          | 2.0        | 6.6         | 7.0  | 540   | 1740     | 2580    | 8.0   | 7.6        | 7.3    |
|                  | 35 + 50      | 2.72 | 3.88      | -          | 2.0        | 6.6         | 7.0  | 540   | 1740     | 2580    | 8.0   | 7.6        | 7.3    |
|                  | 20 + 20 + 20 | 2.00 | 2.00      | 2.00       | 3.0        | 6.0         | 7.3  | 600   | 1340     | 2580    | 6.3   | 6.1        | 5.8    |
|                  | 20 + 20 + 25 | 1.91 | 1.91      | 2.38       | 3.0        | 6.2         | 7.3  | 600   | 1430     | 2580    | 6.8   | 6.5        | 6.2    |
|                  | 20 + 20 + 35 | 1.76 | 1.76      | 3.08       | 3.0        | 6.6         | 7.3  | 600   | 1600     | 2580    | 7.6   | 7.2        | 6.9    |
| 3<br>room        | 20 + 25 + 25 | 1.83 | 2.29      | 2.29       | 3.0        | 6.4         | 7.3  | 600   | 1510     | 2580    | 7.1   | 6.8        | 6.6    |
| room             | 20 + 25 + 35 | 1.70 | 2.13      | 2.98       | 3.0        | 6.8         | 7.3  | 600   | 1660     | 2580    | 7.9   | 7.5        | 7.2    |
|                  | 25 + 25 + 25 | 2.20 | 2.20      | 2.20       | 3.0        | 6.6         | 7.3  | 600   | 1600     | 2580    | 7.6   | 7.2        | 6.9    |
|                  | 25 + 25 + 35 | 2.06 | 2.06      | 2.88       | 3.0        | 7.0         | 7.3  | 600   | 1730     | 2580    | 8.2   | 7.8        | 7.5    |

# (4) Model SCM71ZJ-S (a) Indoor unit SRK\*\*ZJX-S models only

#### <Cooling>

|        |                              |      |      | Coolin             | g capacit | ty (kW) |            |      | Power      | consumpt     | ion (W)      | Stand      | lard curre | ent (A)    |
|--------|------------------------------|------|------|--------------------|-----------|---------|------------|------|------------|--------------|--------------|------------|------------|------------|
| Indoor |                              |      |      | cooling<br>ty (kW) |           | Tota    | I capacity | (kW) | Min.       | Standard     | Max.         | 220V       | 230V       | 240V       |
|        |                              | Α    | В    | С                  | D         | Min.    | Standard   | Max. |            |              |              |            |            |            |
|        | 20                           | 2.0  | -    | -                  | -         | 1.8     | 2.0        | 2.8  | 480        | 500          | 950          | 2.3        | 2.2        | 2.1        |
| 1      | 25                           | 2.5  | -    | -                  | -         | 1.8     | 2.5        | 3.4  | 480        | 680          | 1080         | 3.1        | 3.0        | 2.9        |
| room   | 35                           | 3.5  | -    | -                  | -         | 1.8     | 3.5        | 3.9  | 480        | 1010         | 1240         | 4.6        | 4.4        | 4.3        |
|        | 50                           | 5.0  | -    | -                  | -         | 1.8     | 5.0        | 6.1  | 480        | 1530         | 2100         | 7.0        | 6.7        | 6.4        |
|        | 60<br>20 + 20                | 6.0  | -    | -                  | -         | 1.8     | 6.0        | 7.0  | 480        | 1880         | 2700         | 8.6        | 8.3        | 7.9        |
|        | 20 + 20                      | 2.00 | 2.00 | -                  | -         | 3.0     | 4.0        | 6.1  | 550<br>550 | 850<br>1070  | 1910         | 3.9<br>4.9 | 3.7<br>4.7 | 3.6<br>4.5 |
|        | 20 + 25                      | 2.00 | 3.50 | _                  | -         | 3.0     | 5.5        | 6.9  | 550        | 1470         | 2320         | 6.7        | 6.5        | 6.2        |
|        | 20 + 50                      | 1.94 | 4.86 | _                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 20 + 60                      | 1.70 | 5.10 | _                  | _         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 25 + 25                      | 2.50 | 2.50 | -                  | -         | 3.0     | 5.0        | 6.8  | 550        | 1250         | 2270         | 5.7        | 5.5        | 5.3        |
|        | 25 + 35                      | 2.46 | 3.44 | -                  | -         | 3.0     | 5.9        | 7.2  | 550        | 1660         | 2470         | 7.6        | 7.3        | 7.0        |
| 2      | 25 + 50                      | 2.27 | 4.53 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
| room   | 25 + 60                      | 2.00 | 4.80 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 35 + 35                      | 3.40 | 3.40 | -                  | -         | 3.0     | 6.8        | 7.6  | 550        | 2030         | 2680         | 9.3        | 8.9        | 8.5        |
|        | 35 + 50                      | 2.80 | 4.00 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 35 + 60                      | 2.51 | 4.29 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 50 + 50                      | 3.40 | 3.40 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 50 + 60                      | 3.09 | 3.71 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 60 + 60                      | 3.40 | 3.40 | -                  | -         | 3.0     | 6.8        | 7.7  | 550        | 2030         | 2750         | 9.3        | 8.9        | 8.5        |
|        | 20 + 20 + 20                 | 2.00 | 2.00 | 2.00               | -         | 3.7     | 6.0        | 8.2  | 670        | 1380         | 2750         | 6.3        | 6.1        | 5.8        |
|        | 20 + 20 + 25                 | 2.00 | 2.00 | 2.50               | -         | 3.7     | 6.5        | 8.2  | 670        | 1560         | 2750         | 7.2        | 6.9        | 6.6        |
|        | 20 + 20 + 35                 | 1.84 | 1.84 | 3.22               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 20 + 50                 | 1.53 | 1.53 | 3.83               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 20 + 60                 | 1.38 | 1.38 | 4.14               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 25 + 25                 | 1.94 | 2.43 | 2.43               | -         | 3.7     | 6.8        | 8.2  | 670        | 1740         | 2750         | 8.0        | 7.6        | 7.3        |
|        | 20 + 25 + 35                 | 1.73 | 2.16 | 3.02               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 25 + 50                 | 1.45 | 1.82 | 3.63               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 25 + 60                 | 1.31 | 1.64 | 3.94               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 20 + 35 + 35<br>20 + 35 + 50 | 1.53 | 2.68 | 2.68<br>3.29       | -         | 3.7     | 6.9        | 8.2  | 670<br>670 | 1830<br>1830 | 2750<br>2750 | 8.4<br>8.4 | 8.0        | 7.7        |
| 3      | 20 + 35 + 50                 | 1.20 | 2.30 | 3.60               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
| room   | 20 + 50 + 50                 | 1.15 | 2.88 | 2.88               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 25 + 25                 | 2.30 | 2.30 | 2.30               | _         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 25 + 35                 | 2.03 | 2.03 | 2.84               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 25 + 50                 | 1.73 | 1.73 | 3.45               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 25 + 60                 | 1.57 | 1.57 | 3.76               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 35 + 35                 | 1.82 | 2.54 | 2.54               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 35 + 50                 | 1.57 | 2.20 | 3.14               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 35 + 60                 | 1.44 | 2.01 | 3.45               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 25 + 50 + 50                 | 1.38 | 2.76 | 2.76               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 35 + 35 + 35                 | 2.30 | 2.30 | 2.30               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |
|        | 35 + 35 + 50                 | 2.01 | 2.01 | 2.88               | -         | 3.7     | 6.9        | 8.2  | 670        | 1830         | 2750         | 8.4        | 8.0        | 7.7        |

#### <Cooling>

|                  | _                 |      |        | Coolin             | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | ent (A) |
|------------------|-------------------|------|--------|--------------------|-----------|--------|------------|------|-------|----------|---------|-------|------------|---------|
| Indoor<br>combir |                   |      | Room o | cooling<br>ty (kW) |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V    |
|                  |                   | Α    | В      | С                  | D         | Min.   | Standard   | Max. |       |          |         |       |            |         |
|                  | 20 + 20 + 20 + 20 | 1.73 | 1.73   | 1.73               | 1.73      | 4.4    | 6.9        | 8.8  | 890   | 1700     | 2750    | 7.8   | 7.5        | 7.2     |
|                  | 20 + 20 + 20 + 25 | 1.62 | 1.62   | 1.62               | 2.03      | 4.4    | 6.9        | 8.8  | 890   | 1700     | 2750    | 7.8   | 7.5        | 7.2     |
|                  | 20 + 20 + 20 + 35 | 1.49 | 1.49   | 1.49               | 2.62      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 20 + 20 + 50 | 1.29 | 1.29   | 1.29               | 3.23      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 20 + 20 + 60 | 1.18 | 1.18   | 1.18               | 3.55      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 20 + 25 + 25 | 1.53 | 1.53   | 1.92               | 1.92      | 4.4    | 6.9        | 8.8  | 890   | 1700     | 2750    | 7.8   | 7.5        | 7.2     |
|                  | 20 + 20 + 25 + 35 | 1.42 | 1.42   | 1.78               | 2.49      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 20 + 25 + 50 | 1.23 | 1.23   | 1.54               | 3.09      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 20 + 25 + 60 | 1.14 | 1.14   | 1.42               | 3.41      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
| 4                | 20 + 20 + 35 + 35 | 1.29 | 1.29   | 2.26               | 2.26      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
| room             | 20 + 20 + 35 + 50 | 1.14 | 1.14   | 1.99               | 2.84      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 25+ 25 + 25  | 1.49 | 1.87   | 1.87               | 1.87      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 25 + 25 + 35 | 1.35 | 1.69   | 1.69               | 2.37      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 25 + 25 + 50 | 1.18 | 1.48   | 1.48               | 2.96      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 25 + 35 + 35 | 1.23 | 1.54   | 2.16               | 2.16      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 20 + 35 + 35 + 35 | 1.14 | 1.99   | 1.99               | 1.99      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 25 + 25 + 25 + 25 | 1.78 | 1.78   | 1.78               | 1.78      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 25 + 25 + 25 + 35 | 1.61 | 1.61   | 1.61               | 2.26      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 25 + 25 + 25 + 50 | 1.42 | 1.42   | 1.42               | 2.84      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |
|                  | 25 + 25 + 35 + 35 | 1.48 | 1.48   | 2.07               | 2.07      | 4.4    | 7.1        | 8.8  | 890   | 1740     | 2750    | 8.0   | 7.6        | 7.3     |

#### <Heating>

|             | _       |      |        | Heatin             | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | ent (A) |
|-------------|---------|------|--------|--------------------|-----------|--------|------------|------|-------|----------|---------|-------|------------|---------|
| combin      |         |      | Room l | heating<br>ty (kW) |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V    |
|             |         | Α    | В      | С                  | D         | Min.   | Standard   | Max. |       |          |         |       |            |         |
|             | 20      | 3.0  | -      | -                  | -         | 1.5    | 3.0        | 3.7  | 600   | 840      | 1330    | 3.9   | 3.7        | 3.5     |
| l .         | 25      | 3.4  | -      | -                  | -         | 1.5    | 3.4        | 4.2  | 600   | 1000     | 1510    | 4.6   | 4.4        | 4.2     |
| l 1<br>room | 35      | 4.5  | -      | -                  | -         | 1.5    | 4.5        | 5.0  | 600   | 1330     | 1790    | 6.1   | 5.8        | 5.6     |
| 100111      | 50      | 5.8  | -      | -                  | -         | 1.5    | 5.8        | 6.5  | 600   | 1780     | 2310    | 8.2   | 7.8        | 7.5     |
|             | 60      | 6.8  | -      | -                  | -         | 1.5    | 6.8        | 7.5  | 600   | 2100     | 2660    | 9.6   | 9.2        | 8.8     |
|             | 20 + 20 | 2.70 | 2.70   | -                  | -         | 2.1    | 5.4        | 7.4  | 630   | 1340     | 1870    | 6.2   | 5.9        | 5.6     |
|             | 20 + 25 | 2.62 | 3.28   | -                  | -         | 2.1    | 5.9        | 7.7  | 630   | 1530     | 2130    | 7.0   | 6.7        | 6.4     |
|             | 20 + 35 | 2.51 | 4.39   | -                  | -         | 2.1    | 6.9        | 8.3  | 630   | 1910     | 2650    | 8.8   | 8.4        | 8.0     |
|             | 20 + 50 | 2.34 | 5.86   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 20 + 60 | 2.05 | 6.15   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 25 + 25 | 3.20 | 3.20   | -                  | -         | 2.1    | 6.4        | 8.1  | 630   | 1700     | 2480    | 7.8   | 7.5        | 7.2     |
|             | 25 + 35 | 3.08 | 4.32   | -                  | -         | 2.1    | 7.4        | 8.6  | 630   | 2090     | 2910    | 9.6   | 9.2        | 8.8     |
| 2<br>room   | 25 + 50 | 2.73 | 5.47   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
| 100111      | 25 + 60 | 2.41 | 5.79   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 35 + 35 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 35 + 50 | 3.38 | 4.82   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 35 + 60 | 3.02 | 5.18   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 50 + 50 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 50 + 60 | 3.73 | 4.47   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |
|             | 60 + 60 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.7  | 630   | 2430     | 3350    | 11.2  | 10.7       | 10.2    |

#### <Heating>

|                    |                   |      |        | Heatin             | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | ent (A) |
|--------------------|-------------------|------|--------|--------------------|-----------|--------|------------|------|-------|----------|---------|-------|------------|---------|
| Indoor (<br>combin |                   |      | Room l | heating<br>ty (kW) |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V    |
|                    |                   | Α    | В      | С                  | D         | Min.   | Standard   | Max. |       |          |         |       |            |         |
|                    | 20 + 20 + 20      | 2.57 | 2.57   | 2.57               | -         | 3.2    | 7.7        | 9.1  | 660   | 1830     | 3350    | 8.4   | 8.0        | 7.7     |
|                    | 20 + 20 + 25      | 2.46 | 2.46   | 3.08               | -         | 3.2    | 8.0        | 9.1  | 660   | 1930     | 3350    | 8.9   | 8.5        | 8.1     |
|                    | 20 + 20 + 35      | 2.24 | 2.24   | 3.92               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 20 + 50      | 1.87 | 1.87   | 4.67               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 20 + 60      | 1.68 | 1.68   | 5.04               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 25 + 25      | 2.34 | 2.93   | 2.93               | -         | 3.2    | 8.2        | 9.1  | 660   | 1990     | 3350    | 9.1   | 8.7        | 8.4     |
|                    | 20 + 25 + 35      | 2.10 | 2.63   | 3.68               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 25 + 50      | 1.77 | 2.21   | 4.42               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 25 + 60      | 1.60 | 2.00   | 4.80               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 35 + 35      | 1.87 | 3.27   | 3.27               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
| 0                  | 20 + 35 + 50      | 1.60 | 2.80   | 4.00               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
| 3<br>room          | 20 + 35 + 60      | 1.46 | 2.56   | 4.38               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 50 + 50      | 1.40 | 3.50   | 3.50               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 25 + 25      | 2.80 | 2.80   | 2.80               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 25 + 35      | 2.47 | 2.47   | 3.46               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 25 + 50      | 2.10 | 2.10   | 4.20               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 25 + 60      | 1.91 | 1.91   | 4.58               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 35 + 35      | 2.21 | 3.09   | 3.09               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 35 + 50      | 1.91 | 2.67   | 3.82               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 35 + 60      | 1.75 | 2.45   | 4.20               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 25 + 50 + 50      | 1.68 | 3.36   | 3.36               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 35 + 35 + 35      | 2.80 | 2.80   | 2.80               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 35 + 35 + 50      | 2.45 | 2.45   | 3.50               | -         | 3.2    | 8.4        | 9.1  | 660   | 2060     | 3350    | 9.5   | 9.0        | 8.7     |
|                    | 20 + 20 + 20 + 20 | 2.10 | 2.10   | 2.10               | 2.10      | 3.6    | 8.4        | 9.4  | 800   | 1960     | 3350    | 9.0   | 8.6        | 8.2     |
|                    | 20 + 20 + 20 + 25 | 1.98 | 1.98   | 1.98               | 2.47      | 3.6    | 8.4        | 9.4  | 800   | 1960     | 3350    | 9.0   | 8.6        | 8.2     |
|                    | 20 + 20 + 20 + 35 | 1.79 | 1.79   | 1.79               | 3.13      | 3.6    | 8.5        | 9.4  | 800   | 1980     | 3350    | 9.1   | 8.7        | 8.3     |
|                    | 20 + 20 + 20 + 50 | 1.56 | 1.56   | 1.56               | 3.91      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 20 + 20 + 60 | 1.43 | 1.43   | 1.43               | 4.30      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 20 + 25 + 25 | 1.89 | 1.89   | 2.36               | 2.36      | 3.6    | 8.5        | 9.4  | 800   | 1980     | 3350    | 9.1   | 8.7        | 8.3     |
|                    | 20 + 20 + 25 + 35 | 1.70 | 1.70   | 2.13               | 2.98      | 3.6    | 8.5        | 9.4  | 800   | 1980     | 3350    | 9.1   | 8.7        | 8.3     |
|                    | 20 + 20 + 25 + 50 | 1.50 | 1.50   | 1.87               | 3.74      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 20 + 25 + 60 | 1.38 | 1.38   | 1.72               | 4.13      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
| 4                  | 20 + 20 + 35 + 35 | 1.56 | 1.56   | 2.74               | 2.74      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
| room               | 20 + 20 + 35 + 50 | 1.38 | 1.38   | 2.41               | 3.44      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 25+ 25 + 25  | 1.79 | 2.24   | 2.24               | 2.24      | 3.6    | 8.5        | 9.4  | 800   | 1980     | 3350    | 9.1   | 8.7        | 8.3     |
|                    | 20 + 25 + 25 + 35 | 1.64 | 2.05   | 2.05               | 2.87      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 25 + 25 + 50 | 1.43 | 1.79   | 1.79               | 3.58      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 25 + 35 + 35 | 1.50 | 1.87   | 2.62               | 2.62      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 20 + 35 + 35 + 35 | 1.38 | 2.41   | 2.41               | 2.41      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 25 + 25 + 25 + 25 | 2.13 | 2.13   | 2.13               | 2.13      | 3.6    | 8.5        | 9.4  | 800   | 1980     | 3350    | 9.1   | 8.7        | 8.3     |
|                    | 25 + 25 + 25 + 35 | 1.95 | 1.95   | 1.95               | 2.74      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 25 + 25 + 25 + 50 | 1.72 | 1.72   | 1.72               | 3.44      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | 25 + 25 + 35 + 35 | 1.79 | 1.79   | 2.51               | 2.51      | 3.6    | 8.6        | 9.4  | 800   | 2000     | 3350    | 9.2   | 8.8        | 8.4     |
|                    | _3 1 20 1 00 1 00 | 1.70 | 1.70   | 2.01               | 2.01      | 0.0    | 0.0        | 0.7  | 1 000 | 2000     | 0000    | U.L   | 0.0        | 0.4     |

ESP-PR-1036▲

#### (b) Indoor unit except SRK\*\*ZJX-S models only

#### <Cooling>

| 20   |      |              |      |      | Coolin | g capacit | y (kW) |            |      | Power | consumpt | tion (W) | Stand | dard curre | ent (A) |
|--|------|--------------|------|------|--------|-----------|--------|------------|------|-------|----------|----------|-------|------------|---------|
| The proof of the p |      |              |      |      |        |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.     | 220V  | 230V       | 240V    |
| 1   1   1   25   2.5   2.5   2.   2.   1.   2.   1.8   2.5   3.2   480   730   1080   3.4   3.2   3.1     35   3.5   3.5   -   -   -   1.8   3.5   3.7   480   1120   1240   5.1   4.9   4.7     50   5.0   5.0   -   -   1.8   5.0   5.8   480   1120   1240   5.1   4.9   4.7     50   60   6.0   -   -     -   1.8   5.0   5.8   480   1120   1240   7.9   7.5   7.2     50   60   6.0   -   -     -     1.8   5.0   5.8   480   1120   2700   9.8   9.4   9.0     20 + 25   2.00   2.50   -     -   3.0   4.0   5.8   550   930   1910   4.3   4.1   3.9     20 + 25   2.00   3.50   -     -   3.0   4.5   6.1   550   1770   2060   5.4   5.1   4.9     20 + 20   2.00   3.50   -     -   3.0   5.5   6.6   550   1700   2060   5.4   5.1   4.9     20 + 20   2.00   3.50   -     -   3.0   5.5   6.6   550   1700   2060   5.4   5.1   4.9     20 + 20   1.94   4.86   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     25 + 25   2.50   2.50   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     25 + 25   2.50   2.50   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     25 + 25   2.50   2.50   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     25 + 35   2.46   3.44   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     25 + 35   2.46   3.44   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     35 + 85   3.40   3.40   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     35 + 85   3.40   3.40   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     36 + 80   2.27   4.53   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     36 + 80   2.80   4.00   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     36 + 80   2.51   4.29   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     37 + 80   2.80   3.01   3.40   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     38 + 80   2.80   4.00   -     3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0     39 + 80   2.80   4.00   -     3.0   6.8   7.3   550   2150   2750   9.9    |      |              | Α    | В    | С      | D         | Min.   | Standard   | Max. |       |          |          |       |            |         |
| 100mm   35   |      |              | 2.0  | -    | -      | -         | 1.8    | 2.0        | 2.7  | 480   | 530      | 950      | 2.4   | 2.3        | 2.2     |
| Nome   | 4    | 25           | 2.5  | -    | -      | -         | 1.8    | 2.5        | 3.2  | 480   | 730      | 1080     | 3.4   | 3.2        | 3.1     |
| SO   |      | 35           | 3.5  | -    | -      | -         | 1.8    | 3.5        | 3.7  | 480   | 1120     | 1240     | 5.1   | 4.9        | 4.7     |
| 20+20   2.00   2.00   -   -   3.0   4.0   5.8   550   930   1910   4.3   4.1   3.9   |      | 50           | 5.0  | -    | -      | -         | 1.8    | 5.0        | 5.8  | 480   | 1710     | 2100     | 7.9   | 7.5        | 7.2     |
| 20+25  |      | 60           | 6.0  |      | -      | -         | 1.8    | 6.0        | 6.7  | 480   | 2140     | 2700     | 9.8   | 9.4        | 9.0     |
| 2 Promote 1  |      | 20 + 20      | 2.00 | 2.00 | -      | -         | 3.0    | 4.0        | 5.8  | 550   | 930      | 1910     | 4.3   | 4.1        | 3.9     |
| 20+50  |      |              | 2.00 | 2.50 | -      | -         | 3.0    | 4.5        | 6.1  | 550   | 1170     | 2060     | 5.4   | 5.1        | 4.9     |
| 20 + 60  |      | 20 + 35      | 2.00 | 3.50 | -      | -         | 3.0    | 5.5        | 6.6  | 550   | 1590     | 2320     | 7.3   | 7.0        | 6.7     |
| 2 room   2 room   2 room   2 room   3 c  |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            | 9.0     |
| 22 room 25 + 35  |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            | 9.0     |
| 2  |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            |         |
| TOOM    25 + 50   2.27   4.53   -   -   3.0   6.8   7.3   550   2150   2750   9.9   9.4   9.0  | 2    |              |      | 3.44 | -      | -         | 3.0    |            |      | 550   | 1780     | 2470     | 8.2   |            |         |
| 35 + 35  |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            |         |
| 35 + 50  |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            |         |
| 35+60  |      |              |      |      | -      | -         |        |            |      |       |          |          |       | -          |         |
| 50+50         3.40         3.40         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           50+60         3.09         3.71         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           60+60         3.40         3.40         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           20+20+20         2.00         2.00         2.00         -         3.7         6.5         7.8         670         1450         2750         6.7         6.4         6.1           20+20+25         2.00         2.00         2.50         -         3.7         6.9         7.8         670         1810         2750         8.8         8.4         8.0           20+20+50         1.53         1.53         3.83         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20+25+25         1.94         2.43         2.43         -         3.7<   |      |              |      |      | -      | -         |        |            |      |       |          |          |       |            |         |
| 50 + 60         3.09         3.71         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           60 + 60         3.40         3.40         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           20 + 20 + 20         2.00         2.00         2.00         -         3.7         6.0         7.8         670         1450         2750         7.5         7.2         6.9           20 + 20 + 25         2.00         2.00         2.50         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 20 + 35         1.84         1.84         3.22         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 20 + 60         1.38         1.38         4.14         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 25 + 25         1.94         2.43         2.43  |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 60+60         3.40         3.40         -         -         3.0         6.8         7.3         550         2150         2750         9.9         9.4         9.0           20+20+20         2.00         2.00         2.00         2.00         -         3.7         6.0         7.8         670         1450         2750         6.7         6.4         6.1           20+20+25         2.00         2.00         2.50         -         3.7         6.5         7.8         670         1630         2750         7.5         7.2         6.9           20+20+35         1.84         1.84         3.22         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20+20+60         1.38         1.38         4.14         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20+25+525         1.94         2.43         2.43         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20+25+535         1.73         2.16         3.02   |      |              |      |      | -      | -         |        |            |      |       |          |          |       | _          |         |
| 20 + 20 + 20   2.00   2.00   2.00   -   3.7   6.0   7.8   670   1450   2750   6.7   6.4   6.1  |      |              |      |      | -      |           |        |            |      |       |          |          |       |            |         |
| 20+20+25   |      |              |      |      | -      | -         |        |            |      |       |          |          |       | _          |         |
| 3 room    20 + 20 + 35   |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 3  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 3 room     20 + 20 + 60  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 3 room     20 + 25 + 25  |      |              |      |      |        |           |        |            | -    |       |          |          |       |            |         |
| 3 room   20 + 25 + 35  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 3 room 7   |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 3 room         20 + 25 + 60         1.31         1.64         3.94         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 35 + 35         1.53         2.68         2.68         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 35 + 50         1.31         2.30         3.29         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 35 + 60         1.20         2.10         3.60         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 50 + 50         1.15         2.88         2.88         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 25 + 25         2.30         2.30         2.30         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 35         2.03  |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 3  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 3  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 3 room         20 + 35 + 60         1.20         2.10         3.60         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           20 + 50 + 50         1.15         2.88         2.88         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 25         2.30         2.30         2.30         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 35         2.03         2.03         2.84         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 50         1.73         1.73         3.45         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 50         1.57         1.57         3.76         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 35 + 35         1.82         <   |      |              |      |      |        | _         |        |            |      |       |          |          |       |            |         |
| 20 + 50 + 50         1.15         2.88         2.88         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 25         2.30         2.30         2.30         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 35         2.03         2.03         2.84         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 50         1.73         1.73         3.45         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 25 + 60         1.57         1.57         3.76         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 35 + 35         1.82         2.54         2.54         -         3.7         6.9         7.8         670         1910         2750         8.8         8.4         8.0           25 + 35 + 50         1.57         2.20 <td< td=""><td>3</td><td></td><td></td><td></td><td></td><td>_</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>  | 3    |              |      |      |        | _         |        |            |      |       |          |          |       |            |         |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  | room |              |      | -    |        |           |        |            |      |       |          |          |       |            |         |
| $\begin{array}{c ccccccccccccccccccccccccccccccccccc$  |      |              |      |      |        |           |        |            |      |       |          |          |       | -          |         |
| 25 + 25 + 50       1.73       1.73       3.45       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 25 + 60       1.57       1.57       3.76       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 35       1.82       2.54       2.54       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 50       1.57       2.20       3.14       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 60       1.44       2.01       3.45       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 50 + 50       1.38       2.76       2.76       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         35 + 35 + 35       2.30       2.30       2.30       -       3.7       6.9       7.8       670       1910       2750       8.8  |      |              |      |      |        | _         |        |            |      |       |          |          |       |            |         |
| 25 + 25 + 60       1.57       1.57       3.76       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 35       1.82       2.54       2.54       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 50       1.57       2.20       3.14       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 35 + 60       1.44       2.01       3.45       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         25 + 50 + 50       1.38       2.76       2.76       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0         35 + 35 + 35       2.30       2.30       2.30       -       3.7       6.9       7.8       670       1910       2750       8.8       8.4       8.0  |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 25 + 35 + 35     1.82     2.54     2.54     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 35 + 50     1.57     2.20     3.14     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 35 + 60     1.44     2.01     3.45     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 50 + 50     1.38     2.76     2.76     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       35 + 35 + 35     2.30     2.30     2.30     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0  |      |              |      |      |        | -         |        |            |      |       |          |          |       |            |         |
| 25 + 35 + 50     1.57     2.20     3.14     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 35 + 60     1.44     2.01     3.45     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 50 + 50     1.38     2.76     2.76     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       35 + 35 + 35     2.30     2.30     2.30     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0  |      |              |      |      |        | -         |        |            |      |       |          |          |       | 1          |         |
| 25 + 35 + 60     1.44     2.01     3.45     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       25 + 50 + 50     1.38     2.76     2.76     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       35 + 35 + 35     2.30     2.30     2.30     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 25 + 50 + 50     1.38     2.76     2.76     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0       35 + 35 + 35     2.30     2.30     2.30     -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 35 + 35 + 35   2.30   2.30   2.30   -     3.7     6.9     7.8     670     1910     2750     8.8     8.4     8.0  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
|  |      |              |      |      |        |           |        |            |      |       |          |          |       |            |         |
| 30 + 30 + 50   2.01   2.01   2.88   -   3.7   6.9   7.8   670   1910   2750   88   84   80   |      | 35 + 35 + 50 | 2.01 | 2.01 | 2.88   | -         | 3.7    | 6.9        | 7.8  | 670   | 1910     | 2750     | 8.8   | 8.4        | 8.0     |

#### <Cooling>

|        |                   |      |        | Coolin | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | ent (A) |
|--------|-------------------|------|--------|--------|-----------|--------|------------|------|-------|----------|---------|-------|------------|---------|
| Indoor |                   |      | Room ( | _      |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V    |
|        |                   | Α    | В      | С      | D         | Min.   | Standard   | Max. |       |          |         |       |            |         |
|        | 20 + 20 + 20 + 20 | 1.73 | 1.73   | 1.73   | 1.73      | 4.4    | 6.9        | 8.3  | 890   | 1750     | 2750    | 8.0   | 7.7        | 7.4     |
|        | 20 + 20 + 20 + 25 | 1.62 | 1.62   | 1.62   | 2.03      | 4.4    | 6.9        | 8.3  | 890   | 1750     | 2750    | 8.0   | 7.7        | 7.4     |
|        | 20 + 20 + 20 + 35 | 1.49 | 1.49   | 1.49   | 2.62      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 20 + 20 + 50 | 1.29 | 1.29   | 1.29   | 3.23      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 20 + 20 + 60 | 1.18 | 1.18   | 1.18   | 3.55      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 20 + 25 + 25 | 1.53 | 1.53   | 1.92   | 1.92      | 4.4    | 6.9        | 8.3  | 890   | 1750     | 2750    | 8.0   | 7.7        | 7.4     |
|        | 20 + 20 + 25 + 35 | 1.42 | 1.42   | 1.78   | 2.49      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 20 + 25 + 50 | 1.23 | 1.23   | 1.54   | 3.09      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 20 + 25 + 60 | 1.14 | 1.14   | 1.42   | 3.41      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
| 4      | 20 + 20 + 35 + 35 | 1.29 | 1.29   | 2.26   | 2.26      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
| room   | 20 + 20 + 35 + 50 | 1.14 | 1.14   | 1.99   | 2.84      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 25 + 25 + 25 | 1.49 | 1.87   | 1.87   | 1.87      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 25 + 25 + 35 | 1.35 | 1.69   | 1.69   | 2.37      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 25 + 25 + 50 | 1.18 | 1.48   | 1.48   | 2.96      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 25 + 35 + 35 | 1.23 | 1.54   | 2.16   | 2.16      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 20 + 35 + 35 + 35 | 1.14 | 1.99   | 1.99   | 1.99      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 25 + 25 + 25 + 25 | 1.78 | 1.78   | 1.78   | 1.78      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 25 + 25 + 25 + 35 | 1.61 | 1.61   | 1.61   | 2.26      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 25 + 25 + 25 + 50 | 1.42 | 1.42   | 1.42   | 2.84      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |
|        | 25 + 25 + 35 + 35 | 1.48 | 1.48   | 2.07   | 2.07      | 4.4    | 7.1        | 8.3  | 890   | 1790     | 2750    | 8.2   | 7.9        | 7.5     |

#### <Heating>

|           | _       |      |        | Heatin             | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | nt (A) |
|-----------|---------|------|--------|--------------------|-----------|--------|------------|------|-------|----------|---------|-------|------------|--------|
| combin    |         |      | Room l | heating<br>ty (kW) |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V   |
|           |         | Α    | В      | С                  | D         | Min.   | Standard   | Max. | ]     |          |         |       |            |        |
|           | 20      | 3.0  | -      | -                  | -         | 1.5    | 3.0        | 3.5  | 600   | 1060     | 1330    | 4.9   | 4.7        | 4.5    |
| l .       | 25      | 3.4  | -      | -                  | -         | 1.5    | 3.4        | 4.0  | 600   | 1220     | 1510    | 5.6   | 5.4        | 5.1    |
| 1<br>room | 35      | 4.5  | -      | -                  | -         | 1.5    | 4.5        | 4.8  | 600   | 1510     | 1790    | 6.9   | 6.6        | 6.4    |
| 100111    | 50      | 5.8  | -      | -                  | -         | 1.5    | 5.8        | 6.2  | 600   | 1950     | 2310    | 9.0   | 8.6        | 8.2    |
|           | 60      | 6.8  | -      | -                  | -         | 1.5    | 6.8        | 7.1  | 600   | 2240     | 2660    | 10.3  | 9.8        | 9.4    |
|           | 20 + 20 | 2.70 | 2.70   | -                  | -         | 2.1    | 5.4        | 7.0  | 630   | 1370     | 1870    | 6.3   | 6.0        | 5.8    |
|           | 20 + 25 | 2.62 | 3.28   | -                  | -         | 2.1    | 5.9        | 7.3  | 630   | 1560     | 2130    | 7.2   | 6.9        | 6.6    |
|           | 20 + 35 | 2.51 | 4.39   | -                  | -         | 2.1    | 6.9        | 7.9  | 630   | 1950     | 2650    | 9.0   | 8.6        | 8.2    |
|           | 20 + 50 | 2.34 | 5.86   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 20 + 60 | 2.05 | 6.15   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 25 + 25 | 3.20 | 3.20   | -                  | -         | 2.1    | 6.4        | 7.7  | 630   | 1740     | 2480    | 8.0   | 7.6        | 7.3    |
|           | 25 + 35 | 3.08 | 4.32   | -                  | -         | 2.1    | 7.4        | 8.2  | 630   | 2130     | 2910    | 9.8   | 9.4        | 9.0    |
| 2<br>room | 25 + 50 | 2.73 | 5.47   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
| 100111    | 25 + 60 | 2.41 | 5.79   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 35 + 35 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 35 + 50 | 3.38 | 4.82   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 35 + 60 | 3.02 | 5.18   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 50 + 50 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 50 + 60 | 3.73 | 4.47   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |
|           | 60 + 60 | 4.10 | 4.10   | -                  | -         | 2.1    | 8.2        | 8.3  | 630   | 2490     | 3350    | 11.4  | 10.9       | 10.5   |

#### <Heating>

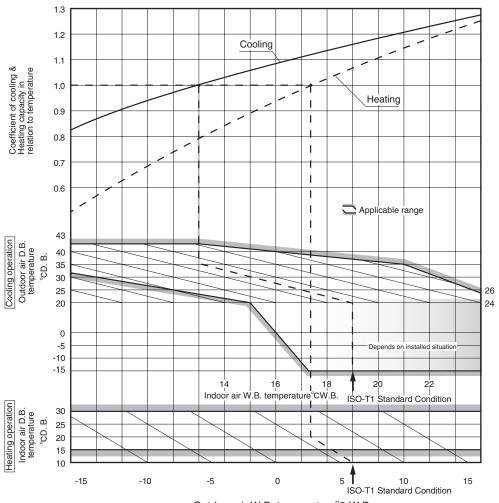
|        |                   |      |        | Heatin             | g capacit | y (kW) |            |      | Power | consumpt | ion (W) | Stand | lard curre | ent (A) |
|--------|-------------------|------|--------|--------------------|-----------|--------|------------|------|-------|----------|---------|-------|------------|---------|
| Indoor |                   |      | Room I | neating<br>ty (kW) |           | Tota   | I capacity | (kW) | Min.  | Standard | Max.    | 220V  | 230V       | 240V    |
|        |                   | Α    | В      | С                  | D         | Min.   | Standard   | Max. |       |          |         |       |            |         |
|        | 20 + 20 + 20      | 2.57 | 2.57   | 2.57               | -         | 3.2    | 7.7        | 8.9  | 660   | 1870     | 3350    | 8.6   | 8.2        | 7.9     |
|        | 20 + 20 + 25      | 2.46 | 2.46   | 3.08               | -         | 3.2    | 8.0        | 8.9  | 660   | 1970     | 3350    | 9.0   | 8.7        | 8.3     |
|        | 20 + 20 + 35      | 2.24 | 2.24   | 3.92               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 20 + 50      | 1.87 | 1.87   | 4.67               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 20 + 60      | 1.68 | 1.68   | 5.04               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 25 + 25      | 2.34 | 2.93   | 2.93               | -         | 3.2    | 8.2        | 8.9  | 660   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 20 + 25 + 35      | 2.10 | 2.63   | 3.68               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 25 + 50      | 1.77 | 2.21   | 4.42               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 25 + 60      | 1.60 | 2.00   | 4.80               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 35 + 35      | 1.87 | 3.27   | 3.27               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
| 3      | 20 + 35 + 50      | 1.60 | 2.80   | 4.00               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
| room   | 20 + 35 + 60      | 1.46 | 2.56   | 4.38               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 50 + 50      | 1.40 | 3.50   | 3.50               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 25 + 25      | 2.80 | 2.80   | 2.80               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 25 + 35      | 2.47 | 2.47   | 3.46               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 25 + 50      | 2.10 | 2.10   | 4.20               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 25 + 60      | 1.91 | 1.91   | 4.58               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 35 + 35      | 2.21 | 3.09   | 3.09               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 35 + 50      | 1.91 | 2.67   | 3.82               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 35 + 60      | 1.75 | 2.45   | 4.20               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 25 + 50 + 50      | 1.68 | 3.36   | 3.36               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 35 + 35 + 35      | 2.80 | 2.80   | 2.80               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 35 + 35 + 50      | 2.45 | 2.45   | 3.50               | -         | 3.2    | 8.4        | 8.9  | 660   | 2100     | 3350    | 9.6   | 9.2        | 8.8     |
|        | 20 + 20 + 20 + 20 | 2.10 | 2.10   | 2.10               | 2.10      | 3.6    | 8.4        | 9.1  | 800   | 2010     | 3350    | 9.2   | 8.8        | 8.5     |
|        | 20 + 20 + 20 + 25 | 1.98 | 1.98   | 1.98               | 2.47      | 3.6    | 8.4        | 9.1  | 800   | 2010     | 3350    | 9.2   | 8.8        | 8.5     |
|        | 20 + 20 + 20 + 35 | 1.79 | 1.79   | 1.79               | 3.13      | 3.6    | 8.5        | 9.1  | 800   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 20 + 20 + 20 + 50 | 1.56 | 1.56   | 1.56               | 3.91      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 20 + 20 + 60 | 1.43 | 1.43   | 1.43               | 4.30      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 20 + 25 + 25 | 1.89 | 1.89   | 2.36               | 2.36      | 3.6    | 8.5        | 9.1  | 800   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 20 + 20 + 25 + 35 | 1.70 | 1.70   | 2.13               | 2.98      | 3.6    | 8.5        | 9.1  | 800   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 20 + 20 + 25 + 50 | 1.50 | 1.50   | 1.87               | 3.74      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 20 + 25 + 60 | 1.38 | 1.38   | 1.72               | 4.13      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
| 4      | 20 + 20 + 35 + 35 | 1.56 | 1.56   | 2.74               | 2.74      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
| room   | 20 + 20 + 35 + 50 | 1.38 | 1.38   | 2.41               | 3.44      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 25 + 25 + 25 | 1.79 | 2.24   | 2.24               | 2.24      | 3.6    | 8.5        | 9.1  | 800   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 20 + 25 + 25 + 35 | 1.64 | 2.05   | 2.05               | 2.87      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 25 + 25 + 50 | 1.43 | 1.79   | 1.79               | 3.58      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 25 + 35 + 35 | 1.50 | 1.87   | 2.62               | 2.62      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 20 + 35 + 35 + 35 | 1.38 | 2.41   | 2.41               | 2.41      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 25 + 25 + 25 + 25 | 2.13 | 2.13   | 2.13               | 2.13      | 3.6    | 8.5        | 9.1  | 800   | 2030     | 3350    | 9.3   | 8.9        | 8.5     |
|        | 25 + 25 + 25 + 35 | 1.95 | 1.95   | 1.95               | 2.74      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 25 + 25 + 25 + 50 | 1.72 | 1.72   | 1.72               | 3.44      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |
|        | 25 + 25 + 35 + 35 | 1.79 | 1.79   | 2.51               | 2.51      | 3.6    | 8.6        | 9.1  | 800   | 2050     | 3350    | 9.4   | 9.0        | 8.6     |

#### 9. SELECTION CHARTS

Correct the cooling and heating capacity in accordance with the conditions as follows. The net cooling and heating capacity can be obtained in the following way.

#### Net capacity = Capacity shown on specification × Correction factors as follows.

#### (1) Coefficient of cooling and heating capacity in relation to temperatures



Outdoor air W.B. temperature°C W.B.

#### (2) Correction of cooling and heating capacity in relation to one way length of refrigerant piping

It is necessary to correct the cooling and heating capacity in relation to the one way piping length between the indoor and outdoor units.

| Piping length [m] | 7   | 10   | 15    | 20    | 25   |
|-------------------|-----|------|-------|-------|------|
| Cooling           | 1.0 | 0.99 | 0.975 | 0.965 | 0.95 |
| Heating           | 1.0 | 1.0  | 1.0   | 1.0   | 1.0  |

#### (3) Correction relative to frosting on outdoor heat exchanger during heating

In additions to the foregoing corrections (1), (2) the heating capacity needs to be adjusted also with respect to the frosting on the outdoor heat exchanger.

| Air inlet temperature of outdoor unit in °CWB | -15  | -10  | -9   | -7   | -5   | -3   | -1   | 1    | 3    | 5<br>or more |
|---|------|------|------|------|------|------|------|------|------|--------------|
| Adjustment coefficient                        | 0.95 | 0.95 | 0.94 | 0.93 | 0.91 | 0.88 | 0.86 | 0.87 | 0.92 | 1.00         |

#### **INVERTER MULTI-SPLIT SYSTEM RESIDENTIAL AIR CONDITIONERS**



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