INSTALLATION AND CONNECTION

Select the model and the number of outdoor unit connection piping kits that you need based on the sales catalog, design engineering, and the data book and installation manual of outdoor unit.

CAUTION
- When brazing the refrigerant pipes, be sure to put the nitrogen first to prevent from oxidizing the inner pipe. If not, the oxidation scale brings the refrigerant cycle clogging and result in malfunction.
- Use clean new pipes for the refrigerant pipes, and do not let water, moisture or dust get into the pipes during installation.

1 INSTALLATION MODE

<Suction gas joint>
Install them horizontally with a maximum gradient of ±10 degrees for even distribution. (Do not install them perpendicularly or upright.) (Figure 4, Figure 5, Figure 6, Figure 7)

<Discharge gas / Liquid / balance pipe joint>
No restrictions on the installation orientation by the direction of refrigerant flow. However, on the discharge gas / liquid joint, the installation cannot have the refrigerant from the main pipe flow directly into the header unit. (Figure 2).

Discharge gas / Liquid pipes
Figure 1

Suction gas pipes
Figure 3

Suction gas joint reverse orientation installation
Figure 4
2 CONNECTION METHOD

**<Suction gas joint>**
Determine the installation orientation of the L-pipe according to the piping connections from the outdoor unit, and select a socket that matches the diameter of the locally procured pipe.

**<Vertical installation>**

**<Vertical installation>**

**<For connections to the bottom>**
Remove the knock-out hole from the bottom of the outdoor units. (Refer to the installation manual of the outdoor unit.)

**4 HEAT INSULATING FOR PIPES**
- Insulate the joints of the liquid pipe, suction gas pipe, discharge gas pipe, and balance pipe individually.
- Insulator for the discharge gas joint, liquid joint and the balance pipe joint are not provided. Please procure it locally.

**<Suction gas pipe>**
- Use heat insulators with heat resistance of 248 °F or more for the discharge gas pipe.
- In order to prevent dripping condensation, do not leave any gap between heat insulator for branching joint (included in package) and heat insulator for pipe (locally procured). And then, wrap the seam with heat insulator with thickness of 0.4" or more (locally procured).

**How to apply the insulation to the suction gas joint**

**<Discharge gas / Liquid / Balance pipe>**
- To heat insulate the T-joint, use a commercially available joint cover (for T-shape) that is 0.4" or more thickness, or one applied with machining as shown in the figure.
- Seal the T-joint completely without any gap to prevent condensation and dripping water.

**3 EXAMPLE OF PIPE CONNECTIONS**
Install and connect the piping between the outdoor units as shown in the diagram below.

**NOTE**
There are no specific requirements on the lengths of the straight pipe before the joint for either the gas or liquid sides.

**<For connections to the front>**