

## RWEYQ-T

### Maximum allowable length after branch

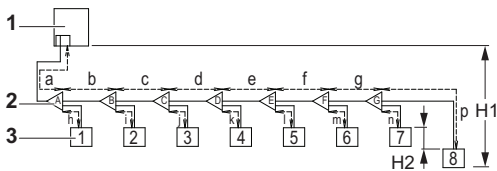
The pipe length from the first refrigerant branch kit to the indoor unit  $\leq 40$  m.

**Example 1.1:** unit 8:  $b+c+d+e+s \leq 40$  m

**Example 1.2:** unit 5:  $b+k \leq 40$  m, unit 8:  $m+n+p \leq 40$  m

**Example 1.3:** unit 8:  $o \leq 40$  m

However, extension is possible if all below conditions are met. In this case limitation can be extended up to 90 m.



- 1 Outdoor units
- 2 Refnet joints (A~G)
- 3 Indoor unit (1~8)

a. The piping length between all indoor to the nearest branch kit is  $\leq 40$  m.

**Example:** h, i, j ...  $p \leq 40$  m

b. It is necessary to increase the pipe size of the suction gas and liquid piping if the pipe length between the first and the final branch kit is over 40 m.

If the increased pipe size is larger than the pipe size of the main pipe, increase is not allowed, extension till 90 m can not be done.

Increase the pipe size as follows:

9.5  $\rightarrow$  12.7; 12.7  $\rightarrow$  15.9; 15.9  $\rightarrow$  19.1; 19.1  $\rightarrow$  22.2; 22.2  $\rightarrow$  25.4<sup>(1)</sup>; 28.6  $\rightarrow$  31.8<sup>(1)</sup>; 34.9  $\rightarrow$  38.1<sup>(1)</sup>

**Example:** unit 8:  $b+c+d+e+f+g+p \leq 90$  m and  $b+c+d+e+f+g > 40$  m; increase the pipe size of b, c, d, e, f, g.

c. When the piping size is increased (step b), the piping length has to be counted as double (except for the main pipe and the pipes that are not increased in pipe size).

The total piping length has to be within limitations (see table above).

**Example:**  $a+b*2+c*2+d*2+e*2+f*2+g*2+h+i+j+k+l+m+n+p \leq 300$  m.

d. The piping length difference between the nearest indoor from first branch to the outdoor unit and farthest indoor to the outdoor unit is  $\leq 40$  m.

**Example:** The farthest indoor unit 8. The nearest indoor unit 1  $\rightarrow$   $(a+b+c+d+e+f+g+p)-(a-h) \leq 40$  m.

## Multi outdoor unit system piping installation

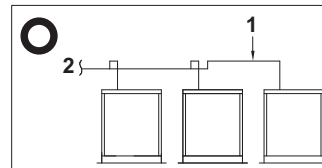
### Precautions when connecting piping between outdoor units

- To connect the piping between outdoor units, an optional multi outdoor unit connection piping kit BHFQ23P907/1357 or BHFQ22P1007/1517 is always required. When installing the piping, follow the instructions in the installation manual that comes with the kit.
- Only proceed with piping work after considering the limitations on installing listed here and in chapter "Connecting the refrigerant piping", always referring to the installation manual delivered with the kit.

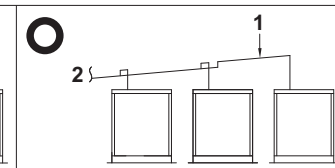
### Possible installation patterns and configurations

- The piping between the outdoor units must be routed level or slightly upward to avoid the risk of oil retention into the piping.

#### Pattern 1

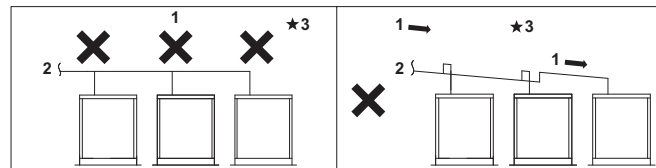


#### Pattern 2



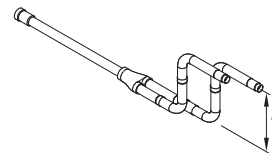
- 1 Piping between outdoor units
- 2 To indoor unit

**Prohibited patterns:** change to pattern 1 or 2.



- 1 Piping between outdoor units
- 2 To indoor unit
- 3 Oil remains in piping

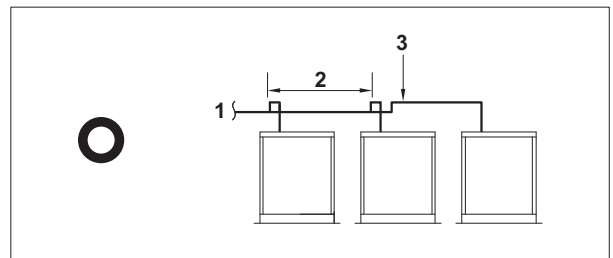
- For the gas piping (both discharge and suction gas pipings in case of the heat recovery system) after the branch, install a trap of 200 mm or larger using the piping included in the piping kit for connecting the outdoor unit. Otherwise, the refrigerant may stay in the piping, causing damage to the outdoor unit.



1  $\geq 200$  mm

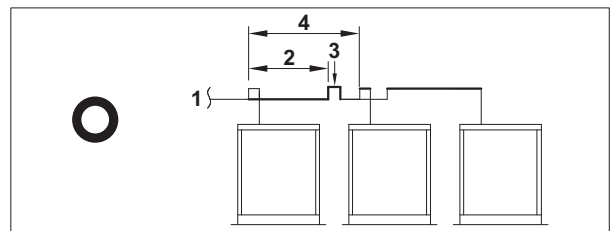
- If the piping length between the outdoor unit connecting pipe kit or between the outdoor units exceeds 2 m, create a rise of 200 mm or more in the gas line within a length of 2 m from the kit.

If  $\leq 2$  m



- 1 To indoor unit
- 2  $\leq 2$  m
- 3 Piping between outdoor units

If  $\geq 2$  m



- 1 To indoor unit
- 2  $\leq 2$  m
- 3 Rising height:  $\geq 200$  mm
- 4  $\geq 2$  m

1. If available on the site. Otherwise it cannot be increased.