

Selection of refrigerant branch kits

Refrigerant Refnets

For piping example, refer to "9.3. Selection of piping size" on page 10.

- When using Refnet joints at the first branch counted from the outdoor unit side, choose from the following table in accordance with the capacity of the outdoor unit (e.g. Refnet joint a).

Outdoor unit capacity type (HP)	2 pipes	3 pipes
8+10	KHRQ22M29T9	KHRQ23M29T9
16+18+20	KHRQ22M64T	KHRQ23M64T
24+26+30	KHRQ22M75T	KHRQ23M75T

- For Refnet joints other than the first branch (e.g. Refnet joint b), select the proper branch kit model based on the total capacity index of all indoor units connected after the refrigerant branch.

Indoor unit capacity index	2 pipes	3 pipes
<200	KHRQ22M20T	KHRQ23M20T
200≤x<290	KHRQ22M29T9	KHRQ23M29T9
290≤x<640	KHRQ22M64T	KHRQ23M64T
≥640	KHRQ22M75T	KHRQ23M75T

- Concerning Refnet headers, choose from the following table in accordance with the total capacity of all the indoor units connected below the Refnet header.

Indoor unit capacity index	2 pipes	3 pipes
<200	KHRQ22M29H	KHRQ23M29H
200≤x<290	KHRQ22M29H	KHRQ23M29H
290≤x<640	KHRQ22M64H ^(a)	KHRQ23M64H ^(a)
≥640	KHRQ22M75H	KHRQ23M75H

(a) If the pipe size above the Refnet header is Ø34.9 or more, KHRQ22M75H/ KHRQ23M75H is required.



INFORMATION

Maximum 8 branches can be connected to a header.

- How to choose a multi outdoor unit connection piping kit (needed if the outdoor unit capacity type is 16 HP or more). Choose from the following table in accordance with the number of outdoor units.

Multi outdoor unit connection kit		
Number of outdoor units	2	3
Heat pump system	BHFQ22P1007	BHFQ22P1517
Heat recovery system	BHFQ23P907	BHFQ23P1357



NOTICE

Refrigerant branch kits can only be used with R410A.

System piping (length) limitations

Piping length restrictions

Make sure to perform the piping installation within the range of the maximum allowable pipe length, allowable level difference and allowable length after branching as indicated below.

Definitions

Actual piping length: pipe length between outdoor⁽¹⁾ and indoor units.

Equivalent piping length⁽²⁾: pipe length between outdoor⁽¹⁾ and indoor units.

Total piping length: total piping length from the outdoor⁽¹⁾ to all indoor units.

Difference in height between outdoor and indoor units: H1

Difference in height between indoor and indoor units: H2

Difference in height between outdoor and outdoor units: H3

(1) If the system capacity is >10HP, re-read "the first outdoor branch as seen from the indoor unit".

(2) Assume equivalent piping length of Refnet joint=0.5 m, Refnet header=1 m, BSVQ100/160=4 m and BSVQ250=6 m (for calculation purposes of equivalent piping length, not for refrigerant charge calculations).