

# INSTALLATION INSTRUCTION

## Branching Header/Branching Joint (Only for R410A)

Please read "Safety Cautions" described in the Installation Manual of the Air Conditioner.

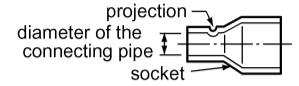
- Check the following parts in the package.
- For piping material and size of the refrigerant pipes, refer to the Installation Manual of the Air Conditioner.

**MODEL:**  
**Branching Header**  
**RBM-HY1043E**  
**RBM-HY1083E**  
**RBM-HY2043E**  
**RBM-HY2083E**

**Branching Joint**  
**RBM-BY54E**  
**RBM-BY104E**  
**RBM-BY204E**  
**RBM-BY304E**

### PARTS

NOTE : 1. All dimensions are in millimeters. In the following tables, ( ) indicates diameter of the indicated position, and others indicate diameter of the connecting pipe.  
 2. Please connect pipe to the side with a projection of the socket. ( ⑤1,⑤2,⑤4,⑤8,⑤9,⑥1,⑥2,⑦0,⑧4,⑧9 : without projection)

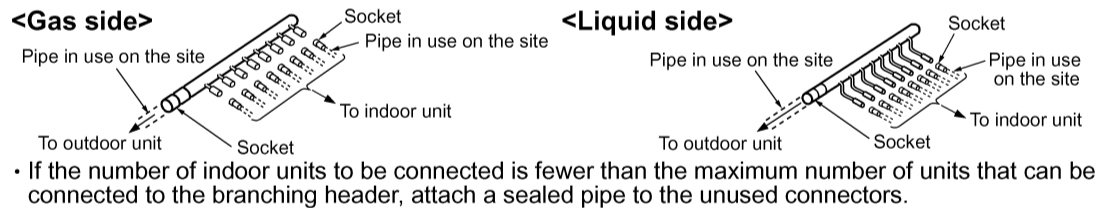


MODEL		RBM-HY1043E		RBM-HY1083E		RBM-HY2043E		RBM-HY2083E	
NAME		RBM-HY1043E		RBM-HY1083E		RBM-HY2043E		RBM-HY2083E	
Branching Header	Branching pipe gas side								
	Branching pipe liquid side								
	Heat insulator (gas side/liquid side)								
Socket	Gas side	No. ⑭ φ 15.9 × (φ 22.2) 1pc ⑮ φ 19.1 × (φ 22.2) 1pc ⑰ φ 28.6 × (φ 22.2) 1pc	No. ⑥⑤ φ 9.5 × (φ 15.9) 4pcs ⑥⑥ φ 12.7 × (φ 15.9) 4pcs	No. ⑭ φ 15.9 × (φ 22.2) 1pc ⑮ φ 19.1 × (φ 22.2) 1pc ⑰ φ 28.6 × (φ 22.2) 1pc	No. ⑥⑤ φ 9.5 × (φ 15.9) 8pcs ⑥⑥ φ 12.7 × (φ 15.9) 8pcs	No. ⑳ φ 28.6 × (φ 31.8) 1pc ㉑ φ 34.9 × (φ 31.8) 1pc	No. ⑥⑥ φ 9.5 × (φ 15.9) 2pcs ⑥⑦ φ 12.7 × (φ 15.9) 2pcs	No. ㉑ φ 28.6 × (φ 31.8) 1pc ㉒ φ 34.9 × (φ 31.8) 1pc	No. ⑥⑥ φ 9.5 × (φ 15.9) 7pcs ⑥⑦ φ 12.7 × (φ 15.9) 7pcs
	Liquid side	No. ⑥⑥ φ 9.5 × (φ 15.9) 1pc ⑥⑦ φ 12.7 × (φ 15.9) 1pc	No. ⑥⑦ φ 6.4 × (φ 9.5) 4pcs	No. ⑥⑥ φ 9.5 × (φ 15.9) 1pc ⑥⑦ φ 12.7 × (φ 15.9) 1pc	No. ⑥⑦ φ 6.4 × (φ 9.5) 8pcs		No. ⑥⑦ φ 6.4 × (φ 9.5) 2pcs		No. ⑥⑦ φ 6.4 × (φ 9.5) 7pcs
Outlet sealed pipe at gas side		(φ 15.9) 1pc		(φ 15.9) 3pcs		(φ 15.9) 1pc		(φ 15.9) 3pcs	
Header sealed pipe at liquid side		(φ 15.9) 1pc		(φ 15.9) 1pc		(φ 15.9) 1pc		(φ 15.9) 1pc	
Outlet sealed pipe at liquid side		(φ 9.5) 1pc		(φ 9.5) 3pcs		(φ 9.5) 1pc		(φ 9.5) 3pcs	
MODEL		RBM-BY54E		RBM-BY104E		RBM-BY204E		RBM-BY304E	
NAME		RBM-BY54E		RBM-BY104E		RBM-BY204E		RBM-BY304E	
Branching Joint	Branching pipe gas side								
	Branching pipe liquid side								
	Heat insulator (gas side/liquid side)								
Socket	Gas side	No. ⑥⑨ φ 12.7 × (φ 15.9) 1pc ⑤① φ 19.1 × (φ 15.9) 1pc	No. ⑥⑤ φ 9.5 × (φ 12.7) 2pcs ⑤④ φ 15.9 × (φ 12.7) 2pcs ⑥④ φ 19.1 × (φ 12.7) 1pc	No. ⑮ φ 19.1 × (φ 22.2) 1pc ⑦① φ 28.6 × (φ 22.2) 1pc	No. ⑦⑦ φ 9.5 × (φ 19.1) 1pc ⑩ φ 12.7 × (φ 19.1) 1pc ⑬ φ 15.9 × (φ 19.1) 2pcs ⑫ φ 22.2 × (φ 19.1) 2pcs ⑧⑧ φ 28.6 × (φ 19.1) 1pc	No. ㉑ φ 28.6 × (φ 31.8) 1pc ㉒ φ 34.9 × (φ 31.8) 1pc	No. ④⑧ φ 9.5 × (φ 28.6) 1pc ④⑨ φ 12.7 × (φ 28.6) 1pc ④⑩ φ 15.9 × (φ 28.6) 1pc ④⑪ φ 19.1 × (φ 28.6) 1pc ④⑫ φ 22.2 × (φ 28.6) 2pcs ④⑬ φ 34.9 × (φ 28.6) 1pc	No.	No. ⑦⑦ φ 9.5 × (φ 38.1) 1pc ⑦⑧ φ 12.7 × (φ 38.1) 1pc ⑦⑨ φ 15.9 × (φ 38.1) 1pc ⑦⑩ φ 19.1 × (φ 38.1) 1pc ⑦⑪ φ 22.2 × (φ 38.1) 1pc ⑦⑫ φ 28.6 × (φ 38.1) 2pcs ⑥① φ 34.9 × (φ 38.1) 3pcs ⑥② φ 41.3 × (φ 38.1) 2pcs
	Liquid side	No. ⑥⑤ φ 9.5 × (φ 12.7) 1pc	No. ⑥⑦ φ 6.4 × (φ 9.5) 2pcs	No. ⑥⑥ φ 9.5 × (φ 15.9) 1pc ⑥⑦ φ 12.7 × (φ 15.9) 1pc	No. ⑥② φ 6.4 × (φ 12.7) 1pc ⑥③ φ 9.5 × (φ 12.7) 2pcs ⑥④ φ 15.9 × (φ 12.7) 1pc	⑬ φ 15.9 × (φ 19.1) 1pc	No. ④③ φ 6.4 × (φ 15.9) 1pc ④④ φ 9.5 × (φ 15.9) 1pc ④⑤ φ 12.7 × (φ 15.9) 2pcs	⑭ φ 15.9 × (φ 22.2) 1pc ⑮ φ 19.1 × (φ 22.2) 1pc	No. ④④ φ 6.4 × (φ 19.1) 1pc ④⑤ φ 9.5 × (φ 19.1) 1pc ④⑥ φ 12.7 × (φ 19.1) 1pc ④⑦ φ 15.9 × (φ 19.1) 2pcs ④⑧ φ 22.2 × (φ 19.1) 1pc

### CONNECTING METHOD

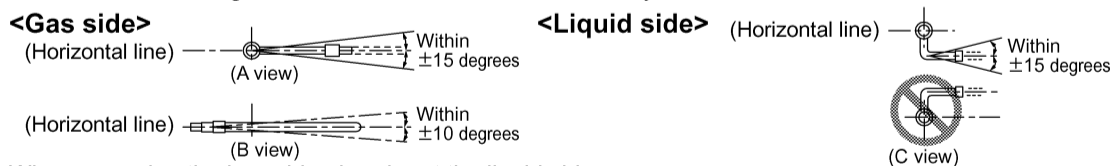
#### Branching Header

Select and install the socket that matches the diameter of a pipe to be connected to the indoor unit.



If the number of indoor units to be connected is fewer than the maximum number of units that can be connected to the branching header, attach a sealed pipe to the unused connectors.

Install the branching header so that it branches horizontally.

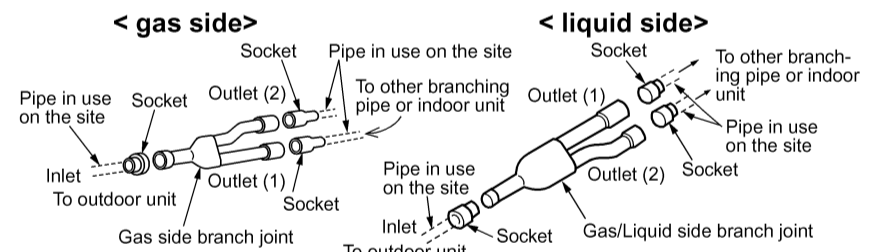


When arranging the branching header at the liquid side, attach a header sealed pipe on the sealing side of the header as shown in the figure at right. Be sure to install the branch pipe downward. Horizontal viewed from D point should be within ± 10 degrees same as view B.

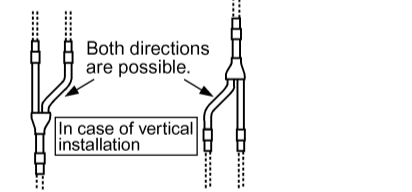
- Supporting branching header
- After applying the insulation, set the hanging metals as support. (in use on the site).

NOTE :  
 1. Install the branching header so that it branches horizontally. It cannot be used in a vertical position.  
 2. Do not use T-type pipe for the branching section.

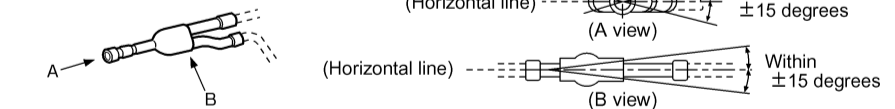
#### Branching Joint



Installation direction of branch pipe  
 Install the branching pipes so that it branch either vertically or horizontally.



#### <Gas/liquid side>

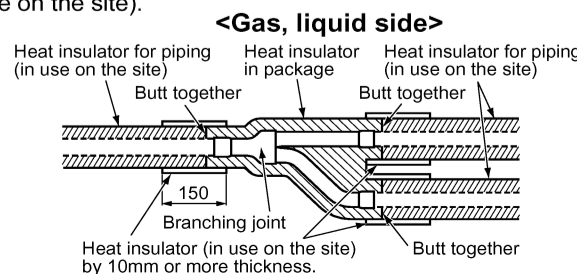


NOTE :  
 Install the branch pipes horizontally or vertically so that they branch evenly.  
 Install the branching joint within ± 15 degrees.

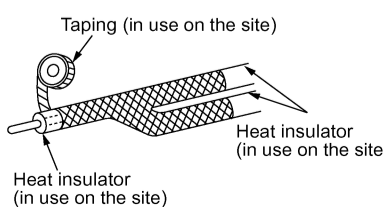
### Heat insulating for pipes(Branching Joint)

In order to prevent dripping at the place where the insulation provided with the branching kit meets the insulating material obtained on the site, butt the two types of insulation up against each other, and then wrap the seam between the two types of insulation in at least 10mm of the insulating material (in use on the site).

On the gas-side pipe, use insulation that can withstand heat of 120°C or higher.



After applying as outlined above, tape the insulation in place.



### ◆ REQUIREMENT ◆

Condensation may occur on the heat insulator according to the atmosphere inside of the ceiling.  
 If the inside of the ceiling is subject to high temperature and high humidity, please add the glass wool (16 to 20 kg/m<sup>3</sup>, 10mm thick or more) on the heat insulator described above for the perfect heat insulation.