

Standard Connections

Model	Male/Female Thread Connections								Solder Connections											Height (mm)	
	PT/NPT/GB								Ø6.6 mm	Ø9.73 mm	Ø12.9 mm	Ø16.15 mm	Ø19.25 mm	Ø22.36 mm	Ø25.6 mm	Ø28.8 mm	Ø35.25 mm	Ø41.5 mm	Ø54.3 mm		
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	1/4"	3/8"	1/2"	5/8"	3/4"	7/8"	1"	1 1/8"	1 3/8"	1 5/8"	2 1/8"		
025	⊙								△	△	△	△	△								20
030	⊙	⊙							△	△	△	△	△	△							20
040/041/042	⊙	⊙							△	△	△	△	△								20
050/051	⊙	⊙	⊙						△	△	△	△	△	△	△	△					27
060	⊙	⊙							△	△	△	△	△								27
070	⊙	⊙	⊙	●	●				△	△	△	△	△	△	△	△	△	△			27
095/096/097	⊙	⊙	⊙						△	△	△	△	△	△	△	△	△	△			27
105	⊙	⊙	⊙	⊙	●				△	△	△	△	△	△	△	△	△	△			27
200/201/202	○		⊙	⊙	⊙	●	●			△	△	△	△			△	△	△	△		27/54
205/206	○		⊙	⊙	⊙	●				△	△	△	△			△	△	△	△		27/54
210	○			⊙	⊙	⊙	●							△		△	△	△			27/54
215	○		○	⊙	⊙	⊙				△	△	△	△			△	△	△	△		27/54
400/401/415/416	○			⊙	⊙	⊙	●			△	△	△	△			△	△	△	△		27/54

Available : ⊙Male/Female Thread ○Female Thread ●Male Thread △ Solder

Model	Flange/Thread Connections						Solder Connections					Height (mm)
	⊙Thread Connections/Flange ○Thread Connections						△ Solder					
	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	2 1/8"	2 3/8"	3 1/8"	3 3/8"	4"	
600/601	○	⊙	⊙	⊙	⊙	⊙	△	△	△	△	△	54/81

※The availability of the connectors are subject to the actual model type and working conditions.

Various connection designs fulfill different specifications.

Connection types include: soldered type for copper tube, female/male thread, hydraulic design, nickel brazed design, temperature control, opposite side...etc.

*Radian can customize connections according to specific demands. Please contact us for more information.

Soldering Connections

In HVAC system, the refrigerant side is usually soldered with the copper pipe. The connection of brazed plate heat exchanger is stainless steel, thus, it is necessary to use high containing silver solder to solder with. Please follow the guides below:

1. Before starting soldering, the copper pipe and the connections should be perfectly cleaned.
2. During the soldering process, applying soldering flux is recommended in order to protect the pipe and heat exchanger from oxidizing and also help cool down the temperature.
3. The brazed plate heat exchanger should be placed in a horizontal position during the entire process, and place wet cloth around the connection base to protect the heat from conducting to the plates.
4. Silver solder containing at least 45% of silver should be used for soldering. The soldering temperature must not exceed 800°C.
5. When the soldering temperature is too high or the duration is too long, potential consequences include the melting of brazing points or damage of the plates which will cause leakages.

