

Bi-Flow Receiver Installation & Mounting instructions

- The receiver is to be located on the liquid line of the system.
- The receiver must be mounted level so that the inlets/outlets come out the top of the tank.
- Brazing requires the use of a 35-45% Silver Solder and Flux.
- Ensure that the tank is protected from overheating while brazing and that any remaining flux is cleaned from the unit.
- If installing outdoors, ensure that the receiver is insulated and protected from the elements.

Heat Pumps

Traditionally, SDHV systems have been charged to special guidelines when used in conjunction with heat pumps. This charging procedure involved charging the units to normal cooling capacities and reviewing the operation in heating mode. If head pressures were found to be impinging on the high head pressure limits, a small amount of refrigerant was removed to prevent the unit from shutting down. The cause of high head pressures in heating mode is due to the disparity in sizes of the indoor and outdoor coils, along with the lower airflow rates of SDHV systems.

With the introduction of newer, larger heat pumps, this issue is more likely to be experienced. While some heat pump units may still be charged in the traditional method, the amount of refrigerant that is required to be removed for heating mode may leave the system drastically undercharged for cooling mode. For this reason it is highly recommended that a Bi-Flow Receiver be used with heat pump applications.

Bi-Flow Receiver

The Bi-Flow Receiver is designed for use with heat pump systems, up to 5 tons, and with any typical refrigerants. The receiver allows refrigerant a location to migrate to during the heating cycle, minimizing head pressures. During cooling mode, the receiver is empty, allowing the full refrigerant charge to be utilized for cooling.

The receiver is a horizontal tank with a pair of dip tubes extending to the bottom of the tank. These two tubes allow for liquid refrigerant to be drawn from the tank regardless of the direction of flow. For this reason, the receiver must be mounted so that the inlet/outlets of the tank come out of the top of the unit. Mounting brackets are located at the base of the unit for secure mounting. The receiver is to be located on the liquid line of the system, anywhere between the indoor and outdoor coils. As the unit is of a bi-flow design, it does not matter which end faces towards the indoor coil.

The inlet/outlet ports are constructed of steel and require the use of a 35-45% Silver Solder and Flux for brazing. The use of standard copper to copper solders may result in difficulty brazing and the potential for a failure at the weld. Ensure that the tank is protected from overheating while brazing and that any remaining flux is cleaned from the unit. If installing outdoors, ensure that the receiver is insulated and protected from the elements.

Manufactured by Energy Saving Products Ltd.

