iAIRE

Submittal

Heat Pump Conversion Kit

Description

iAIRE will take a customer provided non-heat pump unit (either cooling only or gas heat) and convert it to a heat pump unit by installing a reversing valve in the refrigeration system and some controls to control the operation of the heat pump.

EQUIPMENT INCLUDED:

- Reversing valve
- Piping
- Controller
- Temperature probe
- Crank case heater
- Wiring

Sequence of Operations

When the customer provided thermostat has a call for cooling, the unit will operate in the cooling mode (compressor and reversing valve will be engaged to provide the system in the cooling mode).

When the customer provided thermostat has a call for 1st stage of heat, the unit will be operating with the compressor running and the reversing valve not engaged. This will cause the refrigeration system to run in the reverse mode providing heating from the refrigeration system. If there are 2 compressors in the unit, both compressors will run to provide heat with a 1st stage thermostat heat call.

When the customer provided thermostat has a call for 2nd stage heat, both compressors will continue to run in the heating mode (compressors running in reverse to provide heat). If there is an electrical strip heater in the unit, this heater will be engaged with the 2nd stage heat call. If the unit is a gas heat unit, the gas heat will be engaged with a 2nd stage heat call.

The crank case heater will come on to help keep the oil & refrigerant in compressors warm when the temperature is below 40 degrees.

When the unit is running in heat pump mode, the controller will determine when a defrost cycle is needed in the heat pump mode and run the compressors in the cooling mode for 5 minutes to defrost the coils.

Part Number	Weight (lbs)	Part Number	Weight (lbs)
HP-26RTU-1-Install	30	HP-26Split-1-install	30
HP-712RTU-1-Install	40	HP-712Split-1-install	40
HP-712RTU-2-Install	80	HP-712Split-2-install	80
HP-1525RTU-2-Install	120	HP-1525Split-1-install	60
		HP-1525Split-3-install	120