

EconoDRY

Description

Hot gas reheat is a method of dehumidification. The evaporator coil leaving air temperature is dropped below the dew point to remove moisture from the air. The hot gas reheat coil then raises the temperature of the airstream to prevent overcooling of the space.

iAIRE econoDRY includes a hot gas reheat coil that is installed downstream of the evaporator coil. A solenoid valve is installed to provide on/off operation of the hot gas reheat. The hot gas reheat coil increases the temperature of the airstream by approximately 10 degrees. The hot gas reheat coil adds 0.2" to the internal static pressure at nominal conditions.

Included Items:

- Hot Gas Reheat Coil
- Accumulator
- Receiver
- Solenoid Valve and Relay
- Check Valve
- Terminal strip

Items NOT Included:

- Thermostat
- Compressor Capacity Control Device
- Compressor VFD
- Supply Fan VFD
- Interconnecting Piping for Split Systems

Sequence of Operations

When the thermostat (provided by others) is sending a dehumidify signal, the solenoid valve will be open and refrigerant will flow through the hot gas reheat coil. When the thermostat (provided by others) is not sending a dehumidify signal, the solenoid valve will be closed and refrigerant will not flow through the hot gas reheat coil. Y1 needs to be ON during the call for dehumidification.

Dimensions

Package Units: All parts are installed inside the unit. The footprint does not change.

Commercial Splits: All parts are installed inside the CU and AHU. The footprint does not change.

Residential Splits: The reheat coil is mounted to the discharge of the AHU, increasing the length approximately 8".

Weights

Part Number	Weight (lbs)
econoDRY-Install-RESSPLIT	125
econoDRY-Install-26	125
econoDRY-Install-712	175
econoDRY-Install-1525	225



Installer Notes

- Split systems require a hot gas line to be installed between the air handler and condensing unit. A check valve is shipped loose with split systems. Refer to the installation manual for piping details.
- Requires thermostat (provided by others) with humidity sensor and dehumidification output.
- Wire thermostat to provided terminal strip. Connect thermostat dehumidification output to the terminal labeled '+DEHUMID'. The terminal strip shown here is representative. Refer to unit labels.
- Wiring must be shielded cable or 20ga minimum twisted pair with drain wire.
- The relay and solenoid valve are installed and wired by iAIRE.

