



# O/M manual

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**IAIRE econoDRY option provides ON/OFF (snap acting) hot gas reheat (HGR) to a customer provided RTU, Heat pump or split system. The ON/OFF HGR provides an 8-12 degrees temperature increase accross the HGR coil raising the leaving air temperature from the unit helping to control humidity.**

**econoDRY Kit Install**

<b>Project Name</b>	
<b>Quantity</b>	

<b>Model #</b>	
<b>Tag #</b>	

DESCRIPTION
These kit is for an install on customer provided equipment. IAIRE will supply a hot gas reheat coil with an on/off solenoid valve.
<b>EQUIPMENT INCLUDED</b>
- Reheat coil
- Accumulator
- Receiver
- Solenoid vavle
- Piping
- Terminal strip

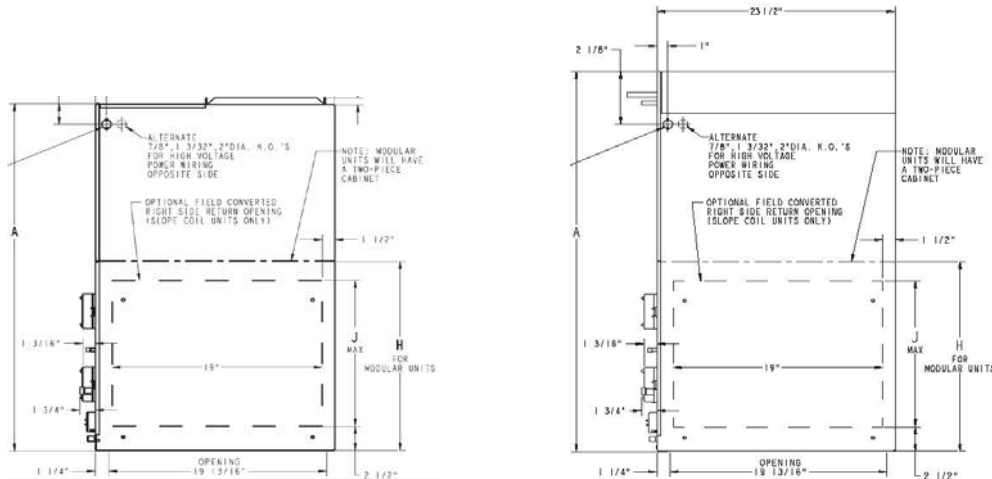


SEQUENCE OF OPERATIONS
When customer provided humidistat sends a signal for humidity, the solenoid that isolates the hot gas coil from the rest of the system opens to allow hot gas to go to the coil. This will raise the temperature of the air coming off the evaporator coil approximately 10 degrees.
When the thermostat stops calling for cooling, the solenoid valve closes, stopping the reheat.

SELECTION	PART NUMBER	W (lbs)
	econoDRY-Install-26 (2-6 ton)	125
	econoDRY-Install-RESSPLIT (res. split)	125
	econoDRY-Install-712 (7-12 ton)	175
	econoDRY-Install-1525 (15-25 ton)	225

NOTES
- Reheat temperature rise is approximately 10 degrees.
- Additional static added to the supply blower from the coil is 0.2" - If actual data is required, please contact the factory.

PHYSICAL DIMENSIONS
All parts fit inside the unit. There is no footprint change to the unit. A coil box is added to the AHU, making the unit approximately 8" taller. (see below drawing for reference)



**NOTE**

These kits include a reheat coil, (1) on/off solenoid valve, accumlator and receiver. Customers are responsible for providing a space thermostat with humidity module to control the unit. When the space senses humidity only, cooling and the hot gas valve will open to provide dehumidification

These kits do not include a Rawal valve or VFD. If required, they are purchased as stand alone options, if needed with the system.



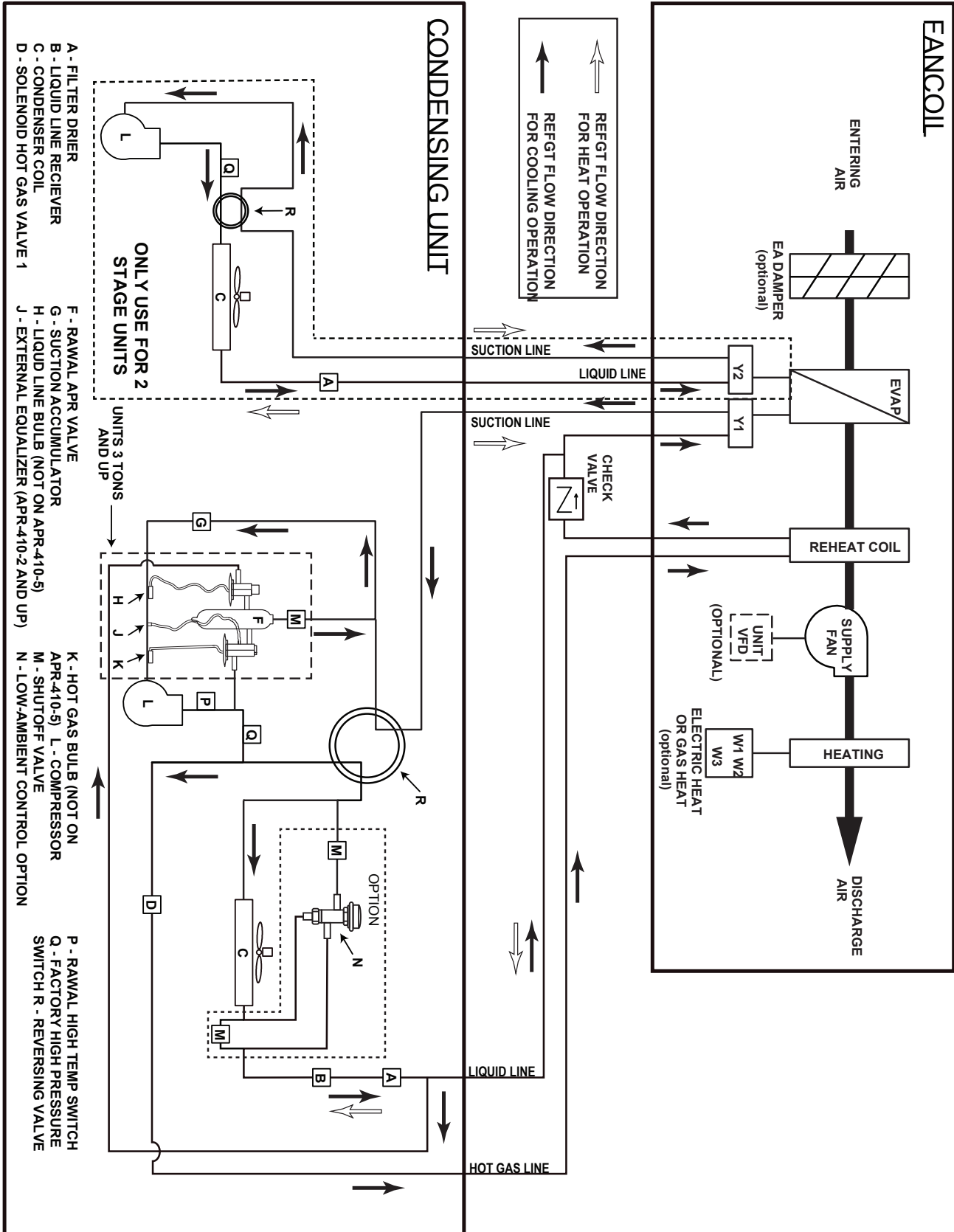


# ON / OFF REHEAT WIRING & PIPING DIAGRAM (HEAT PUMP)

## SCH-0009

Revision: V5.0.0.3

**SAFETIES**  
 AT LOW SUCTION PRESSURES (LOW LOAD) THE RAWVAL DEVICE WILL BYPASS HOT GAS TO THE COMPRESSOR. RAWVAL DEVICE WILL ALSO INJECT SOME LIQUID REFRIGERANT INTO SUCTION LINE TO AVOID OVERHEATING THE COMPRESSOR DURING BYPASS. THIS WILL ALSO PROLONG USE OF FIRST STAGE AND IMPROVE DEHUMIDIFICATION.

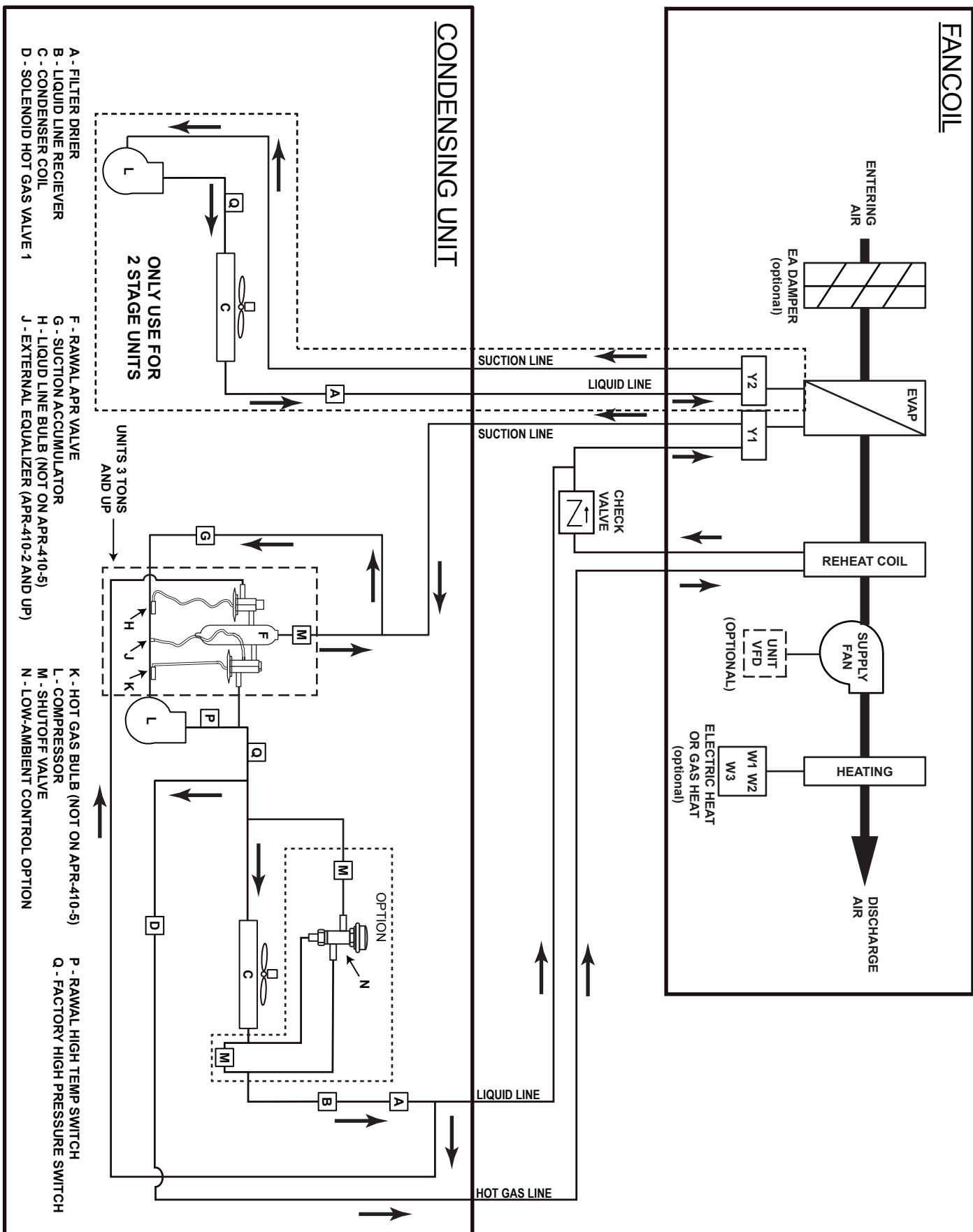




# ON / OFF REHEAT PIPING DIAGRAM SCH-0010

Revision: V5.0.0.4

**SAFETIES**  
 AT LOW SUCTION PRESSURES (LOW LOAD) THE RAWAL DEVICE WILL BYPASS HOT GAS TO THE COMPRESSOR. RAWAL DEVICE WILL ALSO INJECT SOME LIQUID REFRIGERANT INTO SUCTION LINE TO AVOID OVERHEATING THE COMPRESSOR DURING BYPASS. THIS WILL ALSO PROLONG USE OF FIRST STAGE AND IMPROVE DEHUMIDIFICATION.



**CONDENSING UNIT**

**FANCOIL**

- A - FILTER DRIER
- B - LIQUID LINE RECIEVER
- C - CONDENSER COIL
- D - SOLENOID HOT GAS VALVE 1

ONLY USE FOR 2 STAGE UNITS

- F - RAWAL APR VALVE
- G - SUCTION ACCUMULATOR
- H - LIQUID LINE BULB (NOT ON APR-410-5)
- J - EXTERNAL EQUALIZER (APR-410-2 AND UP)

UNITS 3 TONS AND UP

- K - HOT GAS BULB (NOT ON APR-410-5)
- L - COMPRESSOR
- M - SHUTOFF VALVE
- N - LOW-AMBIENT CONTROL OPTION

OPTION

- P - RAWAL HIGH TEMP SWITCH
- Q - FACTORY HIGH PRESSURE SWITCH