

ICM334 3-PHASE HEAD PRESSURE CONTROL



with Temperature and Pressure Inputs

- **One Temperature and up to 2 additional inputs (temperature and/or pressure)**
- **Integral Heat Pump Bypass Circuitry**
 - Allows you to electronically bypass the speed control during heat pump operations
- **Solid State 10 Amp Load Carrying Capability**
- **Hard Start – Ten second hard start**
- **120 - 600 VAC**
- **High Temperature Bypass**
 - Applies full voltage to the motor under normal conditions



Mode of Operation

After properly installing the ICM334, the three phase motor switch will control a connected motor. Using a temperature sensor and two pressure sensors, the device will monitor the ambient temperature and pressure inside the system. The monitor will be energized when there is a Y call.

When the ambient temperature is above 50°F (10°C), the motor will be energized continuously. When the ambient temperature is below 50°F, the pressure sensor is used to determine whether the motor is turned on or off. When the pressure is 15 psi below the set pressure, according to the highest reading of the two pressure sensors, the motor will be turned off. When the pressure is 15 psi above the set pressure, according to the highest reading of the two pressure sensors, the motor will be turned on.

When there is a new Y call the load will energize for 10 seconds.

Specifications

- **Line voltage:** 120 - 600 VAC
- **Control voltage:** 18 - 30 VAC
- **Frequency:** 50-60 Hz
- **Operating temperature:** -40°F to +140°F (-40°C to +60°C)
- **Probes:**
 - **Ambient temperature:** Thermistor, 10K ohm at 77°F (25°C)
 - **Pressure:** ICM380
- **Heat pump override:** 24 VAC N.C. or N.O.
- **Weight:** 12 ounces (341 grams)
- **Mounting:**
 - Surface mount using (2) #8 screws
 - The ICM334 should be surface mounted to a clean metal or other thermally conductive surface for maximum heat dissipation
 - It is recommended that the ICM334 be mounted away from the condenser exhaust air in order to maintain lower operating temperatures

Wiring Diagram

