



Low ambient control for air conditioners and heat pumps.

The **ICM330** head pressure control helps maintain the correct condensing temperature/pressure, which results in a constant head pressure. By adjusting the condenser fan speed, the ICM330 controls the airflow through the condenser. A single desired temperature/pressure setpoint adjustment will result in precise condensing temperatures and stable head pressures.

Features

- Regulates condenser head pressure
- Improves system efficiency
- Helps prevent low pressure cutouts and liquid slugging
- Enables shorter compressor run times
- Prevents pressure overshoots by controlling the fan speed
- Prevents over-condensing in low air temperatures
- Helps eliminate indoor unit freeze-up
- Selectable temperature or pressure sensing
- Selectable pressure range
- Suitable for all refrigerants
- Adjustable minimum fan speed for sleeve or ball bearing motors
- Adjustable Hard Start time
- Integrated heat pump bypass



Mode of Operation

Upon initiation, the **ICM330** will apply full voltage to the fan motor for the time period selected with the Hard Start knob. Hard start time is adjustable from 0.1 to 5 seconds. The hard start ensures correct rotation of the condenser fan, even in windy conditions. After a hard start, the control reads the temperature/pressure sensor and the fan speed is adjusted until the input temperature/pressure matches the set point.

The **ICM330** enables the user to set and adjust the temperature or pressure to be maintained by the control. The set point temperature is adjustable from 70°F – 140°F. The set point pressure is adjustable from 35 – 465 psig. (**ICM380** pressure transducer is available separately).

The **ICM330** works with heat pump and non-heat pump applications. For heat pumps, the jumper selector enables the user to specify heat active or cool active reversing valve systems.

Specifications

Electrical

- **Supply voltage:** 120, 240, and 480 VAC
- **Control voltage:** 18 – 30 VAC
- **Frequency:** 50/60 Hz
- **Operating temperature:** - 40°C to + 75°C
- **Motor Load:** 4 amp and 7 amp models

Sensors

Temperature Sensor – supplied with control

- 10K ohm at 25°C

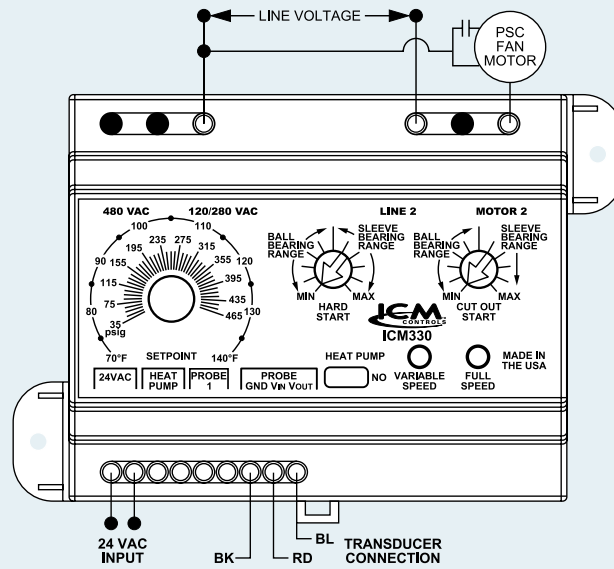
Pressure Transducer – ICM380 optional

- **Power supply voltage:** 5.0 VDC
- **Supply current:** 8.0 mA
- **Output voltage:** 0.5 – 4.5 VDC
- **Pressure range:** 35 – 465 psig
- **Burst pressure:** 2500 psig
- **Proof pressure:** 1500 psig
- **Housing:** Brass

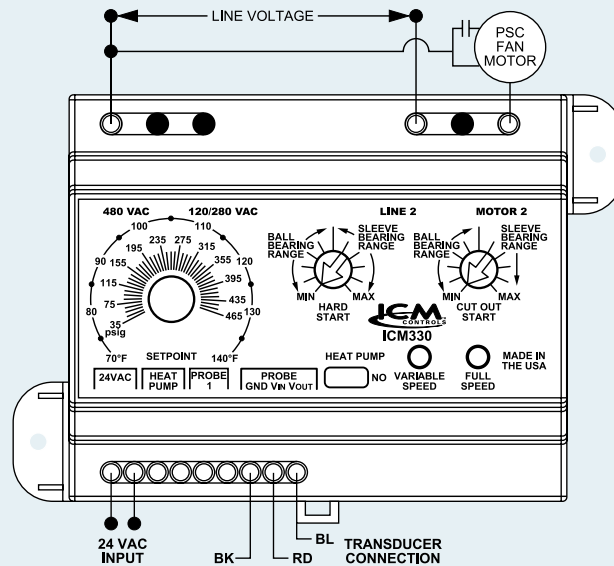
Dimensions

- 4.25" X 3.5" X 2.375"

Wiring Diagram for 115/280 VAC



Wiring Diagram for 480 VAC



Wiring Diagram for Heat Pump Systems

