

# ICM332 and ICM333 HEAD PRESSURE CONTROLS



## With Temperature and Pressure Inputs and Optional Heat Pump Bypass

### ICM332



### Typical Application

Line Voltage  
120, 208, 240, 277, 480  
and 600 VAC

### Probe Connections

1 Temperature Probe  
1 Pressure Probe

### ICM333



### Typical Application

Line Voltage  
120, 208, 240, 277, 480  
and 600 VAC

### Probe Connections

2 Temperature Probes  
2 Pressure Probes

## Features

- **Single (ICM332) or Dual (ICM333) Temperature or Pressure Inputs**
- **Integral Heat Pump Bypass Circuitry**
  - Allows you to electronically bypass the speed control during heat pump operation
- **Solid state 10 amp Load Carrying Capability**
- **Hard Start**
  - Adjustable from .1-5 seconds; provides full torque to the motor during startup to help ensure proper fan rotation and lubrication of bearings
- **120-600 VAC**
- **Low Speed Cutoff**
  - Field-adjustable; user may set the minimum RPM level at which the condenser fan should operate
- **High Temperature Bypass**
  - Applies full voltage to the condenser fan under normal conditions
- **RoHS Compliant/Lead Free Design**
  - For global use

## Mode of Operation

The **ICM332** and **ICM333** Head Pressure Controls operate as temperature- or pressure-sensitive motor fan speed controls. Head pressure is regulated during low ambient conditions by varying the amount of airflow through the condenser. This helps ensure sufficient pressure across the expansion valve, preventing costly downtime and/or loss of valuable perishable goods.

## Specifications

### Input/Output Voltage

- **Line:** 120, 208, 240, 277, 480 and 600 VAC
- **Control:** 18-30 VAC
- **Frequency:** 50-60 Hz
- **Heat Pump Override:** 24 VAC, N.C./N.O.

### Probes:

- **Temperature:** Thermistor, 10K ohm at 77°F
- **Pressure:** ICM380 (ordered separately)

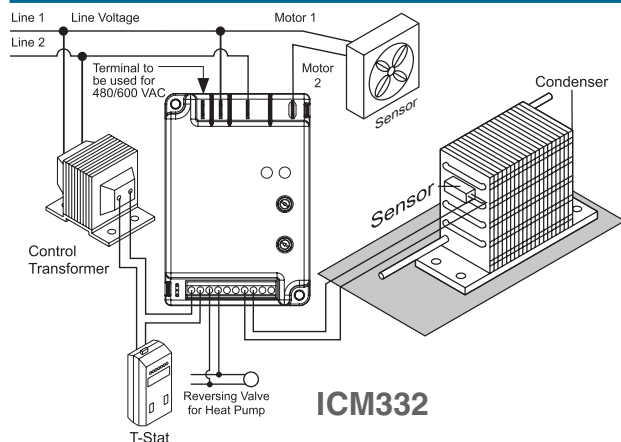
### Control Operating Temperature

- **Operating Temperature:** -40°C to +75°C (-40°F to +176°F)
- **Storage Temperature:** -40°C to +85°C (-40°F to +185°F)

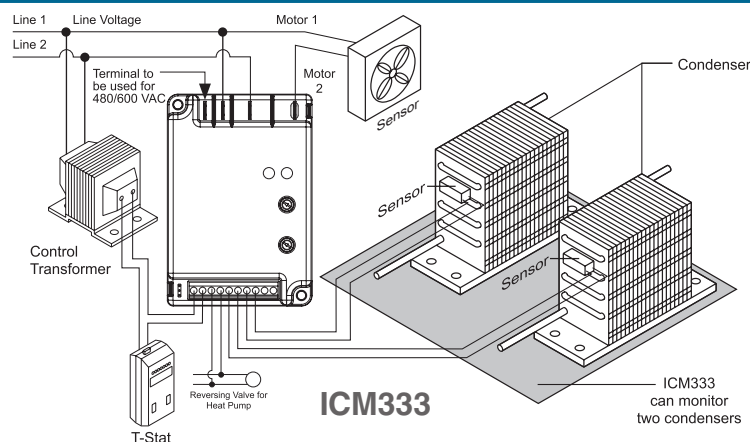
### Dimensions:

- **ICM332 and ICM333:** 4 3/4"L x 3 3/16"W x 1 3/4"H
- **Mounting:** Surface mount using (2) #8 screws

## Typical Wiring Diagrams



**ICM332**



**ICM333**