A utomation

C omponents

I nc.

READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION

All ACI/34 and ACI/334 semiconductor sensors are polarity sensitive but non-position sensitive. The ACI/34 Duct sensor is supplied with a 3-Pole terminal block while the ACI/LM334 has a 2-Pole terminal block for all wiring connections. ACI recommends the use of 18 to 22 AWG twisted pair or shielded cable for all sensor installations.
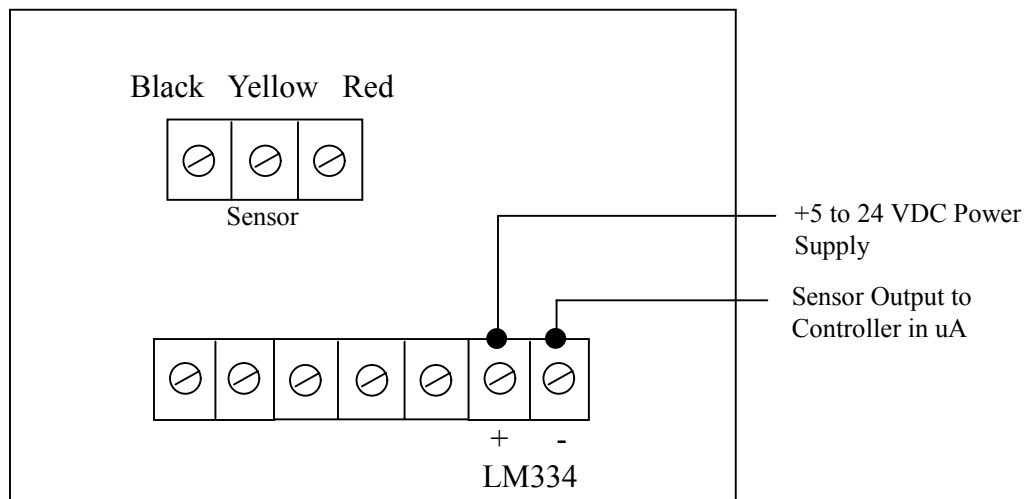
■ **TROUBLESHOOTING**

Sensor reads supply voltage	Sensor or wires are shorted together
Sensor reads 0 mA or 0 VDC	Sensor or wires are open
Erratic readings	Bad wire connections / Condensation on board

■**WIRING DIAGRAMS**
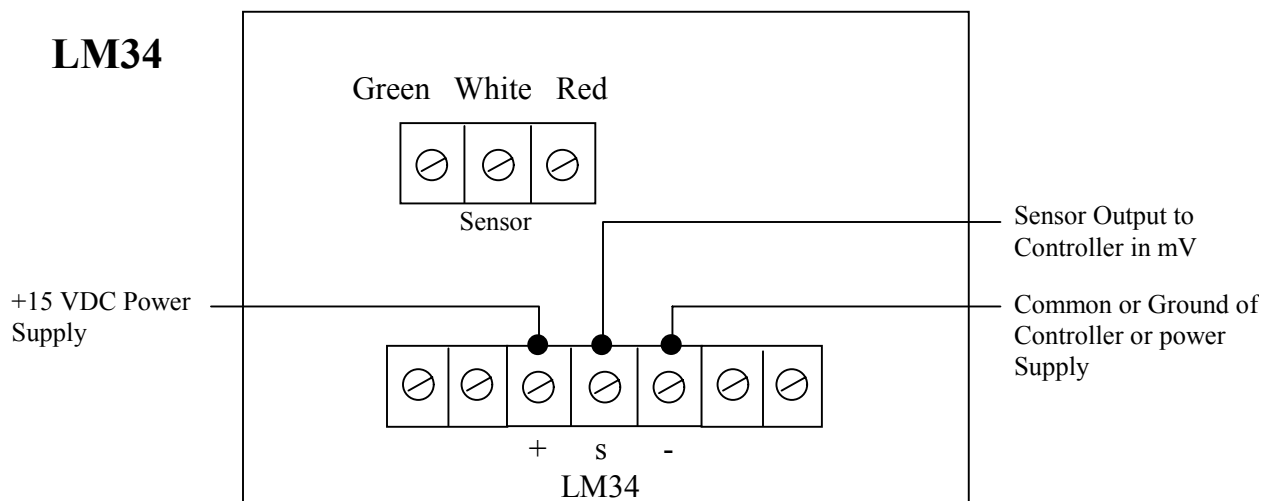
■DUCT SENSORS

Duct temperature sensors - Drill a 3/8" hole in the duct and insert the probe through the hole until the foam pad is up tight to the duct. Now insert the (2) mounting screws through the mounting holes in flange and tighten until the unit is held firmly to the duct.

■FLUID IMMERSION TEMPERATURE SENSORS

The ACI Fluid Immersion-type sensors are provided with a 2 ½", 4", or 6 ¼" insertion length, 304 series stainless steel thermowell. The thermowell has a 1/2" NPT external or process thread and a 1/2" NPT internal or instrument threads. Heat transfer compound may be used but it is not necessary.

■STRAP-ON TEMPERATURE SENSORS

The ACI Strap-On sensors, are provided in a NEMA 1 rated junction box with an adjustable 2" t o 5" pipe clamp. The unit should be mounted on the bottom side of the pipe to ensure proper heat transfer and a true temperature reading. Heat transfer compound and insulating the sensor will help the overall accuracy of the sensor. By ordering extra straps and fastening them together, it is possible to make them fit larger pipes.

■OUTSIDE AIR TEMPERATURE SENSORS

The ACI Outdoor Air temperature sensors are provided, in a weatherproof enclosure. An optional weatherproof Aluminum Bell Box or NEMA 4X Polycarbonate enclosure is also available upon request for an additional charge. All of the mounting hardware is provided with the sensor. Be sure to mount the sensor out of direct sunlight, with the sensor probe pointing downward.

■STAINLESS PLATE TEMPERATURE SENSORS

The ACI Stainless Plate temperature sensors are mounted on the back of a 1 Gang stainless steel plate. The foam pad will insulate the sensor from any drafts in the wall. (2) 6/32" x 1" machine screws are provided for junction box mounting. Be sure that the sensor is not mounted on an outside wall, due to the extreme temperature changes from either drafts or heat transfer.

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