**Mechanical**

**HOLE COVER REMOVAL/INSTALLATION**

TO REMOVE:
Gently lift inside tab and pull hole cover outward.

TO INSTALL:
Align hole cover with slot.
Push hole cover inward until tab snaps into place.

**FOR PROPER VENTILATION, MOUNTED ORIENTATION MUST REMAIN VERTICAL AS SHOWN:**

**AC Power Connection**

- **GREAT COLORED HEX NUT EARTH GROUND**
- **EARTH GROUND**

**AC POWER SPECIFICATIONS**

<table>
<thead>
<tr>
<th>MODEL</th>
<th>POWER</th>
</tr>
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<tbody>
<tr>
<td>0653 887-L-115-C</td>
<td>115VAC, 32VA, 50/60Hz</td>
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**CAUTION**

Use care when attaching power wiring to these connectors. They are not to be used as a strain relief. The connectors cannot withstand excessive bending or flexing.

**Field Bus Connection**

**Smart Sensor Bus Interface (IN4 & SPWR)**

**CAUTION**

- Do not remotely ground any part of the input sensor wiring.
- Remote grounds connected to the return terminal could make the system operate incorrectly or damage the equipment.
- The signal return is not true earth ground. It is an electronic reference point necessary to interpret the sensor properly.

**Wiring Rules**

For reliable input operation, follow these input wiring guidelines:
- Never lay wires across the surface of a printed circuit board.
- Wires should never be within 1 in. or 25 mm of any component on a printed circuit board.
- Use shielded input wire.
- Terminate the shield of the input wires at one end of the run only—preferably at the end where your module is located.
- Be careful when stripping wire not to drop small pieces of wire onto the circuit board.
- Don’t run your input wiring in the same conduit with AC power or the same conduit with your output wiring.

**Grounding the Controller**

This controller includes a screw terminal connection for earth ground. It is important that this connection be made as close to the module as possible.

- **Caution**: Earth ground ( ⬛ ) must be connected to avoid module damage.

**For Proper Ventilation, Mounted Orientation Must Remain Vertical As Shown:**

**Use Copper Conductors Only**

**AC Supply**

**Smart Sensor**

**RS-485**

**AC Power Specifications**

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**Use copper conductors only.**

More than one disconnect switch may be used.

**MOUNTED ORIENTATION MUST REMAIN VERTICAL AS SHOWN:**

**Smart Sensor**

**RS-485**

**AC Power Specifications**

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**Use copper conductors only.**

More than one disconnect switch may be used.
**Inputs**

**Contact and Thermistor Sensing**

- **IN x**
- **IN y**
- **RET**
- **Thermistor**

**DC Voltage Sensing**

- **IN x**
- **V**
- **DC Voltage**
- **RET**

**Max DC Input Voltage = 5.12V**

**Input Impedance = 10K referenced to 5.12 VDC**

**Digital Logic Signal Sensing**

- **IN x**
- **GND**

- **Digital logic signal**

**Outputs**

**Digital Triac Output**

**Internally Powered**

- **Output Rating**: 24 VAC, 300mA (Cannot switch DC loads)
- **Minimum Load**: 30mA

- **Note**: One side of Triac is internally grounded

**Externally Powered**

- **Output Rating**: 24 VAC, 300mA (Cannot switch DC loads)
- **Minimum Load**: 30mA

- **AC Line Power**
- **X1**
- **X2**
- **Transformer**
- **Note**: One side of Triac is internally grounded

**Tristate from 2 Triac Outputs**

- **OUT 5**
- **24VAC INTERNAL 24VAC**

- **Note**: One side of Triac is internally grounded

**Adjacent output pairs:**

- OUT1 and OUT2
- OUT3 and OUT4

- The outputs are electrically connected as shown in the schematic for the built-in Tri-state output.

- Configure the output point of the first point of a pair (OUT1 of the pair OUT1 and OUT2) with an Electrical Type of Tri-state.

**Digital Form A Relay Output**

- **OUT 5**
- **277 VAC @ 3 A**
- **30 VDC @ 3A**

**Output Rating:**

- **24 VAC, 300mA (Cannot switch DC loads)**
- **Minimum Load**: 30mA

**Note**: One side of Triac is internally grounded

**Detailed Programming & Technical Information**

Refer to the following documents:

- i2 Controller Technical Reference, 30-3001-861
- b3 and b4920 Controller Technical Reference, 30-3001-862

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