TraceNet™ ECM-Ambient-WP
Electronic Control Module
INSTALLATION PROCEDURES
For Ambient Sensing Thermostat Connection
(Pilot Control)

Do not open while energized. See installation instructions.

For use as an adjustable electronic control module
Ordinary & Hazardous Locations
Class I Division 2, Groups A, B, C, D
Class II Division 2, Groups F, G; Class III; T4
Class I, Zone 1, AEx eb mb [ib] IIC T4; Zone 21 AEx tb IIIC T135°C

PN 27673

# See product specification for ambient temperatures
The following installation procedures are guidelines for the installation of the TraceNet ECM-Ambient-WP Kit.

Receiving, Storing and Handling . . .
1. Inspect materials for damage incurred during shipping.
2. Report damages to the carrier for settlement.
3. Identify parts against the packing list to ensure the proper type and quantity has been received.
4. Store in a dry location.

Kit Contents . . .

<table>
<thead>
<tr>
<th>Item</th>
<th>Quantity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>Expediter Assembly Support Cap with O-Ring Threaded Grommet Compressor Grommet Support Base with O-Ring</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>Junction Box Lid</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>Junction Box Base with O-Ring</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>Expediter Nut</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>Banding</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>Electronic Control Module w/ Terminal Blocks (Refer to terminal specifications for maximum allowable wire size) ECM Type* ECM Type* C - Controller L - Limiter CL - Controller/Limiter</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>Junction Box Lid Cord</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>Bracket</td>
</tr>
<tr>
<td>9</td>
<td>3</td>
<td>Screws</td>
</tr>
<tr>
<td>10</td>
<td>3</td>
<td>Washers</td>
</tr>
<tr>
<td>11</td>
<td>1</td>
<td>RTD Gland</td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>RTD</td>
</tr>
</tbody>
</table>

Tools Required . . .

Manuals . . .
- For operating and monitoring please refer to ECM user manual and ECM DCS guide.

Dimensions . . .

<table>
<thead>
<tr>
<th>Dimensions</th>
<th>7.9&quot;</th>
<th>6.1&quot;</th>
</tr>
</thead>
</table>

Installation Precautions . . .
- To minimize the potential for arcing and fire caused by product damage or improper installation use ground-fault protection. The National Electrical Code (NEC) and Canadian Electrical Code (CEC) require ground-fault protection of equipment for each branch circuit supplying electric heat tracing.
- Installation must comply with Thermon requirements and be installed in accordance with the NEC, CEC, or any other applicable national and local codes.
- Component approvals and performance ratings are based on the use of Thermon specified parts only. User supplied power connection fittings must be listed or certified for intended use.
- De-energize all power sources before opening enclosure.
- Keep ends of heating cable and kit components dry before and during installation.
- Individuals installing these products are responsible for complying with all applicable safety and health guidelines. Proper personal protective equipment, or PPE, should be utilized during installation. Contact Thermon if you have any additional questions.

Certifications/Approvals . . .

- Ex eb mb [ib] IIC T4, Ex tb IIIC T135°C SIRA 12ATEX5239X II 2 (2) G Ex eb mb [ib] IIC T4, Ex tb IIIC T135°C SIRA 12ATEX5239X II 2 (2) D Ex tb IIIC T135°C IP66 Db
- International Electrotechnical Commission IEC Certification Scheme for Explosive Atmospheres SIR 12.0103X Class I Division 2, Groups A, B, C, D Class II Division 2, Groups E, F, G; Class III; T4 Ex eb mb [ib] IIC T4, Zones 21, 22 Ex tb IIIC T135°C, Zones 21, 22
**TraceNet™ ECM-Ambient-WP**

**INSTALLATION PROCEDURES**

1. **Mounting Method 1:** Secure wall mount bracket to mounting surface using pipe band provided with kits.

2. **Mount expeditor to bracket using M5 x 8mm screws and M5 lock washers.** Tighten cap securely.

3. **Mount junction box base on expeditor.** Make sure to align slots to properly orient junction box base.

4. **For power connection applications:** Use dimple molded into side of junction box base to locate center of hole, drill for user supplied power connection fittings per manufacturer’s recommendations.

5. **Install power cable and RTD.** Stainless steel RTD tip must extend ≥ 20 mm out of gland.

6. **Install electronic control module and complete system wiring.** Terminal set screws shall be tightened to a torque value of 1.4 Nm (12.4 lb-in). See wiring details. Set module electronic control at desired setpoint.

7. **Install junction box lid and twist hand tight.** Insert screwdriver into ratchet slots located on side of junction box base.

8. **Use screwdriver to ratchet on junction box lid.** Lid will rotate 30 degrees. To remove lid, repeat steps 7 and 8 but in the opposite direction.
Wiring Details

Heater output connection to winterizing panel is used to switch main winterizing contactor.