

PRODUCT SPECIFICATIONS

TraceNet[™] ECM[™]

ELECTRONIC CONTROL MODULE

APPLICATION

The TraceNet ECM is an electronic control module specifically designed for controlling electric heat trace circuits used in freeze protection and temperature maintenance applications. Available in both pipe (XP) and wall (WP) mount options. The ECM serves both the temperature control as well as the sensor and power connection for a heat trace circuit.

The ECM is housed in a glass reinforced nonmetallic enclosure with an environmental protection rating of IP66. Depending on options selected, the ECM may be used as a combination temperature control and limiter, a temperature controller, or a temperature limiter. Rotary switches are provided for adjusting temperature control and limiter set points. The standard version of the ECM communicates on a physical network of RS485 by using a Mod-bus RTU communication protocol. Additionally, an alternate CAN-Bus communication network option is available.

The ECM is approved for use in both ordinary (nonclassified) and hazardous (classified) areas. The ECM-OS is available in a stainless steel junction box for use in offshore applications. (Refer to Form TEP0138U)

RATINGS

Operating/control voltage	120/208/230 Vac
Operating ambient range	60°C to 55°C
Minimum ambient storage range	
Control switch type options	SPST and DPST
Switching current ratings 1	
SPST 30/30/20 amp	os (25°C, 40°C, 55°C)
DPST 28/23/17 amp	os (25°C, 40°C, 55°C)
Alarm output current rating	
Electrical connection	terminal blocks 3
Adjustable temp. control range	
Measurement range	60° to 500°C
Measurement accuracy (ambient)	
	± 1°C (0°C to +55°C)
	± 2°C (0°C to -60°C)
Temperature sensor(s) 100 Ohm three	
High temp. alarm/trip	programmable
	(auto or manual reset)
RTD input circuitry	intrinsically safe (Ex i)
Life expectancy	100,000 cycles

CERTIFICATIONS/APPROVALS



II 2 G Ex eb mb [ib] IIC T4 Gb SIRA 12ATEX5239X II 2 D Ex th IIIC T135°C IP66 Db

International Electrotechnical Commission IEC Certification Scheme for Explosive Atmospheres SIRA 12.0103X



CONSTRUCTION

- 1 Pipe-mount expediter², glass-reinforced polymer
- 2 Three-wire RTD sensor (order separately)
- 3 Junction box, glass-reinforced polymer
- 4 Stainless steel mounting bracket

PRODUCT FEATURES

- Encapsulated electronics and control
- · One temperature control module for wide range of temperature control and limiter applications
- Energy saving accurate electronic temperature control action
- Data highway communication capability
- · Selectable automatic or manual reset limiter action
- · Control/limiter setting in degrees Centigrade or degrees Fahrenheit
- · Combines power junction box and control module in one unit
- Also available as ambient thermostat (WP mount only)

- 1. When located outdoors and subject to solar gain, some current de-rating will be required. Contact Thermon for additional information.
- 2. The pipe mount expediter has a maximum pipe exposure temperature of 250°C.
- 3. The terminal blocks consist of:
 - (6) 10 mm2 line/load/PE terminals
 - (3) 3 mm² comm. port terminals
 - (3) 3 mm² alarm relay terminals (2 x 3) 2.5 mm² sensor terminals
 - See installation instructions for maximum wire size.
- 4. Refer to Form TEP0010U, System Accessories Heat Tracing Cables for additional accessories.

THERMON The Heat Tracing Specialists®

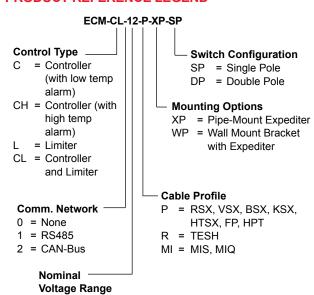


ISO 9001 European Headquarters: Boezemweg 25 • PO Box 205 • 2640 AE Pijnacker • The Netherlands • Phone: +31 (0) 15-36 15 37 Corporate Headquarters: 100 Thermon Dr • PO Box 609 San Marcos, TX 78667-0609 • Phone: 512-396-5801 • 1-800-820-4328 For the Thermon office nearest you visit us at . . . www.thermon.com



PRODUCT REFERENCE LEGEND

1 = 120 Vac 2 = 230 Vac 3 = 208 Vac



TYPICAL WIRING DIAGRAM

