PRODUCT SPECIFICATIONS

TraceNet™ TCM2
CONTROL AND MONITORING MODULE

APPLICATION
The TCM2 is a microprocessor-based temperature control and monitoring module developed specifically for heat tracing applications. The unit provides control and monitoring capabilities via digital information display for one or two heat tracing circuits with input from up to two RTDs per circuit.

RATINGS
Control and monitoring capacity......2 heat tracing circuits
Module supply voltages......................... 100 to 240 Vac
Controlled output load voltage ........... 100 to 600 Vac
Storage ambient..........................-40°F to 176°F
(-40°C to 80°C)
Power clamp function...... programmable from 20%-100%
Temperature input.................. up to two, 3-wire platinum
100 Ohm RTDs per circuit
Temperature control range...............-40°F to 1112°F
(-40°C to 600°C)
Control band ....programmable in increments of 1 degree
Module dimensions (HxWxD)........... 4.65” x 4.7” x 3.25”
(118 x 119 x 83 mm)
High operating current alarm..............1 to 300 Amps
Low operating current alarm............0 to 299 Amps
Ground/earth leakage alarm/trip.........20 to 250 mA
( in 1 mA increments)
Alarm outputs ................................ rated to 100 mA
Self-test frequency ...... programmable from 2 to 99 hours
Communication .......................Modbus ASCII/RTU via RS485
Auxiliary power output.....................9 W @ 24 Vdc

CERTIFICATIONS/APPROVALS
ANSI/UL 61010-1
CAN/CSA-C22.2 No. 61010-1
EN61010-1
Hazardous Locations (Classified)4*
CL I, Div 2, Gp BCD T4
ANSI/ISA 12.12.01
CSA C22.2 No. 213
-40°C ≤ Ta ≤ 60°C

Notes
1. For load voltages above 600 Vac, contact factory.
2. For higher amperage ratings, contact factory.
3. Ethernet or wireless communication via optional accessory modules.
4. When used within Thermon TraceNet TCM2 control panels.

PRODUCT FEATURES
A TCM2 control and monitoring unit offers the following features:

Reduces Man-hours: With the simplified, 4-button user interface, operators can quickly program the TCM2. The new TCM2 wiring harness allows maintenance personnel to swiftly install, remove, and conduct troubleshooting of the system.

Improved Control Methods: The TCM2 utilizes multiple control methods, similar to the Thermon TCM18 (On/Off, Soft-Start, Proportional) and features the upgraded Ambient Proportional Control (APC and APCM) that employs the energy saving method of Ambient Proportional Control with the higher current capacity of the mechanical relay.

Upgraded Communications: The TCM2 can network with any Thermon Controller to TraceNet™ Command or any plant DCS system via RS-485 in either MODBUS ASCII or RTU. In the panel, the TCM2 can employ a converter to offer MODBUS TCP/IP Ethernet.