



PRODUCT DATASHEET

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 ¹
Storage ambient.....	-40°C to 80°C (-40°F to 176°F)
Power clamp function.....	Programmable from 20%-100%
Temperature input.....	up to two, 3-wire platinum 100 Ohm RTDs per circuit
Temperature control range.....	-40°C to 600°C (-40°F to 1112°F)
Control band.....	Programmable in increments of 1 degree
Module dimensions (H x W x D).....	118 x 119 x 83 mm (4.65" x 4.7" x 3.25")
High operating current alarm.....	1 to 300 Amps ²
Low operating current alarm.....	0 to 299 Amps ²
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 ³
Auxiliary power output.....	9 W @ 24 Vdc

CERTIFICATIONS/APPROVALS

The TCM2 meets the requirements of NFPA 13 for Fire Sprinkler applications as outlined in UL 515A. Please refer to the TCM2 Specification Guide (TEP0174), TCM2-FX IOM (PN80520), and Fire Sprinkler Freeze Protection System Installation & Design Guide (TEP0165) for further information.



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



UL listed for use with Fire Sprinkler
Freeze Protection Systems (UL515A)



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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 the Genesis Network 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.

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.