



PRODUCT DATASHEET
EXO TOUCH™
 SINGLE-POINT CONTROL AND MONITORING

APPLICATION

The EXO series is Thermon’s control and monitoring solution for a wide range of commercial electrical trace heating applications. Whether deployed for freeze protection, hot water temperature maintenance, grease waste flow maintenance, roof and gutter de-icing, or snow melt, the EXO series ensures easy and reliable thermal management.

The EXO TOUCH model features single-point heat trace control capability, an LCD touchscreen, two thermistor inputs, visual and audible alarms, and a variety of adjustable control settings.

The 4.3" resistive touch display allows the user to easily navigate through the available control settings on the simple and intuitive interface. EXO TOUCH is internationally certified for usage in Ordinary Locations. With an outdoor-rated enclosure, it offers exceptional performance and reliability, regardless of the weather. EXO TOUCH conforms to UL-61010-1 and is in process for getting UL-515A approval for the fire sprinkler application.

PRODUCT FEATURES

LED backlit Thermon logo - Provides an easy way to get a visual cue on the health and status of the system using different colors. Each color helps identify a different status condition. Please refer to the **CPD1094 EXO TOUCH Operating Manual** for further details.

Efficient Configuration and Operation - With the resistive touch 4.3" LCD display, operators have local access to all the settings and readings under any conditions. It is a simple, intuitive, and easy to use interface. The touch display provides a smooth user experience for interacting with the unit.

Control Methods - The EXO utilizes the ON/OFF, ON/OFF Limiter, APCM (Ambient Proportional Control- Mechanical) and APCM Limiter methods with mechanical relays. APCM mode allows for minimum cable length for temperature sensing as the sensor just needs to be able to measure ambient temperature and not run till the pipe.

Current Measurement- EXO is capable of heater current measurements of up to 35 A. It helps in



understanding if the consumption is in line with the expectation or not. The user can also configure alarms when the value is above or below a certain setpoint.

Ground Fault Measurement - EXO can detect ground fault current from 0 mA to 200 mA. This feature helps detect any ground fault condition quickly. The user can also configure the limit in the specified range.

Thermistors - The unit comes with 2 thermistors which support a temperature measurement range of -40 °C to 125 °C (-40 °F to 257 °F). They have a high accuracy of ±1 °C.

Audible Alarm - The unit comes with an audible alarm. This helps notify the user of any alarm condition even in absence of visual inspection of the unit.

Dry Contact Alarm Output (Form C Relay) - Comes with a Form C Relay providing flexibility to configure the alarm as NO or NC, based on the user’s preference.

ORDERING INFORMATION

| Part Number - PN | Model Description |
|------------------|--|
| 817010 | EXO TOUCH Single point Commercial Controller |



PRODUCT DATASHEET

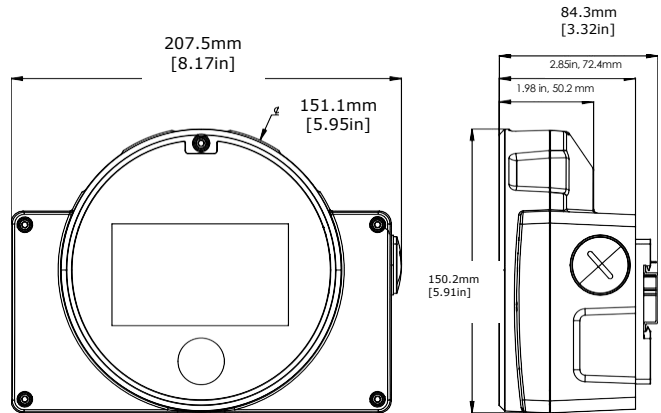
EXO TOUCH™

SINGLE-POINT CONTROL AND MONITORING

ELECTRICAL SPECIFICATIONS

| | |
|-------------------------------------|--|
| Control and monitoring capacity | 1 heat trace circuit |
| Control Methods (Process & Ambient) | ON/OFF, ON/OFF Limiter, APCM, APCM Limiter |
| Rated Voltage (Supply & Load) | 100-240 VAC ± 10%, 50 Hz 110-277 VAC ± 10%, 60 Hz |
| Rated Current | 250 mA max. |
| Input Protection | <ul style="list-style-type: none"> Surge protection, MOVs, from both phases to ground as well as phase to phase External breaker |
| Load Voltage | 100-240 VAC ± 10%, 50 Hz 110-277 VAC ± 10%, 60 Hz |
| Output Heater Current | <p>30 A @ 25°C</p> <p>Heater Current Derating</p> <p>Max Heater Current (A_{max})</p> <p>Ambient (°C)</p> |
| Heater current measurement | up to 35 A max. |
| Ground fault measurement | 0 mA to 200 mA |
| Maximum Duty Cycle | Programmable from 20%-100% |
| Temperature Inputs | 2x Thermistors, Accuracy ±1 °C |
| Ground Fault Alarms | High Ground Fault Alarm High Ground Fault Trip Alarm |
| Heater Current Alarms | Low Heater current Alarm High Heater current Alarm High Heater current Trip/HH Alarm |
| Self-test Frequency | Programmable from 1 - 168 hours; Disabled |
| Control Band | Programmable in increments of 1 degree |
| Control Temperature Range | -40°C to 125°C, increments of 1 degree (-40°F to 275°F) |
| Operating Temperature | -20°C to 45°C (-4°F to 113°F) |
| Relative Humidity | 0 - 90% |
| Control Relay | 1x SPST Mechanical Relay |
| Limiter Relay | 1x SPST Mechanical Relay (only for trip function) |
| Alarm Output Functions | <p>24 VDC, 3 A max. Dry contact 1x Form C, Support for NO or NC operation Audible and Visual Alarm Indication</p> <ul style="list-style-type: none"> System fault Programming Error High Temperature Trip High Current Trip/HH High Ground Current Trip Temperature Sensor Fault |

PRODUCT DIMENSIONS



MECHANICAL RATINGS

| | |
|--------------------|--|
| Ingress Protection | Type 4, IP54 For Ordinary Locations |
| Power Wiring | 16 AWG/1.3 mm ² (min.) to 6 AWG/13.3 mm ² (max.) |
| Other Wiring | 24 AWG/0.2 mm ² (min.) to 16 AWG/1.3 mm ² (max.) |
| Mounting | DIN Rail mounted |
| Dimensions | 207.5 mm * 84.3 mm * 151.1 mm (Width x Depth x Height) |
| Weight | ~ 1.82 lbs. (828 g) |

CERTIFICATIONS/APPROVALS



WARNING - Disconnect all power sources before installation or servicing.
AVERTISSEMENT - Débranchez toutes les sources d'alimentation avant l'installation ou l'entretien.

UL-515A approval for fire sprinkler application expected soon.