

**Annunciator Panel** 

The TTD is a fully configurable fault annunciator and shut-down control system designed to protect engines, compressors and associated equipment.

This easy-to-operate panel features a simple interface. One display head is common to all configurations which requires fewer spare parts. The optional tachometer may use CD ignition or MPU input. The panel offers optional pre-lube or post-lube functionality as well as optional noflow detection. It can monitor 48 userconfigurable sensors.



TTD-H, PSU-2 approved for hazardous locations Class 1,

## **Specifications**

**Power Requirements:** 

PSU-2: 10-32 VDC, 10 W (max); 90-400 VDC CD Ignition, 750 uA @ 100 VDC (max)

On-Board Backup Power: Lithium battery, 6 VDC, 1300 mAh

**Digital Inputs:** 48 (aka channels)

Sensor Types: Discrete input, N.O./N.C., intrinsically safe or

non-incendive

Magnetic Pickup Input: 3.6 - 120 VAC, 2-10 kHz.

**Outputs:** 

IGN: 0.4 A @ 400 VDC\* for 5 seconds 0.15 A @ 400 VDC(\*) cont. duty FV-: 0.5 A @ 400 VDC(\*) for 5 seconds

**ALR:** 0.5 A @ 48 VDC **AUX:** 0.5 A @ 48 VDC

**Operator Interface:** 

Display Type: LCD, Static, 80 segment, custom text with LED

backlight

**Display Viewable Area:** ~ 2.79 x 1 in. (71.04 mm x 25.4 mm)

**Display Contrast:** Automatic

**Display Backlight:** Yellow (Normal Operation); Red (Shutdown) (Backlight will only be available when unit is powered by DC. Voltage Level Monitor: Monitor and display voltage level of DC supply, CD ignition and internal battery.

Keypad: 6 switches: Ridge Embossed, Metal Dome, Tactile 14 Oz.

Trip Force

**Enclosure Cutout:** 5.25 x 5.25 in. (133 mm) Operating Temperature: -40° to 85° C **Viewable Temperature:** -40° to 85° C Storage Temperature: -40° to 85° C

**Tachometer Accuracy:** ±0.5% of the display reading or ±1 RPM,

whichever is greater

Resettable Hourmeter Range: 0 to 99999 hrs. Non-Resettable Hourmeter Range: 0 to 99999 hrs.

Hourmeter Accuracy: ±1 hour per year.

## **Communication Ports: 1**

A single bi-color (green/red) LED is provided to give visual indication of active transmit and receive traffic. Only one connection will be active at any time.

Interface: Factory configured for RS232; field-selectable for RS232

or RS485

**Baud/Configuration:** 9600, 19.2K, 38.4K<sup>†</sup>;N,8,1;N,8,2

Protocol: MODBUS (Slave)

**Connection:** There are two screw terminal connectors for RS485. There are two screw terminal connectors for RS232. There is one screw terminal common for both ports labeled as GND.

**Third Party Approvals:** 

TTD-H, PSU-2: CSA Class I, Division 2, Groups B, C and D Intuitive Display Icons: Display status and assist in setup and operation resulting in greater ease of operation and interface. The appropriate icon will turn on to indicate unit status or navigation through the setup features.

RUN - Run mode

RPM - Screen Value

**HOURS - Screen Value** 

**TYPE** - Channel Type Configuration

**LOW BATT** - Low Battery Warning (displayed when condition

**HISTORY - Shutdown History** 

TEST - Test Mode

**LUBE - Pre-lubrication Timer** 

**POSTLUBE - Post-lubrication Timer** 

SHUTDOWN - Stop Mode

ALARM - Alarm(s) Warning (displayed when condition exists)

SETPOINT - Edit Set-point Value

**SETUP -** Setup Menu(s)

\* CSA approved for 250VDC maximum

† 38.4K Baud will not be available when IGN input is selected as the source for RPM calculations. When MPU is selected, this feature is available for selection.

**Warranty** — A limited warranty on materials and workmanship is given with this Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm This Page Has Intentionally Been Left Blank