

# MURPHY®

### by **ENOVATION** CONTROLS

## SUPERIOR TURNKEY PANEL OFFERS COMPLETE CONTROL, FAMILIARITY ACROSS APPLICATIONS

POWERCORE®
TEC-10

Supports SAE J1939 CAN protocols

Change settings from the face of the panel

Rugged panel withstands dust, water and vibration

Can be utilized across many applications providing familiarity for users



Murphy's PowerCore® TEC-10 panel provides full control of your engine including auto start/stop, auto throttling and display of engine parameters along with critical faults from the engine/application. The TEC-10 supports SAE J1939 CAN protocols for electronically governed engines as well as analog sensors on mechanical engines for fault and safety warnings/shutdowns.

An incredibly versatile control panel, the TEC-10 allows parameters and settings to be changed directly from the front face or via a free PC configuration tool. Powerful flexibility allows for the same control panel to be used across a wide range of applications while providing operator consistency and familiarity.

The control panel features molded-in industry-standard connectors mating with Deutsch HDP series connectors and is compatible for use on the simplest mechanical

engine to the most advanced, fully electronic Tier 4 engines.\*

Designed as a plug-and-play solution, the TEC-10 panel is perfect for rental or industrial applications where I/O is needed and auto start or auto throttling is desired.

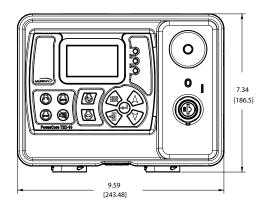
The rugged TEC-10 panel can be mounted directly to the engine or engine/application cover. Built to endure industrial environments from full sun to wide temperature ranges, the panel features a high degree of sealing for dust and water as well as the ability to withstand higher vibration with exposure.

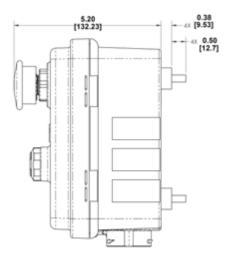
\*Murphy Industrial Harness or John Deere OEM engine harnessing required.

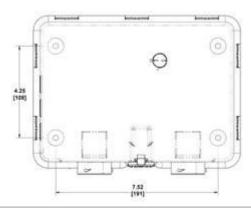
#### POWERCORE®

### TEC-10 PANEL

#### Standard Dimensions







#### TEC-10 PANEL SPECIFICATIONS

#### Interface

Display:

Monochrome HR-TFT

2.7 in./ 68 mm, WQVGA (400 x 240 pixels)

Languages: English, Spanish, German, French, Italian

(3) LEDs: green (mode), yellow (warning) and red (shutdown)

#### Operator controls:

- (11) Raised silicone keypads, tactile feedback
- (1) Rotary switch, power on/off
- (1) Push-switch (red), engine stop

#### Power Supply:

Operating Voltage: 8-32 VDC, reverse battery polarity and load dump protected

Cranking Power Holdup: 0 VDC up to 50 mS(also good for brownout/ blackout instances)

Current consumption: Power on in stopped state; 117 mA at 12 VDC. Power

on in standby mode; 52 mA at 12 VDC.

#### • Inputs (9):

- (5) Digital, configurable (active on High, Low, Open)
- (3) Analog, configurable (4-20 mA, 0-5V, resistive or digital ground)
- (1) Frequency, supporting: Magnetic pickup (30 Hz - 10 kHz, 2.0 VAC-120 VAC) and Engine Alternator (30 Hz - 10 kHz, 4.5 VRMS - 90 VRMS)

#### • Outputs (8):

- (2) Relay, switched +DC, 10A
- (1) Relay, Form C (dry / volt-free), 10A
- (2) Low-side FET (-DC), 1A
- (2) High-side FET (+DC), 1A
- (1) Dedicated Alternator Excitation, +DC, 1A

#### Communications:

- (1) CAN: J1939
- (1) RS485: Modbus RTU

#### Mating Connectors:

- 21 Position, Deutsch HDP26-24-21SE,
- 31 Position, Deutsch HDP26-24-31SE

#### Physical/Environmental:

Enclosure material: Polycarbonate

Dimensions (WxHxD): 9.59 x 7.34 x 5.20 in. (243.48 x 186.5 x 132.23mm)

Weight: 4 lbs (1.8 kg) IP rating: IP67

Operating Temperature: -40° to +85° C (-40° to 185° F) Storage Temperature: -40 to +85° C (-40° to 185° F) Vibration: 7.86 Grms (5-2000 Hz), 3-axis random

Shock: ±50G. 3-axis

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