

MLC 380 R2

For Electronic Engines



Installation Manual

In order to consistently bring you the highest quality, full featured products, we reserve the right to change our specifications and designs at any time. The latest version of this manual can be found at www.murphybynovationcontrols.com.

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.murphybynovationcontrols.com/warranty



**BEFORE BEGINNING INSTALLATION OF THIS MURPHY
PRODUCT:**

Read and follow all installation instructions.

Please contact Enovation Controls immediately if you have any
questions.

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MLC380 R2 Panel

The MurphyLink Series MLC380 R2 Panel for Electronic engines, engineered and built by Enovation Controls' Industrial Panel Division, is a superior panel offering that includes the powerful, yet simple-to-configure PV380¹ display. This display is part of the Murphy PowerView[®] family and provides monitoring of Tier 4/Euro Stage 4 compliant electronic engines. The PV380 monitors multiple J1939 parameters and provides basic engine alarm/shut-down information.

The MLC380 R2 panel has the ability for the software to be fully configured from the front user interface. If the factory default parameters are not the desired set points, the packager or operator has the ability to change these settings. The configuration tool also allows for the splash screen to incorporate a company logo.

The flexibility of the MLC380 allows for the same panel to be used across many applications. This provides the operator familiarity with the display and panel in any application. The panel utilizes an industry standard Deutsch connector and is compatible for use on the simplest to the most advanced, fully electronic Tier 4 engines, when used with the correct Murphy Industrial Harness² or John Deere OEM engine harnessing.

This panel is available in a rugged, powder-coated galvanized enclosure that can be mounted on or near the engine.

¹Please see www.murphybynovationcontrols.com/PV380 for additional information regarding this display model.

²Please see www.murphybynovationcontrols.com/MIH for additional information regarding harnessing.



Feature	Description
PowerView Model PV380 R2 Display	For additional information on the PV380 R2 display, refer to "00-02-0997 – PV380 R2 Operations" manual found on the Literature tab at www.murphybynovationcontrols.com/PV380 .
Yellow Fault/Warning Lamp	Indicates when a warning is present via CAN communications.
Red Fault/Shutdown Lamp	Indicates when a shutdown is present via CAN communications.
Fuse Holder	Panel Fuse – 10A Glass type
Key Switch	Operator initiated turning on or off the engine, or of cranking of engine via turning the key to crank state.
Connector	21 position sealed connector Deutsch HDP24-24-21PE; Mating Connector HPD26-24-21SE

PV380 R2 Display

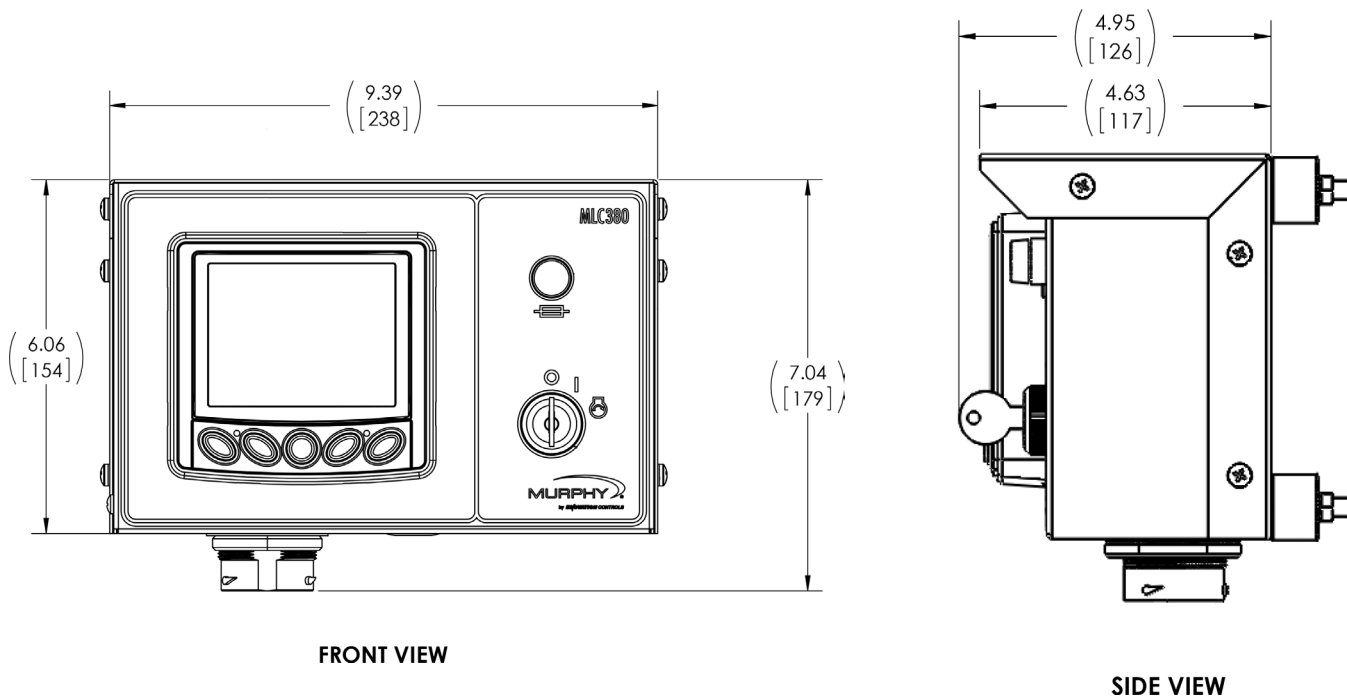
The MurphyLink® Series MLC380 R2 Panels feature the PowerView® Model PV380 R2 display. This J1939-compliant device provides electronic engine parameter data, is simple to install, and matches the PowerView line of rugged displays.

The PV380 R2 is a robust, multifunction display for advanced monitoring of electrical engines. The PV380 R2 can be easily programmed on site with its intuitive screens and sturdy push buttons. In addition, two LEDs indicate an Active-fault alarm or Shutdown status.

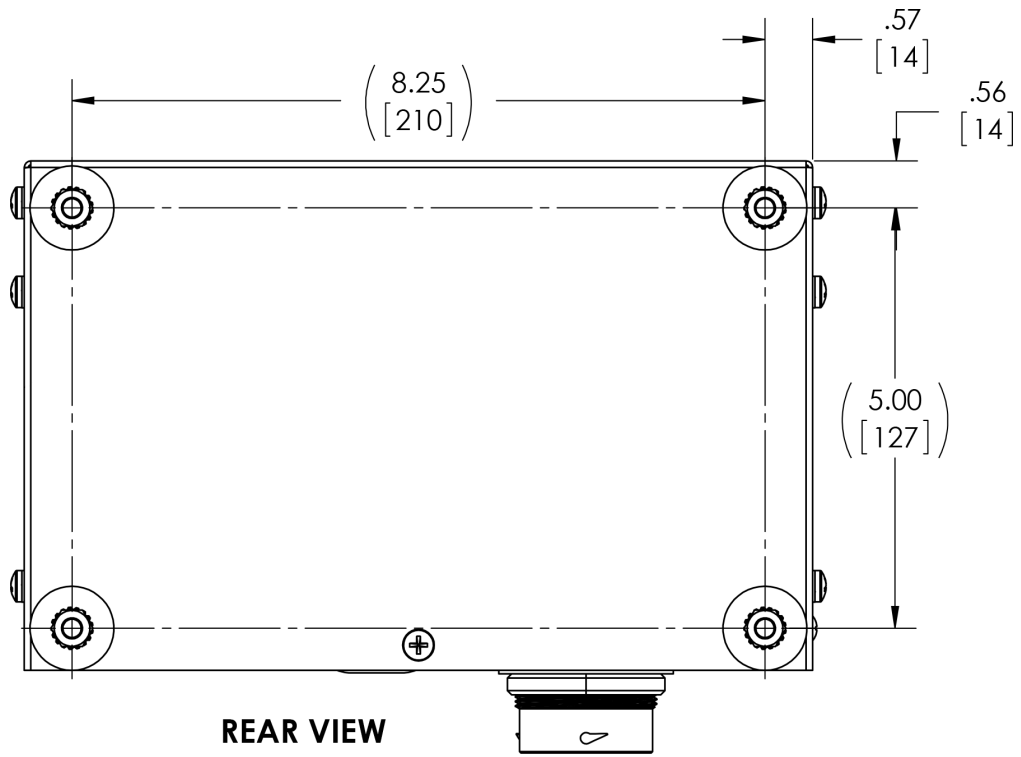
Active and Stored Fault messages display the SPN (Suspect Parameter Number), FMI (Failure Mode Indicator) and the OC (Occurrence Count) using the SAE J1939 protocol.

Dimensions

MLC380 R2 Electronic



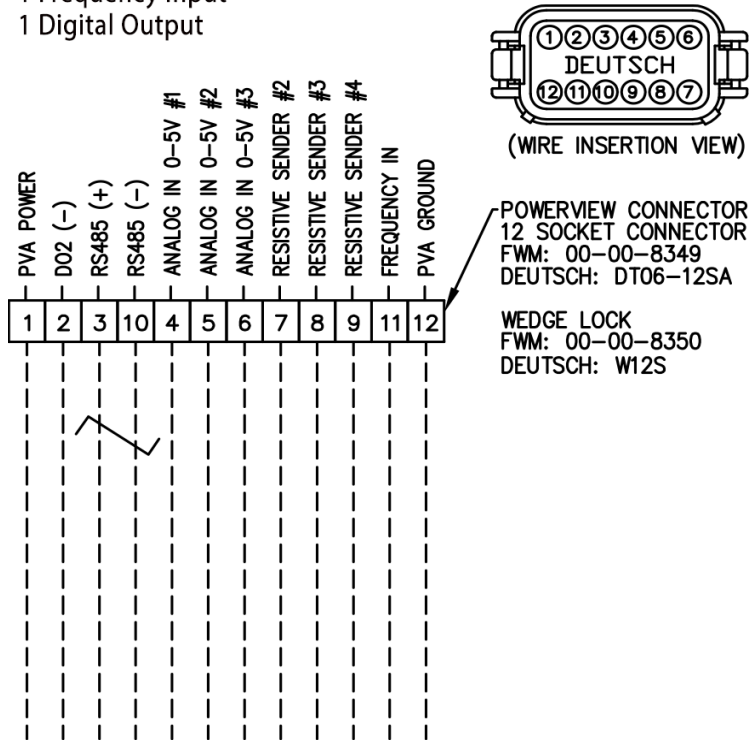
Mounting Dimensions



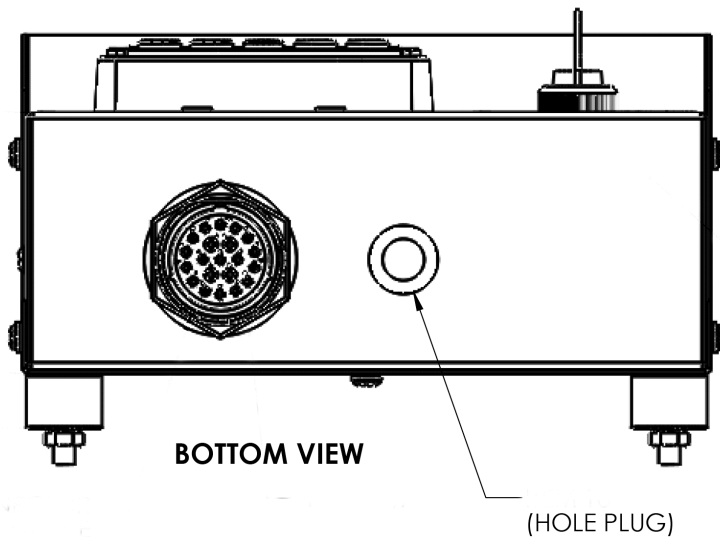
Accessories

I/O Harness P/N 78-00-1060 – 10 feet long

- 3 Analog 0-5 V or 4-20 mA Inputs
- 3 Resistive Inputs
- 1 Frequency Input
- 1 Digital Output



NOTE: The I/O harness plugs directly into the PV380 through the hole plug at the bottom of the panel.



PV380 Specifications

Electrical

Display	3.8" (9.65 cm) QVGA (320x240 pixels); monochrome transfective LCD with heater, MTFB 50,000 hours
Resolution	QVGA, 320 x 240 pixels
Backlighting	White LED
Communications	(1) CAN 2.0B (J1939 protocol and proprietary messaging), (1) RS-485 serial (Modbus)
Protocols	J1939, NMEA 2000
Connection	Deutsch DT Series 6- and 12- pin
Keyboard	5 tactile buttons
Input	(4) resistive analog (3) analog; 0-5V / 4-20 mA (1) frequency; 2-10,000Hz, 3.6-120VAC
Output	(2) 500mA; switched low-side
Voltage	6-36 VDC; reverse polarity protected

Environmental

Operating Temperature	-40° C to +85° C (-40° F to +185° F)
Storage Temperature	-40° C to +85° C (-40° F to +185° F)
Protection	IP66 and 67 (IEC/EN 60529)
Standards Compliance	Electrical Safety: 2006/95/EC Electromagnetic Compatibility: <ul style="list-style-type: none"> • 2004/108/EC: <ul style="list-style-type: none"> • EN 61000-6-4:2001 (emission) • EN 61000-6-2:2001 (immunity) • EN 50121-3-2 and EN 12895 • SAE J1113/2, 4, 11, 12, 21, 24, 26 and 41
Vibration	7.86g random vibrate (5-2,000Hz)
Shock	±50g shock in 3 axes

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