

# MLC 380 R2

# For Mechanical 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.enovationcontrols.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.enovationcontrols.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, 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 mechanical engines. The PV380 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 industry standard Deutsch connectors and is compatible for use on the simplest to the most advanced, when used with the correct Murphy Industrial Harness<sup>2</sup> or John Deere OEM engine harnessing.

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

<sup>&</sup>lt;sup>2</sup>Please see www.murphybyenovationcontrols.com/MIH for additional information regarding harnessing.



MLC380 R2 Mechanical Version

Feature	Description
PowerView Model PV380 R2 Display	For additional information on the PV380 R2 display, refer to "00-02-1017 – PV380 R2 Mechanical Operations" manual, found on the Literature tab at www.murphybyenovationcontrols.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	Contains the fuse for the PV380 R2 panel.
Key Switch	Operator initiated cranking of engine via turning the key to crank state.
Connector Option	15 position Amp Connector 770030-1 Mating Connector Amp 770023-1

<sup>&</sup>lt;sup>1</sup>Please see www.murphybyenovationcontrols.com/PV380 for additional information regarding this display model.

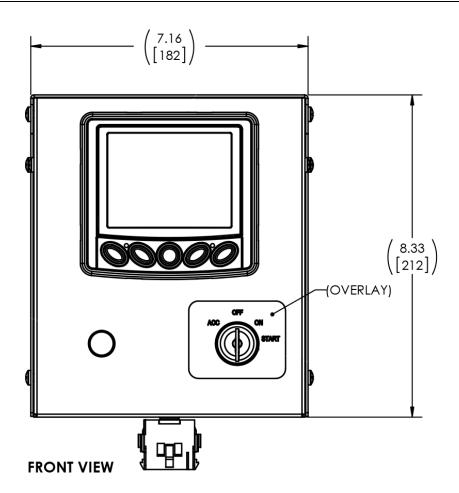
#### PV380 R2 Display

The MurphyLink® Series MLC380 R2 Panels feature the PowerView® Model PV380 R2 display.

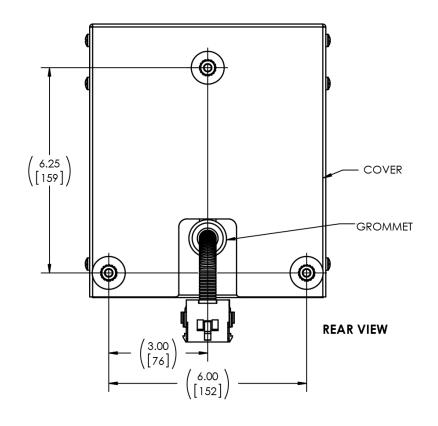
The PV380 R2 is a robust, multifunction display for advanced monitoring and shut down of mechanical engines, replacing the need of mechanical Swichgages and a magnetic switch. The PV380 R2 monitors multiple analog/digital parameters and provides basic engine alarm/shut-down information to the operator. The display.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.

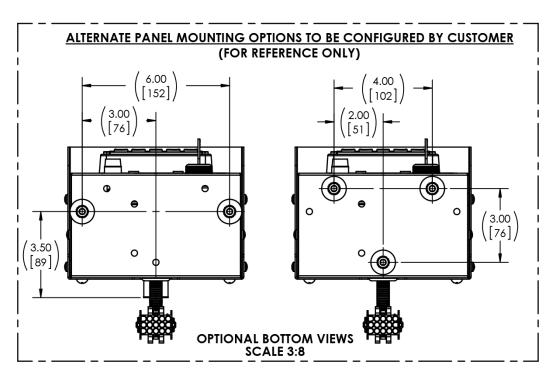
This manual was developed to help you become familiar with the PV380 R2 display, identify navigation basics and recognize useful options and features. The clear 3.8-inch monochrome screen makes it easy to see parameters in the display, especially in bright sunlight.

#### **MLC380 R2 Mechanical Dimensions**



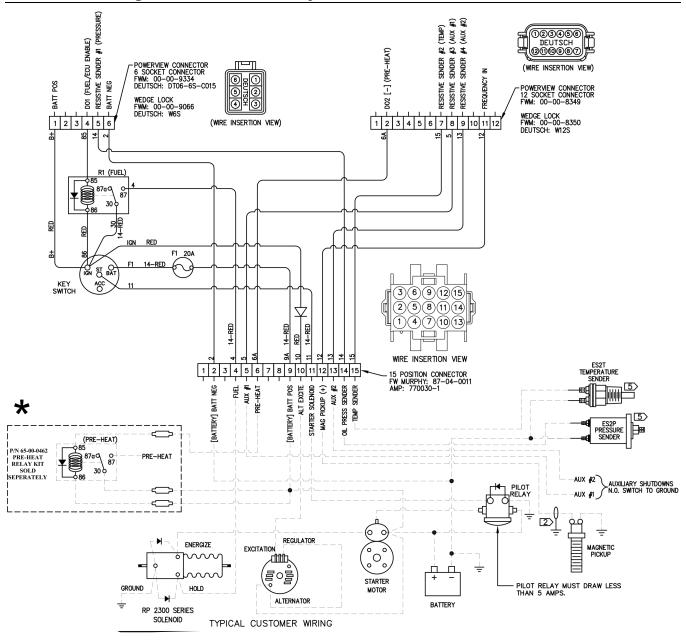
00-02-1014





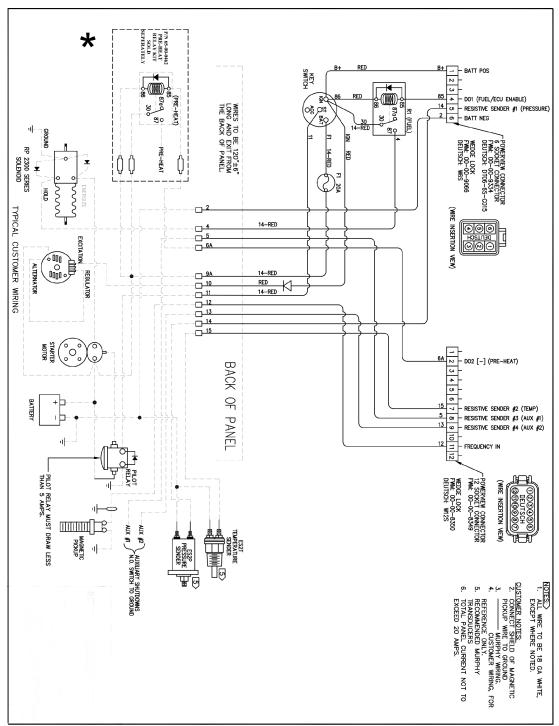
## **Wiring Diagrams**

### **Mechanical Engine- Connector Only**



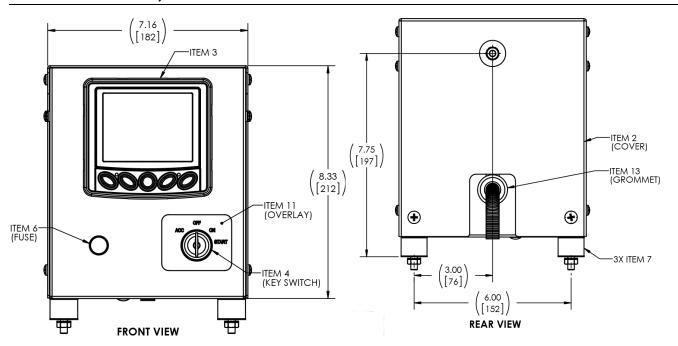
Part Number	Accessories
65000462	Glow Plug Kit * See wiring diagram above for installation.
87040010	Mating Connector

## **Mechanical Engine with Harness**

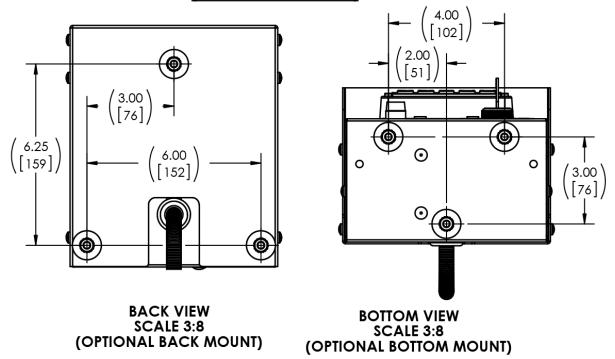


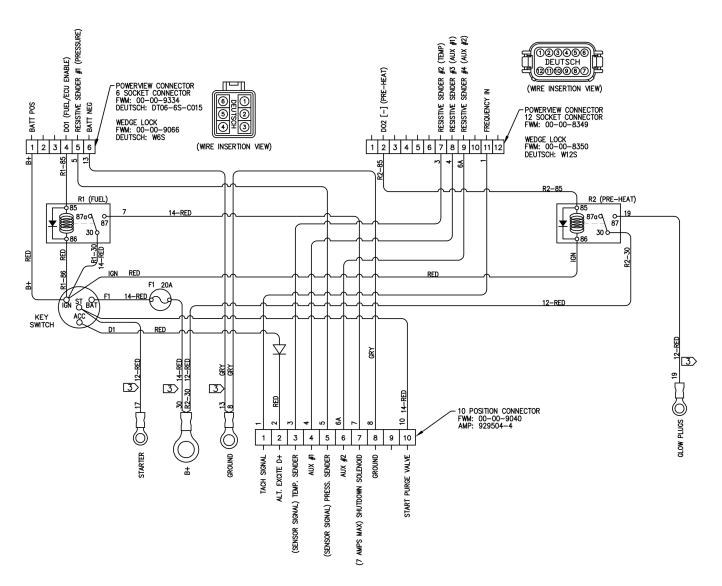
Part Number		Accessories
65000462	Glow Plug Kit	* See wiring diagram above for installation.

## Mechanical WDU, Part 1



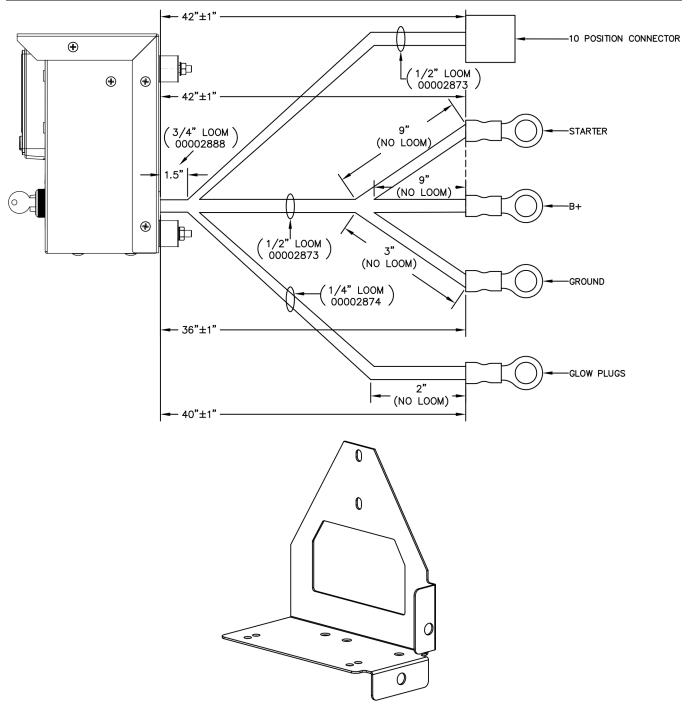
# ALTERNATE PANEL MOUNTING OPTIONS TO BE CONFIGURED BY CUSTOMER (FOR REFERENCE ONLY)





TYPICAL CUSTOMER WIRING

## Mechanical WDU, Part 2



Part Number	Accessories
30000855	WDU Bracket

# **PV380 Specifications**

#### **Electrical**

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Display	3.8" (9.65 cm) QVGA (320x240 pixels); monochrome transflective 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**

-40° C to +85° C (-40° F to +185° F)		
-40° C to +85° C (-40° F to +185° F)		
IP66 and 67 (IEC/EN 60529)		
Electrical Safety: 2006/95/EC Electromagnetic Compatibility:  • 2004/108/EC:  • 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		
7.86g random vibe (5-2,000Hz)		
±50g shock in 3 axes		

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