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# Models PV350 & PV380 R2

#### **Installation Manual**

Products covered in this document comply with European Council electromagnetic compatibility directive 2004/108/EC and electrical safety directive 2006/95/EC.

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 <a href="https://www.MurphyByEnovationControls.com/PV380">www.MurphyByEnovationControls.com/PV380</a>.

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 <a href="https://www.MurphyByEnovationControls.com/warranty">www.MurphyByEnovationControls.com/warranty</a>

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#### **Hardware Installation**

The following instructions will guide you through installing the PowerView display.

# **Inspecting Package Contents**

Before attempting to install the product, it is recommended that you ensure all parts are accounted for and inspect each item for damage (which sometimes occurs during shipping). The items included in the box are:

- PV350 or the PV380 unit
- Dash gasket
- Installation manual P/N 00-02-0998

The PV350 and PV380 R2 Operations Manuals can be found online at:

www.MurphyByEnovationControls.com/PV350 www.MurphyByEnovationControls.com/PV380

#### **Dash-Mounted Installation**

#### Tools needed

- Jig saw or
- 3.5" Hole saw or
- 3.5" knockout (chassis) punch

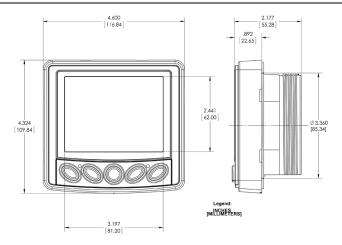
#### **Preparing the Dash**

Determine the location of the PowerView in the dash. Refer to the Mounting Hole Options sheet at the end of this document for the appropriate opening sizes.

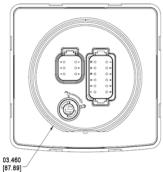
#### Mounting the Unit

- Place the dash gasket over the prepared dash opening.
- 2. Place the back side of the display through the opening in the dash.
- Push the unit through the opening until the case is flush.
- Place the screw-on type mounting clamp behind the dash and install on the unit until it is hand tight.

## **Dimensions**



# Dimensions, cont.



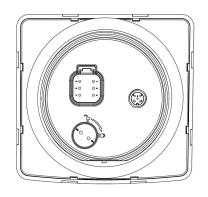
Legend:

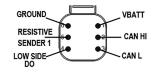
Inches [Millimeters]

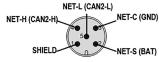
Note: Pinout depicted is the PV380

# **Wiring Information**

# Pin Specifications for PV350



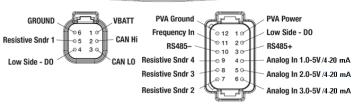




#### **Pin Specifications for PV380**

## PV380 Connector Pin Outs (Back View)





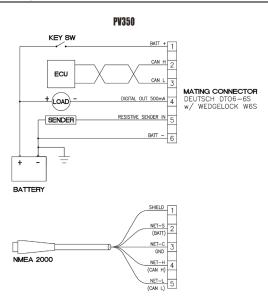
#### **PV350 Mating Connector Part Numbers:**

- Deutsch DT06-12SA plug housing
- Deutsch DT06-6S plug housing
- W6S and W12S wedge locks
- Deutsch 0462-201-16141 contact (socket)
- M12 (Micro-C) 5-pin male plug compatible with NMEA 2000 thin backbones (light cable)

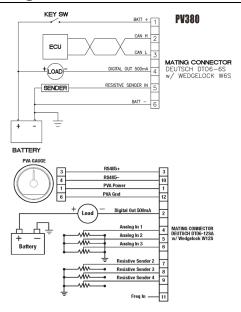
#### **PV380 Mating Connector Part Numbers:**

- Deutsch DT06-12SA plug housing
  - Deutsch DT06-6S plug housing
  - W6S and W12S wedge locks
- Deutsch 0462-201-16141 contact (socket)

# Wiring Diagram for PV350



# Wiring Diagram for PV380



# PV350 and PV380 Features and Operations



# Flat Screen Display

A 3.8" QVGA monochrome LCD screen displays gauges, soft key commands and fault messages as well as menu options for setup and configuration.

#### **Soft Keys and Commands**

The five tactile push buttons on the bottom of the display correspond to the options available for the screen being displayed.

#### **Alarms**

Red and amber warning LEDs; set point triggered output for external piezo buzzer or shut-down relay.

## **Operations Manual**

The PV350/PV380 Murphy Standard Configuration Operation manuals can be found at <a href="https://www.MurphyByEnovationControls.com/PV350">www.MurphyByEnovationControls.com/PV350</a> and <a href="https://www.MurphyByEnovationControls.com/PV380">www.MurphyByEnovationControls.com/PV380</a>.

# **Specifications**

## **Electrical**

Display	3.8" monochrome LCD	
Resolution	QVGA, 320 x 240 pixels	
Orientation	Landscape	
Backlighting	LED, white	
Flash Memory	2Mb	
RAM	256kb	
Operating Voltage	6 - 36 VDC, protected against reverse polarity and load-dump	
Power Consumption	10 W max	
Communications	PV350: (2) CAN 2.0B NMEA 2000 isolated (second port) PV380: (1) CAN 2.0B (1) RS485 serial (Modbus)	
Protocols	J1939, FreeForm CAN	

Connection	PV350: 6 pin Deutsch connector and 5 pin M12 connector PV380: 6 pin and 12 pin Deutsch DT series connectors	
Keyboard	5 tactile buttons	
Inputs	PV350: (1) resistive analog (backlight control) PV380: (4) resistive analog (3) analog, 0-5V / 4-20 mA (1) frequency, 20-10,000 Hz, 3.6-120 VAC	
Output	PV350: (1) 500 mA; switched low-side PV380: (2) 500 mA; switched low-side	

#### **Environmental**

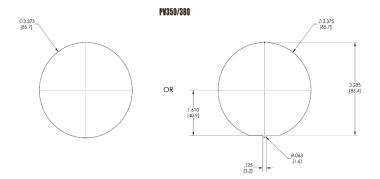
Operating Temperature	-40° C to +85° C
Storage Temperature	-40° C to +85° C
Protection	IP67, front and back, IP66 panel seal

Standards Compliance	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	
Vibration	Random vibration, 7.86 Grms (5-2000 Hz), 3 axes	
Shock	+/- 50G in 3 axes	

## Mechanical

		-
Case Material	PC/ABS	

# **Mounting Hole Options**



MOUNTING HOLE OPTIONS

ENOVATION CONTROLS CORPORATE HEADQUARTERS 5311 S 122ND EAST AVENUE TULSA. OK 74146

ENOVATION CONTROLS LTD. – UNITED KINGDOM CHURCH ROAD LAVERSTOCK SALISBURY SP1 1QZ UK

MURPHY INTERNATIONAL TRADING — CHINA SUITE 1704, ANTAI BUILDING, 107 ZUNYI RD SHANGHAI, 2000 S1 CHINA

ENOVATION CONTROLS INDIA PVT. LTD. 301, 3RD FLOOR, KRSNA CHAMBERS, 11 GALAXY GARDENS, NORTH MAIN ROAD, KOREGAON PARK, PUNE 411001, MAHARASHTRA. INDIA

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