MURPHY®
by ENOVATION CONTROLS

PowerView®

CE

Models PV350 & PV380 R2

Installation Manual

Sec 78/00-02-0998 2018-10-24

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 support.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 enovationcontrols.com/warranty

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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:

support.EnovationControls.com/

Then search for PV350 or PV380.

Dash-Mounted Installation

Tools needed

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

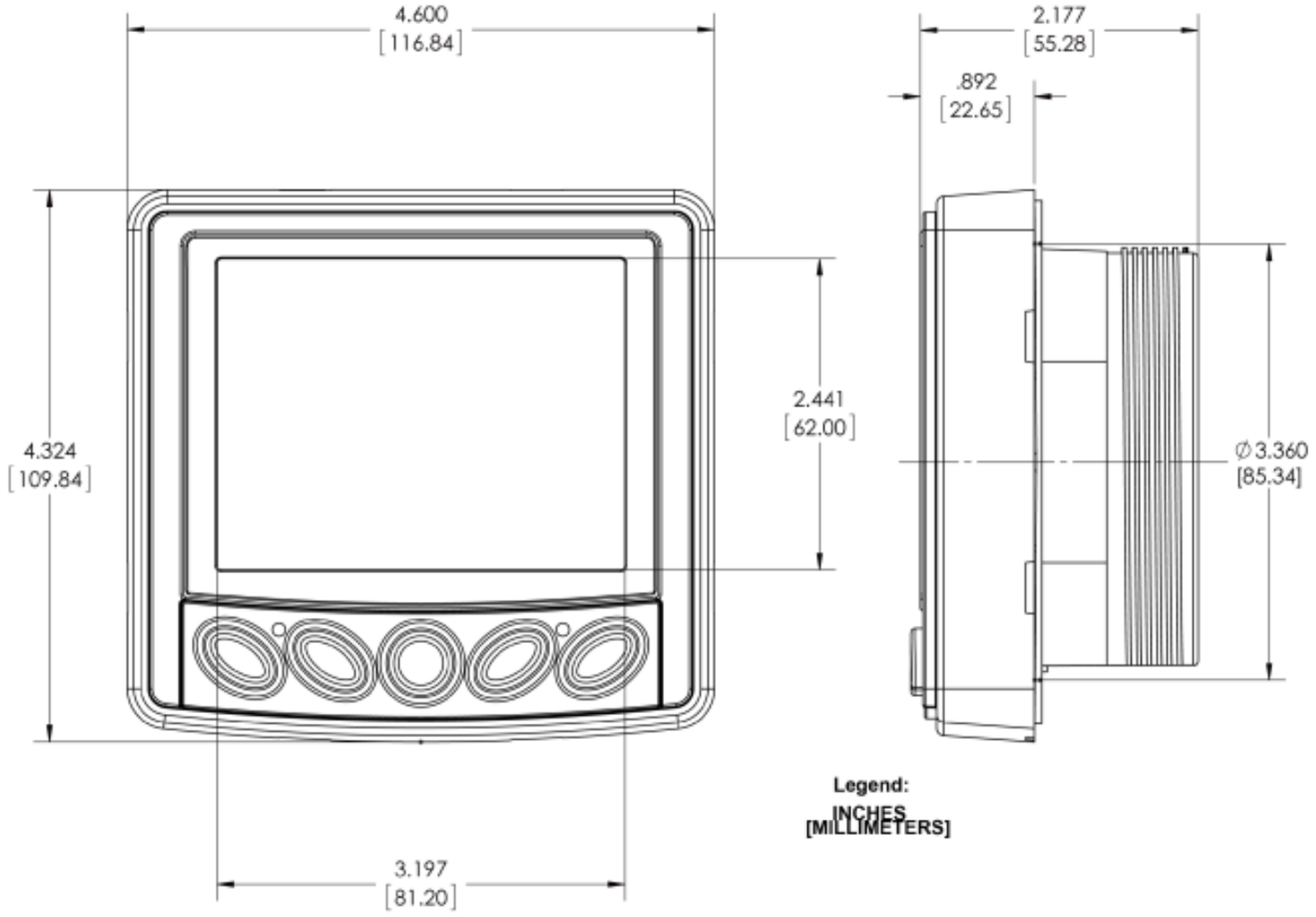
Preparing the Dash

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.

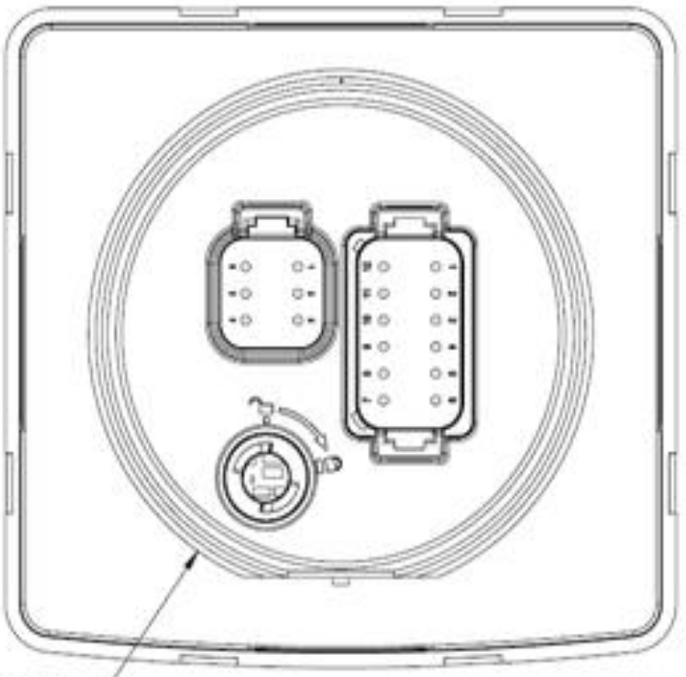
Mounting the Unit

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

Dimensions


4.600
[116.84]
2.177
[55.28]
.892
[22.65]
2.441
[62.00]
4.324
[109.84]
Ø3.360
[85.34]
3.197
[81.20]
Legend:
INCHES
[MILLIMETERS]

Dimensions, cont.



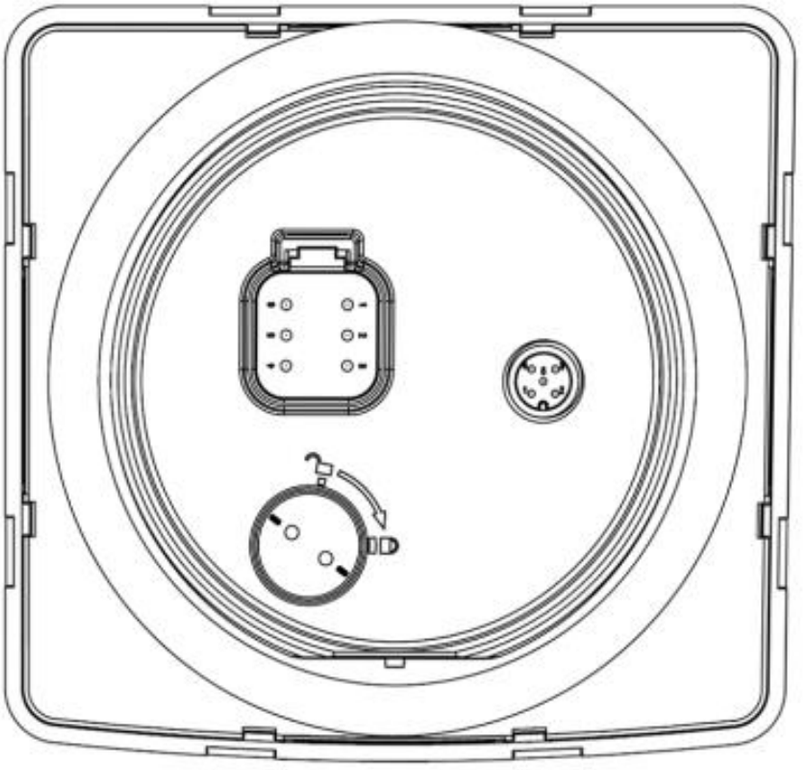
Note: Pinout depicted is the PV380

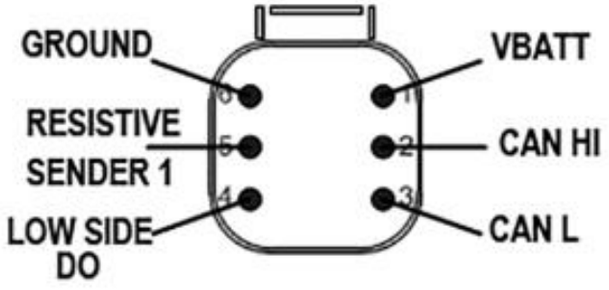
Legend:

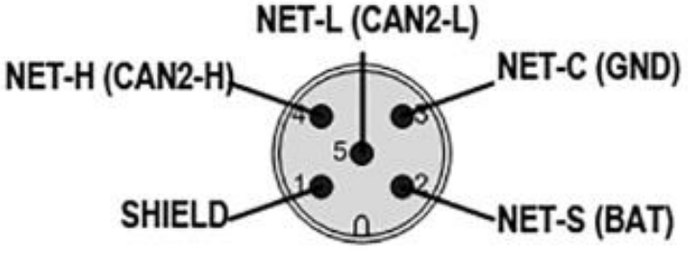
Inches
[Millimeters]

Wiring Information

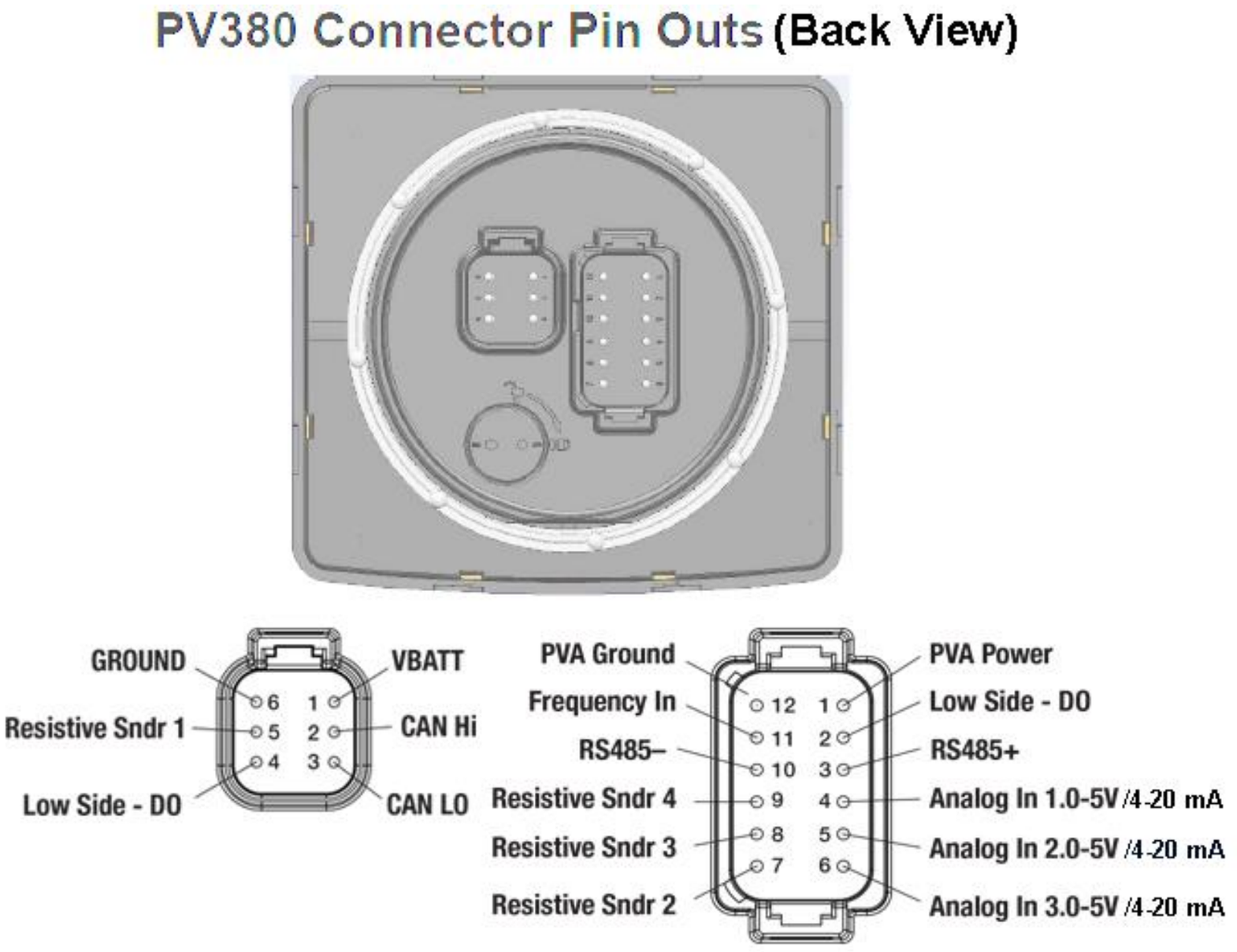
Pin Specifications for PV350







Pin Specifications for PV380



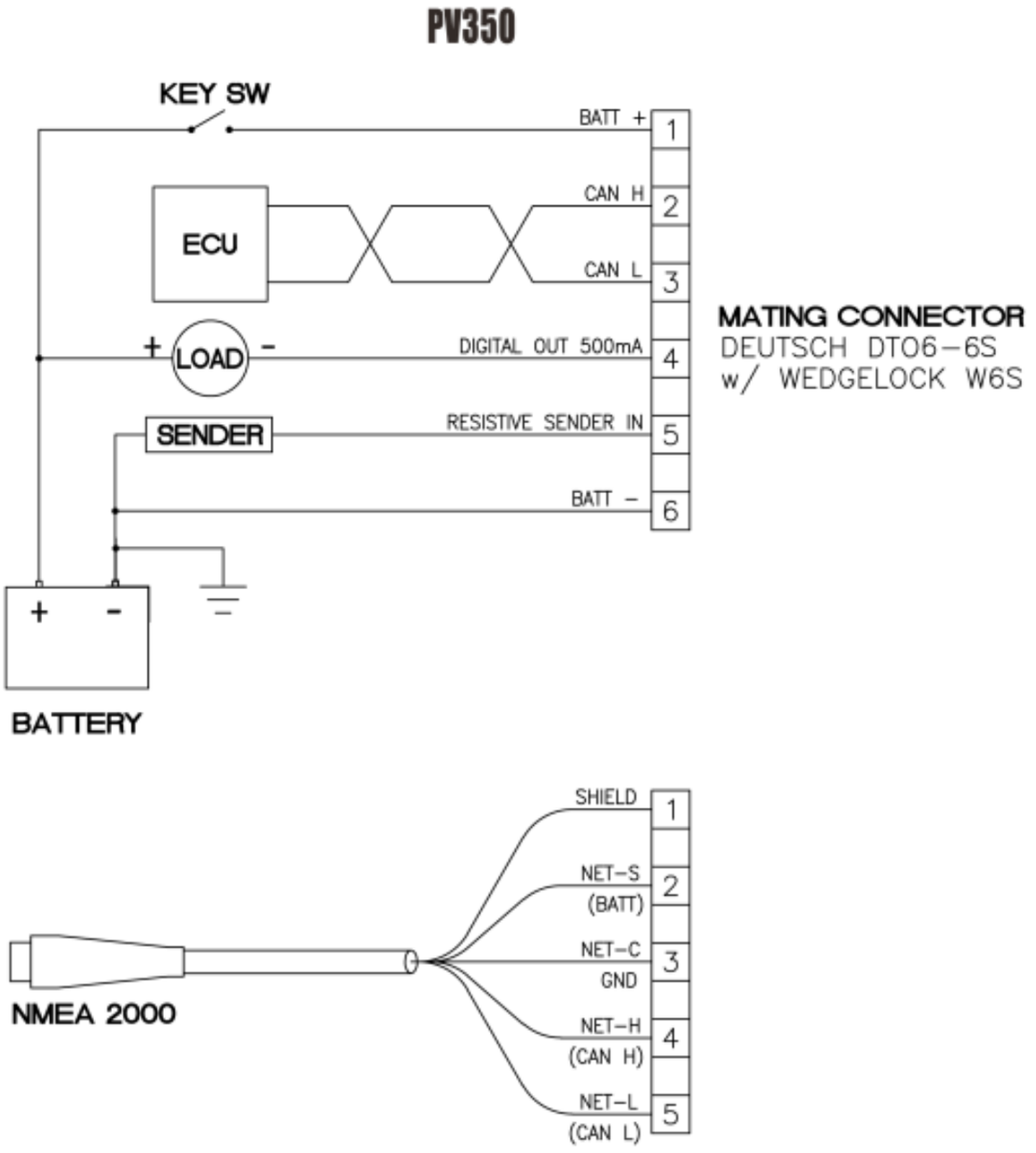
PV350 Mating Connector Part Numbers:

- 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)

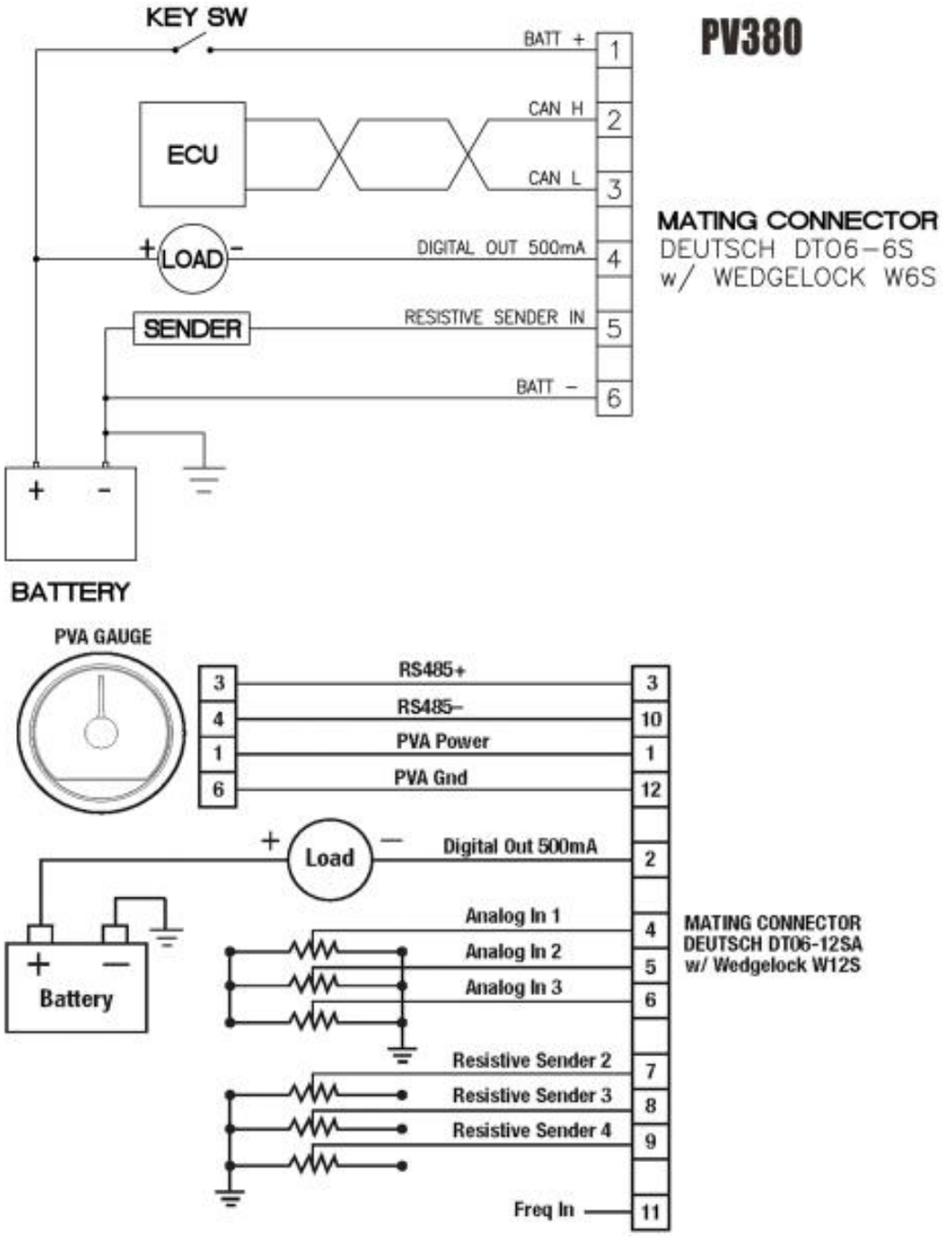
PV380 Mating Connector Part Numbers:

- 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

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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 support.EnovationControls.com/

Then search for PV350 or PV380.

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 (1) 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	-40º C to +85º C
Storage Temperature	-40º C to +85º C
Protection	IP67, front and back, IP66 panel seal

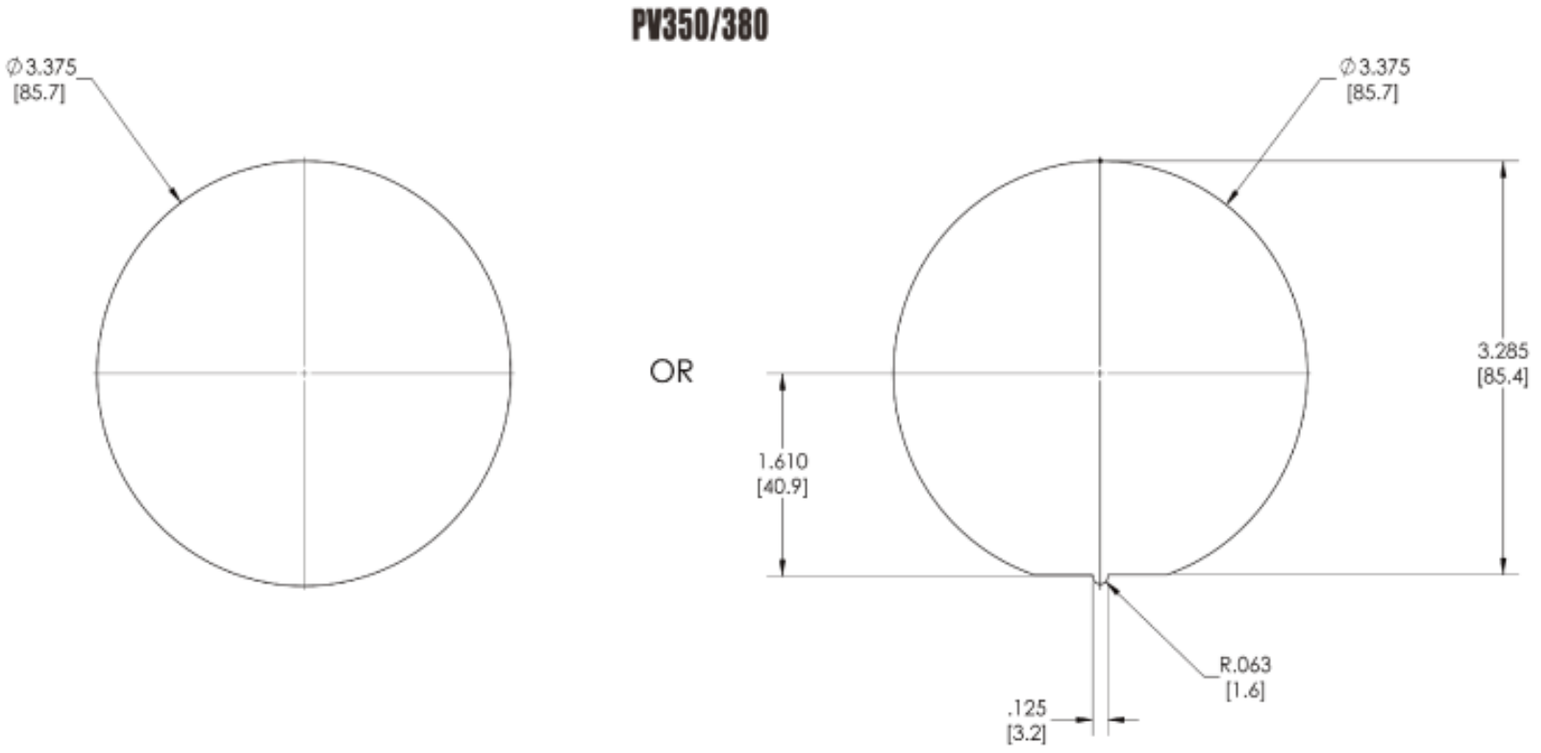
Standards Compliance	Electrical Safety: 2006/95/EC
	Electromagnetic Compatibility:
	• 2004/108/EC:
	  • EN 61000-6-4:2001 (emission)
	  • EN 61000-6-2:2001 (immunity)
	  • EN 50121-3-2 and EN 12895
	• SAE J1113/2, 4, 11, 12, 21, 24, 26 and 41

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

SUN MURPHY INTERNATIONAL TRADING (SHANGHAI) CO., LTD
B15 ROOM, 6# BUILDING, 351 SIZHUAN ROAD
SONGJIANG DISTRICT, SHANGHAI 201601, CHINA

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

U.S. SALES & SUPPORT

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bsi. ISO 9001 Quality Management

FM 28221 (Tulsa, OK - USA)
FM 29422 (UK)