

# CANdrive<sup>™</sup> CANbus J1939 to Electric Gage Interface





#### **Features**

- For modern electronic engines and equipment applications using SAE J1939 Controller Area Network
- Drives standard electric gages
- User configurable compatibility with Murphy, VDO, or Datcon
- Engine fault LED option

As part of the MurphyLink® family, the **Murphy CANdrive** offers a cost effective instrument solution for modern electronic engines. CANdrive acts as an interface between ECU CANbus/J1939 transmitted data and standard electric indicating gages. CANdrive and electric gages are an alternative solution to retrofitting of engine senders, magnetic pickups and associated wiring.

CANdrive has dedicated outputs for a tachometer, oil pressure, and coolant temperature electric gages. Configurable switches allow for selectivity between 12 or 24 VDC systems, and for all gage outputs to be selected as either Murphy, VDO, or Datcon.

CANdrive is packaged in a compact, surface mounted case with epoxy encapsulation for maximum durability and environmental sealing. Electrical connection is via a 12-way automotive-type connector.

#### **How to Order**

Part Number	Model / description
78-70-0363	CDV100F, CANdrive J1939 to electric gage interface. 1x CAN status LED,
	connector forward
78-70-0364	CDV300R, CANdrive J1939 to electric gage interface. 8x status/fault LEDs,
	connector rearward. Model CDVG sealing gasket included.
78-00-0437	CDV-PW-30, CANdrive power and CAN harness. Length: 30 in. (0.762 m).
	Included with CDV100F and CDV300R

# **Typical Connection**



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.

MURPHY, the Murphy logo, MurphyLink® and CANdrive™ are registered and/or common law trademarks of Murphy Industries, Inc. This document, including textual matter and illustrations, is copyright protected by Murphy Industries, Inc., with all rights reserved. (c) 2007 Murphy Industries, Inc.

# **Specifications**

## **Power Supply**

Operating Voltage (user configurable via link L2)

- 12V range (link L2 in place) 7 16 VDC
- 24V range (link L2 cut) 19 30 VDC

# **Current Consumption**

- CDV100: 25mA typ.
- CDV300: 50mA typ. (2 LEDs lit)

## Inputs

CANbus: SAE J1939 protocol. Input has a 120 Ohm terminating resistor, removable by switch S4.

#### Outputs

Oil pressure / coolant temperature: Switch selectable outputs for use with Murphy, VDO or Datcon electric gauges.

Tachometer: pulsed DC, approx. 121 Hz. @ 1500 RPM

# Overall Dimensions (w x h x d):

Case 2.7 x 3.8 x 0.9 in. (68 x 96 x 22 mm)
 (allow 2 in. (50mm) depth with connector)

Weight: approximately 0.18 lb. (80 g)

# **Environmental Sealing:**

CDV100F: IP60

CDV300R: IP65 from front with sealing gasket (included)

**Operating Ambient Temperature.** -40°F to +185°F (-40°C to +85°C)

# **Electric Gage Compatibility**

Output Compatible gages

**Tachometer** Murphy ATA series Tachometers

Murphy ATHA series Tach / Hourmeters

Oil Pressure Murphy EG21P series Electric Pressure Gages

Murphy EGS21P series Electric Pressure Swichgages

VDO 0-5 bar or 0-10 bar pressure gauges Datcon 0-7 bar or 0-10 bar pressure gauges

Coolant Temperature Murphy EG21T series Electric Temperature Gages

Murphy EGS21T series Electric Temperature Swichgages

VDO electric temperature gauges Datcon electric temperature gauges



CALL MURCAL TO PLACE YOUR ORDER



**Warranty** - A limited warranty on materials and workmanship is given with this FW Murphy product. A copy of the warranty may be viewed or printed by going to www.fwmurphy.com/support/warranty.htm