

# Type 8502-1043

The 8502-1043 is a versatile signal amplifier and conditioner that can be used to perform a wide variety of signal scaling and conversion functions. The driver amplifier is conveniently packaged in a compact, standard rail mountable enclosure.

#### **FEATURES:**

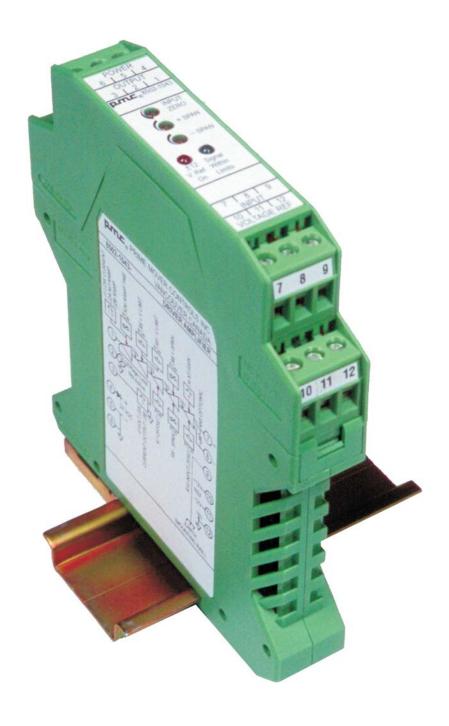
- Integral ± 12 volt reference supplies to power external input potentiometers.
- Accepts standard 0 to 10 V, -10 to 0 to +10 V, 0 to 20 mA, 4 to 20 mA signals as well as many nonstandard signal ranges.
- Provides standard 0 to 10
  V and -10 to 0 to +10 V.
- Product rev. 1 provides 0 to 20 mA, 4 to 20 mA, -20 to 0 to +20 mA and 0 to 100 mA signals.
- Separate Input Zero, Positive Span, Negative Span and Output Offset adjustments.
- Adjustable Positive and Negative output signal limiters.
- Open collector signal limit output for out of range / signal failure detection.
- Adjustable ramp function for filtering and smoothing the units output signal. (rev. 1 only)
- Indicators for Voltage Reference On and Signal Within Limits.(rev. 1 only)

#### **APPLICATIONS:**

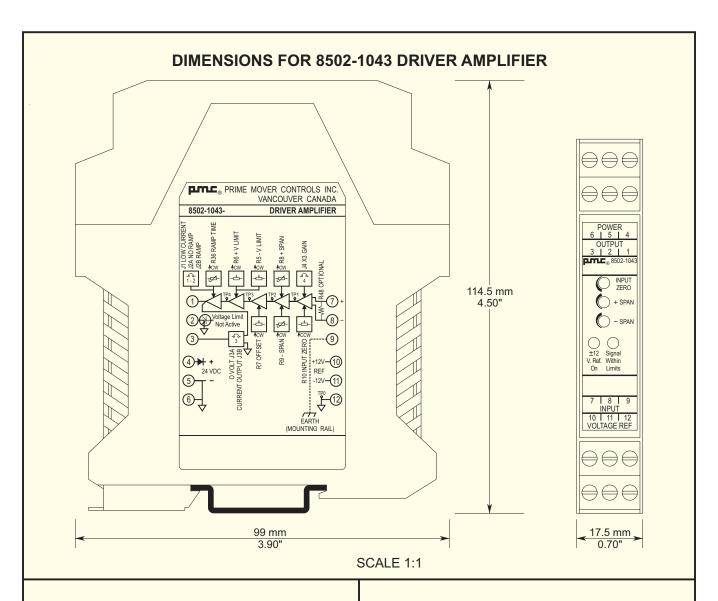
- Propeller pitch indication systems.
- Current to voltage conversion.
- Control signal scaling and limiting.
- · Signal failure detection.

# **DRIVER AMPLIFIER**

**RAIL MOUNT** 



# PRIME MOVER CONTROLS INC.



#### **SPECIFICATIONS:**

## Supply:

- $\bullet$  Nominal 24  $V_{DC}$ , range 18 to 45  $V_{DC}$
- Typical 95 mA nominal, 1 A max
- Reverse voltage protection

#### **Voltage Reference Outputs:**

- $\pm$  12.0 V<sub>DC</sub>, 10 mA max
- Short circuit protected

#### **Signal Output:**

- 75 mA max continuous output \*
- Output voltage range ± 12 V<sub>DC</sub>
- Short circuit protection

#### **Voltage Limit Output:**

- 200 mA, ½ W, 60 V<sub>DC</sub> open collector
- $\bullet$  Deactivated within  $\pm~0.2~V_{\text{\tiny DC}}$  of the voltage limit being activated

#### Ramp Range:

• 0 to 4 V/s ramp

## Input Voltage Range:

• ± 12 V<sub>DC</sub>

#### **Environmental:**

- Operating temperature -20 to +70°C
- Storage temperature -40 to +85°C
- Vibration: Frequency range 3 to 100 Hz

Velocity amplitude 100 mm/sec below

22 Hz

Acceleration amplitude 0.7 g above

22 Hz

## **Physical:**

- IP30 Enclosure
- Dimensions: 99 mm L × 17.5 mm W × 114.5 mm H

 $(3.90" L \times 0.70" W \times 4.50" H)$ 

- Weight, typical 0.15 kg (0.32 lbs)
- Removable terminal blocks for 14 to 20 AWG

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