



# DM3801

## DC INPUT PROPORTIONAL VALVE DRIVER PULSE WIDTH MODULATED OUTPUT

### FEATURES

- Choice of  $\pm 10$  VDC or 4/20 mADC Inputs
- Provides a Bipolar Current Drive for a Current Controlled Valve
- User Write-On Label
- Unpluggable Terminal Blocks
- Standard DIN-Rail Mount with Easy Snap-On Snap-Off
- Connections Readily Accessible from the Front
- Permanent Warranty

### DESCRIPTION

The DM3801 valve driver provides a bipolar current drive to a current controlled valve.

The unit uses a pulse-width modulated square wave output that switches at a high frequency. The duty cycle of the output wave changes to create an average DC current through the valve magnet winding.

The DM3801 valve driver is housed in an aluminum DIN rail mountable case with a stainless steel mounting plate and plastic front panel.

Connections are made via two 4-pin plug-in terminal blocks. These terminal blocks allow the product to be removed without disconnecting the wires.

### TYPICAL APPLICATIONS

Hydraulic proportional valve driver.

### SPECIFICATIONS

#### INPUT

4/20 mADC  
(62 ohm internal shunt)  
-10/10 VDC  
( $>500$  Kilohms impedance)

#### SPAN ADJUSTMENT

$\pm 15\%$  of span

#### ZERO ADJUSTMENT

$\pm 15\%$  of span

#### OUTPUT

-35/35 mADC to -100/100 mADC

#### ACCURACY

$\pm 0.1\%$  of span

#### INPUT TO OUTPUT LINEARITY

$\pm 0.02\%$  of Span

#### STEP RESPONSE TIME

Inductive load dependant  
<10 ms (typical)

#### OUTPUT RIPPLE (Peak-to-Peak)

0.1% of Span

#### COMMON MODE REJECTION

>100 dB, DC to 60 Hz

#### OPERATING TEMPERATURE

14 to 140 °F/-10 to 60 °C

#### TEMPERATURE STABILITY

$\pm(0.02\%$  of span)/°C

#### POWER

115 VAC  $\pm 10\%$  50/60 Hz  
2.5W max

Optional  
24 VDC (21 to 32 VDC)

**ORDERING INFORMATION**

**POWER**

115 VAC, 50/60 Hz Power

**INPUT**

-10/10 VDC

4/20 mADC

**OUTPUT**

**Select Units**

35/60mADC

60/100 mADC

**Enter Output**

Zero Scale

Full Scale

**OPTIONS**

Conformal Coating

**TAGS**

**Specify Tag Numbers**

Tag Number is typed on product label at no charge.

Enter Tag Number(s)

**ACCESSORIES**

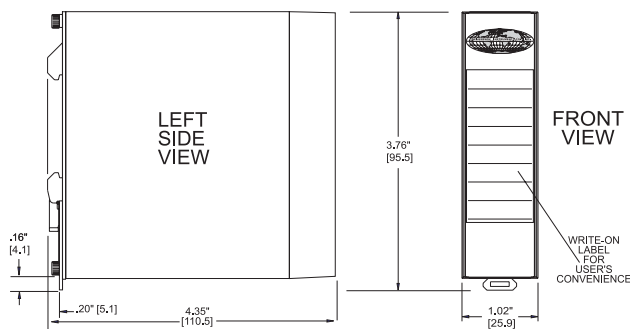
**DM3801**

DR1 DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)

QTY \_\_\_\_\_

**DIMENSIONS**

Inches [mm]



**CONNECTIONS**

Input +	-10/+10 V +
Input -	-10/+10 V -
Input +	4/20 mA +
Input -	4/20 mA -
Output +	Output +
Output -	Output -
L1	Power AC L1
L2	Power AC L2



2915 Parkway Street  
Lakeland, FL 33811-1391 · USA

**800-234-1343**

Tel: 863-647-2000 · Fax: 863-644-5318  
www.wici.com · Email: sales@wici.com