

DM4300A AND DM4300A-HS DC INPUT FIXED RANGE ISOLATED TRANSMITTER

FEATURES

- · User Write-On Label
- High Speed Version with 150 microseconds Response
- Provides a Fully Isolated DC Output Proportional to DC Input
- Plug-In Terminal Blocks

Standard DIN-Rail Mount with Easy Snap-On Snap-Off

- Connections Readily Accessible from the Front
- · Choice of Power Options
- Permanent Warranty

DESCRIPTION

The DM4300A is a fixed range DC to DC isolator that provides an isolated current or voltage output proportional to a current or voltage input.

The DM4300A is also available in a high speed version that is useful in motor control feedback circuits and other applications that require fast response time. All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning. It utilizes a feedback VCO to develop a pulse train with a duty cycle proportional to the input signal amplitude. This pulse train is coupled through a pulse transformer to the output circuitry, where the duty cycle data is converted to a proportional DC output level. Connections are made via two 4-pin terminal blocks. These terminal blocks allow the product to be removed without unwiring the connections.

TYPICAL APPLICATIONS

Useful for motor control feedback and applications requiring fast response time.

SPECIFICATIONS

INPUTRANGE

4/20 mA and 0/10 V $\,$

SPAN ADJUSTMENT

±15% of span

ZEROADJUSTMENT

±15% of span

INPUT IMPEDANCE

4/20 mA: 61.9 ohms 0/10 V: 500 kilohms

OUTPUT RANGE

4/20 mA and 0/10 V

DRIVE CAPABILITY

Voltage 5 mA (2 kilohms at 10V) Current >24 V compliance (1200 ohms max. at 20 mA) OUTPUT RIPPLE (Peak-to-Peak) <0.15% of span

ISOLATION

Output / Input >500 megohms

Breakdown, Output / Input >1000 VAC rms Sinewave

Breakdown, Power / Circuitry >1500 VAC rms Sinewave

RESPONSE TIME (99.9%)

DM4300A 100 ms DM4300A-HS 150 microseconds

ACCURACY

±0.1% of span (exclusive of user-supplied calibration instruments)

LINEARITY

+ 0.02% of span

COMMON MODE REJECTION

>100dB, dc TO 60 Hz

OPERATING TEMPERATURE

14°F to 140°F/-10°C to 60°C

TEMPERATURE STABILITY

<u>+</u> (0.01% of span)/°C

POWER

Standard 115 VAC <u>+</u> 10%, 50/60 Hz 230 VAC + 10%, 50/60 Hz

Optional 115/230 VAC Selectable

±10%, 50/60 Hz 24 VAC ± 10%, 50/60 Hz 24 VDC (21 to 32 VDC) 12 VDC (10 to 16 VDC)

Wattage 2.5 W max

DM4300A AND DM4300A-HS

Wilkerson Instrument Co., Inc.

ORDERING INFORMATION

MODEL

DM4300A DM4300A-HS

POWER

115 VAC, 50/60 Hz Power

- 230 VAC, 50/60 Hz Power
- 24 VAC, 50/60 Hz Power
- 24 VDC, Power, Transformer Isolated
- □ 12 VDC, Power, Transformer Isolated

INPUT

Select Input

□ 0/10 VDC □ 4/20mA

OUTPUT

Select Output

□ 0/10 VDC □ 4/20mA

OPTIONSConformal Coating

TAGS Specify Tag Numbers Tag number is typed on product label at no charge.

Enter Tag Number(s)

ACCESSORIES

DM4300A AND DM4300A-HS

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

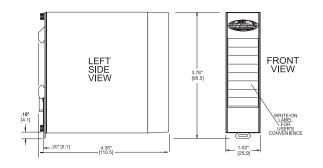
Qty____

TERM 7

TERM 8

DIMENSIONS

Inches [mm]



CONNECTIONSTERM 1Input +TERM 2Input -TERM 3ShieldTERM 4No ConnectionTERM 5Output +TERM 6Output -



Power AC L1 or DC +

Power AC L2 or DC -