

DM6010 AC TRUE RMS INPUT, ISOLATED FIELD RANGEABLE TRANSMITTER

FEATURES

- Spans from 0.16 V rms to 256 Vrms .
- Selectable Response Time & Filter
- Plug-In Terminal Blocks
- Standard DIN-Rail Mount with Easy Snap-On Snap-Off
- **User-Settable Input and** Output Ranges
- **Fully Labeled Jumper Positions** for Easy Range Settings
- **Connections and Ranging** Readily Accessible from the Front
- **Choice of Power Options**
- **User Write-On Label**
- **Permanent Warranty**

DESCRIPTION

The DM6010 provides an isolated voltage or current output proportional to the RMS value of an AC voltage or current input. The true RMS measurement capability allows accurate measurements of distorted sine wave sources as well as complex wave shapes such as a phase angle modulated SCR drive output.

All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptability 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 plug-in terminal blocks. These terminal blocks allow the product to be removed without unwiring the connections.

TYPICAL APPLICATIONS

Useful for measuring and control, accurate AC measurements, and data acquisition.

SPECIFICATIONS

INPUT

Span Voltage 0.016 V to 256 V Current 0.8mA to 100 mA Frequency 47 Hz to 1000 Hz

SPAN ADJUSTMENT +5% to -55% of selected range

ZERO ADJUSTMENT

50% elevated

INPUTIMPEDANCE

Voltage 1 megohm Current 20 ohms

CRESTFACTOR

PEAK/RMS + 6.3 max (±1% accuracy)

OUTPUT Voltage

Current (mA) 0/1 0/4 4/20 0/20 -10/+10

OUTPUT LOGIC

0/.25

0/1

1/5

0/5

0/10

-5/+5

Normal or Reverse Acting

DRIVE CAPABILITY Voltage: 5 mA Current: >24 Compliance

OUTPUT RIPPLE (Peak-to-Peak) <0.1% of full scale

ISOLATION

Resistance >500 megohms Voltage Rating >1000 VAC rms Sinewave

ACCURACY

±0.3% of span

OPERATING TEMPERATURE

14 to 140 °F/-10 to +60 °C

TEMPERATURE STABILITY

±(0.01% of span) /°C

POWER

Standard 115 VAC ± 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

For inputs above 100 mA, use P/N689 0.1 ohm Shunt.

DM6010	Wi	Ikerson Instrument Co., Inc.	Copy and Fax to Place Order.
ORDERING INFORMATION			
POWER 115 VAC, 50/60 Hz Po 230 VAC, 50/60 Hz Po 24 VAC, 50/60 Hz Po 24 VDC Power, Transf 12 VDC Power, Transf INPUT Select Units VAC mAAC AA Enter Input Cero Scale Full Scale OUTPUT Select Units VDC mADC	ower wer ormer Isolated ormer Isolated	OPTIONS Conformal Coating TAGS Specify Tag Numbers Tag number is typed on product label at no charge. Enter Tag Number(s)	
Enter Output Zero Scale Full Scale)		
ACCESSORIES			
DM6010 DR1 DIN-Rail, 3	35 mm Symmetrica	al, 39 inches (1 meter) Q	TY

DIMENSIONS Inches [mm]



CONNECTIONS

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TERM HI V	High Range Input
TERM Common	Input Common
TERM Common	Input Common
TERM LO V /CUR	Low Range Input
TERM Output +	Output +
TERM Output -	Output -
TERM L1	Power AC L1 or DC +
TERM L2	Power AC L2 or DC -



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