



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

OUTPUT LOGIC

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.

ORDERING INFORMATION

POWER

115 VAC, 50/60 Hz Power230 VAC, 50/60 Hz Power

☐ 24 VAC, 50/60 Hz Power

☐ 24 VDC Power, Transformer Isolated

☐ 12 VDC Power, Transformer Isolated

INPUT

Select Units

□ VAC □ mAAC □ AAC

Enter Input

Zero Scale

Full Scale

OUTPUT

Select Units

☐ VDC ☐ 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)

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ACCESSORIES

DM6010

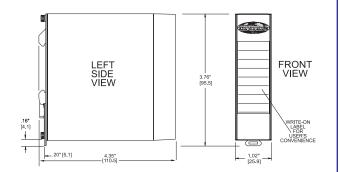
DR1

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

QTY

DIMENSIONS

Inches [mm]



CONNECTIONS

TERM HI V High Range Input
TERM Common Input Common
TERM Common Input Common
TERM LO V /CUR Low Range Input
TERM Output +

TERM Output + Output + TERM Output - Output -

TERM L1 Power AC L1 or DC + TERM L2 Power AC L2 or DC -



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