



MM4420

DC INPUT DIVIDER TRANSMITTER

OUTPUT = A / B

FEATURES

- Provides DC Output Proportional to the Quotient (Ratio) of Two DC Inputs (Output = A/B)
- Fully Isolated Output Available
- 1 V or 1 mA Minimum Input Span
- Unlimited* Choice of Input/ Output Ranges
- Choice of Power Options
- 10 Year Warranty

DESCRIPTION

The MM4420 provides a DC output voltage or current proportional to the quotient (ratio) of two DC inputs. Typical input ranges are 4/20 mA, 10/50 mA, 0-1 V, 0-5 V, and 0-10 VDC. Other ranges are available down to minimum spans of 1 V or 1 mA DC. Standard calibration provides the output at full scale (100%) when both inputs are at full scale (100%). Other calibrations are available.

All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning.

TYPICAL APPLICATIONS

Controlling relative speed, mixing rates, compensating flow readings for temperature changes (mass flow = flow rate/temperature), etc.

SPECIFICATIONS

INPUT RANGE

Voltage

select any range between
±250 V max (min span 1 V)

Typical inputs:

0-1 V, 0-5 V, 0-10 V

Current

select any range between
±100 mA max
(min span 1 mA)

Typical inputs:

4/20 mA or 10/50 mA

INPUT IMPEDANCE

Voltage

100 kilohms min

Current

1.25 V drop typical
others available

OUTPUT RANGE

Voltage

select any range from
-10 V to +15 V, 10 mA max load
(min span 0.2 V)

Current

select any range from 0 to
50 mA max, 24 V compliance
(1200 ohms at 12 mA max)

18 V compliance for ISO option
if full scale output >20 mA

RESPONSE TIME

(Range Dependent)

≤ 150 ms

ACCURACY

Inputs @ ≥10%
± 0.25% of span

ISOLATION (Optional)

Output / Input

>500 megohms

Breakdown Voltage

>1000 VAC rms

Breakdown, Power / Circuitry

>1500 VAC rms

OUTPUT RIPPLE (Peak-to-Peak)

<0.1% of span

OPERATING TEMPERATURE

14°F to 140°F / -10°C to 60°C

TEMPERATURE STABILITY

±0.02% of span/°C max

POWER

115 VAC ±10%, 50 or 60 Hz
(2.5 W max)

230 VAC ±10%, 50 or 60 Hz
(2.5 W max)

(DC Power Option)

24 VDC (limits 21 VDC to
32 VDC) (2.5 W max)

12 VDC

Isolation, DC power supply to
input common: 10 megohms

* Within specified range limits.

ORDERING INFORMATION

POWER

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

INPUT

Select Units

- VDC mADC

Enter Input

Zero Scale

Full Scale

OUTPUT

Select Units

- VDC mADC

Enter Output

Zero Scale

Full Scale

OPTIONS

- Conformal Coating
- Isolation

TAGS

Specify Tag Numbers

Tag number is typed on product label at no charge.

Enter Tag Number(s)

Attach equation that defines the math function desired. Also include any tables or charts.

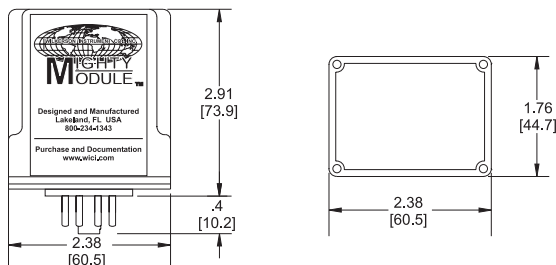
ACCESSORIES

MM4420

DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	QTY _____
MP008	Plastic Socket, 8-pin Panel Mount or PVC Snap Track	QTY _____
TRK48	PVC Snap-Track, 4 ft. (MP008, MP011 & DMP8500)	QTY _____
DMP008	DIN-Rail Mounting Socket, 8-pin, 35 mm Symmetrical Rail	QTY _____
CLP1	Holddown Assembly for MP008 and MP011	QTY _____
HKB-HK2D-8	Explosion-Proof Housing with MP008 Installed	QTY _____

DIMENSIONS

Inches [mm]



CONNECTIONS

PIN 1	AC L1 or DC +
PIN 2	No Connection
PIN 3	AC L2 or DC -
PIN 4	Input B +
PIN 5	Input A +
PIN 6	Input -
PIN 7	Output +
PIN 8	Output -



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