



# MM1005

## 4 to 20 mA SINGLE ALARM WITH 24 VDC POWER SUPPLY FOR TWO-WIRE TRANSMITTER

### FEATURES

- Provides a DPDT Relay Contact Closure at a Preset DC Current Input
- Standard Fail-Safe Operation
- Red and Green LED Alarm Status Indicators
- Adjustable Deadband
- 24 VDC Power Supply for Two-Wire Transmitters
- 4/20 mA Input Range
- 10 Year Warranty

### DESCRIPTION

The MM1005 monitors a DC current input and trips a dpdt, 5 A relay when the input exceeds the desired level. Normal operation has the relay energized for the non-alarm condition and it de-energizes for an alarm condition. This provides a fail-safe alarm condition for loss of power to the module. The alarm has a set of red/green LEDs to indicate alarm status.

The module contains a 24 VDC transmitter power supply specifically designed for use with two-wire and other 24 VDC powered transmitters. The deadband adjustment allows a deadband of 0.5% to 100% of span to be set into the module. The deadband is symmetrical about the setpoint.

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

#### TYPICAL APPLICATIONS

HI/LO pressure alarm, level/position control, temperature alarm, etc.

### SPECIFICATIONS

#### INPUT RANGE

4/20 mA

#### INPUT IMPEDANCE

61.9 ohms

#### TRANSMITTER POWER SUPPLY

24 VDC regulated,  
30 mA max

#### SETPOINT

0 to 100% of span

#### DEADBAND

0.5% to 100% of span

#### RELAY CONTACTS (dpdt)

Resistive Load  
5 A max, 150 W max,  
220 VAC max, 30 VDC max

Inductive Load  
(Power Factor  $\geq$  0.4)  
2.5 max, 75 W max,  
220 VAC max, 30 VDC max

#### TRANSISTOR OUTPUT (Option V)

Relay driver  
(12 V coil,  $\geq$  220 ohms)  
or open-collector outputs sink  
100 mA, 30 V supply max

#### RESPONSE TIME

20 ms typical

#### ACCURACY

$\pm$ 0.1% of span or 10  $\mu$ V  
whichever is greater

#### COMMON MODE REJECTION

120 dB, DC to 60 Hz

#### OPERATING TEMPERATURE

14°F to 140°F/-10°C to 60°C

#### TEMPERATURE STABILITY

$\pm$ (0.02% of span + 30  $\mu$ V)/°C  
max

#### POWER

115 VAC  $\pm$ 10%, 50 or 60 Hz  
(2.5 W max)  
230 VAC  $\pm$ 10%, 50 or 60 Hz  
(2.5 W max)

**ORDERING INFORMATION**

**POWER**

- 115 VAC, 50/60 Hz Power
- 230 VAC, 50/60 Hz Power

**ALARMS**

**Alarm Selection - Output**

- Relay
- Transistor, O.C.

**Alarm Type**

- High  Low

**Alarm Logic**

- Normal - De-energize On Alarm
- Reverse - Energize On Alarm

**Enter Setpoint Input Level**

Setpoint 1

**OPTIONS**

- Conformal Coating

**TAGS**

**Specify Tag Numbers**

Tag number is typed on product label at no charge.

**Enter Tag Number(s)**

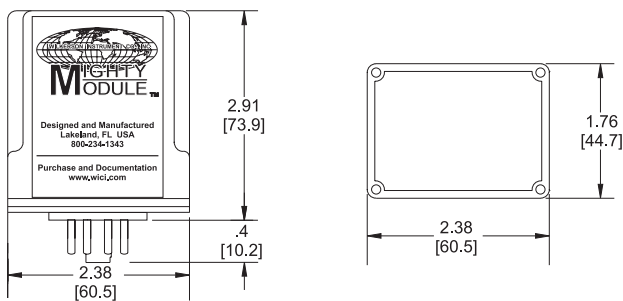
**ACCESSORIES**

**MM1005**

DR1	DIN-Rail, 35 mm Symmetrical, 39 inches (1 meter)	Qty _____
MP011	Plastic Socket, 11-Pin, Panel Mount or PVC Snap Track	Qty _____
TRK48	PVC Snap-Track, 4 ft, for MP008, MP011, & DMP8500	Qty _____
DMP011	DIN-Rail Mounting Socket, 11-Pin, 35 mm Symmetrical Rail	Qty _____
CLP1	Holddown Assembly for MP008 and MP011	Qty _____
HKB-HK2D-11	Explosion-Proof Housing with MP011 Installed	Qty _____

**DIMENSIONS**

Inches [mm]



**CONNECTIONS**

PIN 1	Power AC L1
PIN 2	24 VDC +
PIN 3	Power AC L2
PIN 4	Input +
PIN 5	Input - & 24 VDC -
PIN 6	Relay Set 1 NO
PIN 7	Relay Set 1 C
PIN 8	Relay Set 1 NC
PIN 9	Relay Set 2 NO
PIN 10	Relay Set 2 C
PIN 11	Relay Set 2 NC