



MM1800

POTENTIOMETER POSITION INPUT

SINGLE ALARM

FEATURES

- Provides a DPDT Relay Contact Closure at a Preset Potentiometer Position Input
- Potentiometer Values from 100 ohms to 100 kilohms
- Standard Fail-Safe Operation
- Adjustable Deadband
- Red and Green LED Alarm Status Indicators
- Latching Alarm Available (MM1810)
- Unlimited* Choice of Input Ranges
- Choice of Power Options
- 10 Year Warranty

DESCRIPTION

The MM1800 monitors the slide position of a potentiometer 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 de-energized 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.

A 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.

With the latching alarm option, the latching alarm has no deadband control. Once the limit has been reached the alarm latches and power to the module must be momentarily interrupted to reset the alarm.

All Wilkerson products are designed with RFI filters and lightning protection to reduce susceptibility to electrical noise and damage by lightning. They also utilize a stable 1 V power supply to excite the potentiometer. Any value potentiometer from 100 ohms to 100 kilohms can be used.

TYPICAL APPLICATIONS

Tank level, valve or actuator control, monitoring or warning.

SPECIFICATIONS

INPUT POTENTIOMETER RESISTANCE

any value from 100 ohms to 100 kilohms

SPAN ADJUSTMENT

70% to 100% of pot rotation

OFFSET ADJUSTMENT

0 to 25% of pot rotation

INPUT IMPEDANCE

>10 megohms

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, 30 VDC max

Inductive Load

(Power Factor ≥ 0.4)
2.5 A max, 75 W max, 220 VAC max, 30 VDC max

TRANSISTOR OUTPUT

(Option V)

relay driver

(12 V coil, ≥ 220 ohms)

or open-collector

outputs sink 100 mA, 30 V supply max

EXCITATION

1 V, 10 mA max load

RESPONSE TIME

20 ms typical

ACCURACY

$\pm 0.1\%$ of span

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/°C max

POWER

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

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

(DC Power Option)

24 VDC (limits 21-32 VDC)

12 VDC (limits 10-16 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

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

TAGS

Specify Tag Numbers

Tag Number is typed on product label at no charge.

Enter Tag Number(s)

OPTIONS

- Conformal Coating

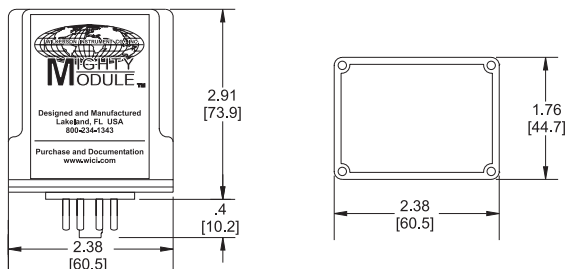
ACCESSORIES

MM1800

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	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 or DC +
- PIN 2 Potentiometer Input FS
- PIN 3 Power AC L2 or DC -
- PIN 4 Potentiometer Input Zero
- PIN 5 Potentiometer Input Wiper
- 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