



MM1820

POTENTIOMETER POSITION INPUT DUAL ALARM

FEATURES

- Provides Relay Contact Closures at a Present Potentiometer Position Input
- Potentiometer Values from 100 ohms to 100 kilohms
- Fail-Safe, Latching and Adjustable Deadband Available
- Red and Green LED Alarm Status Indicators
- Unlimited* Choice of Input Ranges
- Choice of Power Options
- 10 Year Warranty

DESCRIPTION

The MM1820 monitors the slide position of a potentiometer and provides two sets of spdt, 5 A alarm relays with two independently adjustable setpoints. Each setpoint has a set of red/green LEDs to indicate alarm status. When the signal exceeds a particular setpoint, the relay becomes energized. To provide a “fail-safe” operation (loss of power resulting in alarm state), select Option R. The module can be supplied as a HI/HI,

HI/LO, or LO/LO alarm (HI/LO supplied if not specified).

Standard deadband on both alarms is fixed at 0.5% of span. (Option A provides adjustable deadband of 0.5% to 100% of span.) Option D, latching alarms 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 position 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

each alarm 0 to 100% of span

DEADBAND

Standard

fixed 0.5% of span

(Option A)

0.5% to 100% of span

(Option D)

Latching. Interrupt power to reset.

RELAY CONTACTS (spdt)

Resistive Load

5 A max, 150 W max,
240 VAC, 30 VDC max

Inductive Load

1/8 HP max at
120/240 VAC

TRANSISTOR OUTPUT

(Option V)

open-collector, sink 100 mA,
30 V supply max

EXCITATION

1 V, 10 mA max load

RESPONSE TIME

20 ms typical

ACCURACY

±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

±0.02% of span/°C max

POWER

115 VAC ±10%, 50/60 Hz
(2.5 W max)

230 VAC ±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
- High/High
- Low/Low

Alarm Logic

- Normal - Energize on Alarm
- Reverse - De-energize on Alarm

Enter Setpoint - Input Level

Setpoint 1

Setpoint 2

Adjustable Deadband (Option A)

- Yes No

OPTIONS

- Conformal Coating

TAGS

Specify Tag Numbers

Tag Number is typed on product label at no charge.

Enter Tag Number(s)

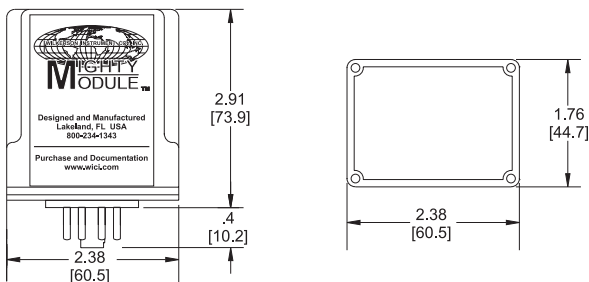
ACCESSORIES

MM1820

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 1 NO
PIN 7	Relay 1 C
PIN 8	Relay 1 NC
PIN 9	Relay 2 NO
PIN 10	Relay 2 C
PIN 11	Relay 2 NC