MM1620

AC INPUT
DUAL ALARM

FEATURES

- **Provides Relay Contact Closures at Preset AC Input**
- **Fail-Safe, Latching and Adjustable Deadband Available**
- **Red and Green LED Alarm Status Indicators**
- **50 mV or 1 mA Minimum Input Span**
- **Unlimited* Choice of Input Ranges**
- **Choice of Power Options**
- **10 Year Warranty**

DESCRIPTION

The MM1620 monitors an AC input signal 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 input is between the setpoints, the relays are normally de-energized. When the signal exceeds a particular setpoint, the relay becomes energized. To provide a "fail-safe" operation (loss of power resulting in an 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.

TYPICAL APPLICATIONS

AC motor/current limit, AC power status or demand warning.

SPECIFICATIONS

INPUT RANGE

Voltage
select any range from
0 to 250 V rms max
(min span 50 mV)

Current
select any range from
0 to 1 A rms max**
(min span 1 mA, internal shunt)

INPUT FREQUENCY

40 Hz to 1 kHz Sinewave

INPUT IMPEDANCE

Voltage
200 kilohms

Current

Current Input	Current Shunt Value
1 mA	100 OHM
10 mA	10 OHM
20 mA	5 OHM
100 mA	1 OHM
1 A	0.1 OHM

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 max, 30 VDC max

Inductive Load
1/8 HP max at 120/240 VAC

TRANSISTOR OUTPUT

(Option V)
relay driver
(12 V coil, ≥ 220ohms)
or open-collect or outputs sink
100 mA, 30 V supply max

RESPONSE TIME

1 sec typical

ACCURACY

±0.5% 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.*

*** For input values greater than 1 A rms select appropriate external shunt resistor and use with 0-500 mV rms input.*

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
☐ VAC ☐ mAAC ☐ AAC
Enter Input
☐ Zero Scale
☐ Full Scale

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)

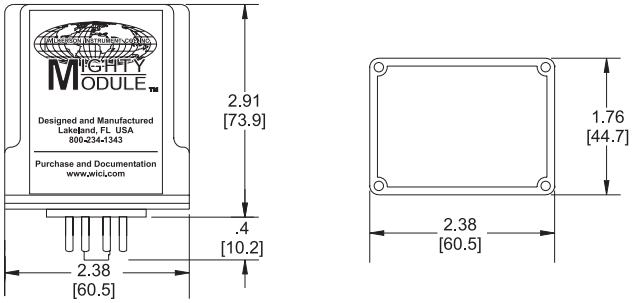
ACCESSORIES

MM1620

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. (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 or DC +
PIN 2	No Connection
PIN 3	Power AC L2 or DC -
PIN 4	Input Signal
PIN 5	Input Common
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

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