



MM1720

FREQUENCY INPUT DUAL ALARM

FEATURES

- Provides Relay Contact Closures at Preset Frequency Input
- Fail-Safe, Latching, and Adjustable Deadband Available
- Red and Green LED Alarm Status Indicators
- Frequency Limit 60 kHz
- 50 mV to 100 V Peak Input Sensitivity
- Adjustable Threshold for Low Level Noise Rejection
- Unlimited* Choice of Input/Output Ranges
- Input Pullup Resistor Available
- Choice of Power Options
- 10 Year Warranty

DESCRIPTION

The MM1720 monitors a frequency 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 relays become 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.

The wide range of input sensitivity allows the MM1720 to be driven from low level magnetic pickups as well as logic level signals. A threshold adjustment sets the minimum input amplitude the module will process. This allows the user to trade off sensitivity versus

noise rejection. An optional pullup resistor (Option P) permits use with contact-closure or open-collector inputs.

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

TYPICAL APPLICATIONS

Flow, speed of motors, conveyors, etc. control HI/LO limit alarm.

SPECIFICATIONS

INPUT RANGE

select any range from 0 to 10 Hz
min to 0 to 60 kHz max

INPUT SENSITIVITY

any voltage from 50 mV to 100 V
peak

INPUT IMPEDANCE

100 kilohms

OPTION P

Pullup resistor to + input
10 kilohms

Open-circuit voltage
+12 VDC

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, ± 220 ohms) or
open-collector outputs sink
100 mA, 30 V supply max

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

INPUT

Specify Input - Select Units

- Hz KHz

Enter Input

Zero Scale

Full Scale

ALARM

Alarm Selection - Output

- Relay Transistor, O.C.

AlarmType

- 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)

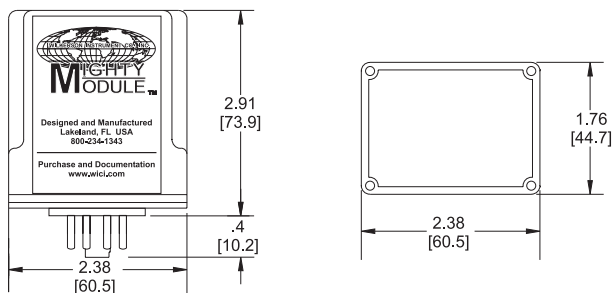
ACCESSORIES

MM1720

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 MP008 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 +
- PIN 5 Input -
- 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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