

Motion Failure Detector

DZM

- Detect failure of rotating or reciprocating machines
- 3 Decade digital setting accuracy
- Proximity switch or contact input
- Relay output— 2 pole 8 amp @ 230 vac
- DC or AC powered versions
- Wide selection of time ranges
- Plug in or panel mounting
- 12 VDC output to power sensors etc.



DESCRIPTION

The DZM range of motion failure detectors can be used to monitor any rotating or reciprocating machinery by using a sensor or switch and will provide an output signal when the time between signal pulses falls below the required level. The wide time ranges available allows the monitoring of fast or slow events—up to 9.99 hours between events.

The DZM may be panel mounted using the supplied clamp or plugged into a standard 11 pin socket

MODE OF OPERATION

When power is applied the relay energises and a time period starts. If no input pulse is received within the set time (Adjusted using the decade switches on the instrument) the relay de-energises. Any input pulse restarts the time period from zero and prevents the relay de-energising. If the DZM has timed out then any subsequent pulse will re-energise the relay and restart the time period. Optional latching versions will not reset once timed out and require the removal of power to do so.

SPECIFICATION

Power Input: 115 or 230 VAC 50-60 Hz or 14 to 35 VDC @ 50 mA

DC Output: 12 VDC @ 50 mA max for powering sensors etc

Input Signal: PNP type (1000 ohms to 0v) maximum input voltage 35V

Input Pulse Rate: 0 to 5000 pulses per second

Min Pulse Width: 100 micro seconds

Time Ranges: 6 ranges from 0.01 seconds to 9.99 hours

Time Setting: 3 decade digital push-push switches

Relay: Double pole change over rated at 8 amps @ 230VAC

Dimensions: 48 x 48 x 120 mm (112 behind panel)

Panel cut-out 45 x 45 mm

Indication: Red LED for power supply indication

Green LED for relay indication

Time Ranges

 Range 1 (order code 1)
 :
 0.01 - 9.99 seconds

 Range 2 (order code 2)
 :
 0.1 - 99.9 seconds

 Range 3 (order code 3)
 :
 1 - 99.9 seconds

 Range 4 (order code 4)
 :
 0.1 - 99.9 minutes

 Range 5 (order code 5)
 :
 0.1 - 9.99 hours

Options

Supply: 12—30 VDC power (order code— add suffix 24)

115 VAC power (order code—add suffix 115) 230 VAC power (order code—add suffix 230)

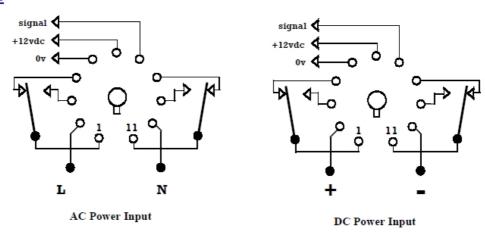
Reverse operation: Relay de-energised during normal non-fail operation (order code—add suffix R)

NPN input type: 1000 ohm pull up to +12V (order code– add suffix N)

Latching: Once timed out the relay is not reset by subsequent inputs pulses and only

resets with removal of power supply (Order code - add suffix L)

Connections



Order code: {type}-{timer range}-{power supply}-{Option}

i.e. DZM.4.115, DZM.2.24.R.L