

DC INPUT ALARM TRIPS

ISOLATED, FIELD CONFIGURABLE

**Input: 0-50 mV to ± 10 Vdc,
0-1 mA to 4-20 mADC**

Output: Two 8 Amp DPST Relays

DMD1080

- ✓ One Minute Setup for 24 Input Ranges
- ✓ Switch Selectable Relay Configuration
- ✓ Removable Plugs for Faster Installation
- ✓ Input Tracker and Alarms Status LEDs
- ✓ Full 1200V Isolation
- ✓ Alarm Test/Reset Button
- ✓ Built-In Loop Power Supply for Sink/Source Input

Applications

- ✓ Process Limit Backup Alarm
- ✓ Tank Level Alarm
- ✓ Process Signal Over, Under, Out-of-Range Alarm

The DMD1080 accepts a DC voltage or current input and provides visual alarm indication and alarm relay contact outputs. 15 voltage and 9 current input ranges can be field configured via external rotary and slide switches. Offset ranges such as 1 to 5 Vdc and 4 to 20 mA are also included. Heavy-duty relay contacts allow the module to directly control high capacity loads. Front accessible potentiometers are used to adjust the alarm setpoint from 0 to 100% and the deadband from 1 to 100%. The unit provides a single setpoint adjustment of the two DPST relay contacts. The alarm output can be field configured for HI or LO operation, latching or non-latching, and normal or reverse acting.

SPECIFICATIONS

Input Ranges: 24 field selectable ranges via switch settings

Voltage: 0-50 mV to 0-10 Vdc

Bipolar Voltage: ± 5 Vdc or ± 10 Vdc

Current: 0-1 mADC to 0-20 mADC, 4-20 mADC

Input Impedance and Burden:

Voltage: 250 k Ω minimum

Current: 50 Ω typical

Voltage Burden: 1 Vdc at 20 mA current input

Isolation:

1200V Isolation: power to input 600 Vac or 600 Vdc common mode protection

Input Loop Power Supply:

15 Vdc $\pm 10\%$, 25 mADC

maximum ripple, less than 10 mV rms may be wired for sinking or sourcing mA input

Relay Output: Single setpoint dual DPST contacts, field configurable; 2 Form A (NO) and Form B (NC) contact sets (8 terminals) may be wired for C Form operation

Relay Contact Ratings:

8 Amps @ 240 Vac resistive load

5 Amps @ 240 Vac inductive load

8 Amps @ 30 Vdc resistive load

3.5 Amps @ 30 Vdc inductive external contact protection such as a RC snubber is recommended for inductive loads

Set Point: 12 turn potentiometer adjustable from 0 to 100% of span

Deadband: 12 turn potentiometer adjustable from 1 to 100% of span

Response Time: 70 milliseconds typical

Functional Test/Reset Button:

Toggles relay to opposite state when pressed; resets latching relay if latching relay mode is selected

Ambient Temperature Range and Stability:

-10 to 60°C (14 to 140°F) operating ambient; better than 1% of span over operating temperature range; better than 0.02% of span per °C

Power: 60 to 265 Vac, 50/60 Hz or 85 to 300 Vdc, 2W maximum

DC Versions: 9 to 30 Vdc or 10 to 32 Vac, 50/60 Hz, 2W maximum

Housing: Mounts to standard 35 mm DIN rail, IP40 rating

Connectors: Four 4-terminal removable connectors 14 AWG maximum wire size

Dimensions:

22.5 W x 117 H x 122 mm D (0.89 x 4.62 x 4.81")



DMD1080 shown actual size.

INSTRUMENTATION

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To Order	
MODEL NO.	DESCRIPTION
DMD1080	Standard power input, DC input alarm trip, isolated, field configurable
DMD1080-DC	Low power input, DC input alarm trip, isolated, field configurable

ACCESSORIES	
MODEL NO.	DESCRIPTION
DRTB-RAIL-3575	DIN rail, 35 mm x 7.5 mm (1.4 x 0.30") slotted, 2 m (6.6') length
DRTB-RAIL-3515	DIN rail, 35 mm x 15 mm (1.4 x 0.60") slotted, 2 m (6.6') length

Comes complete with operator's manual.

Ordering Example: DMD1080, standard power, DC input alarm trip.