

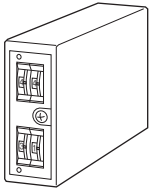
Dual Output Super-mini Signal Conditioners Pico-M Series

DC ALARM

(thumbwheel switch adjustment, CE)

Functions & Features

- Providing relay outputs at preset DC input levels
- Dual (Hi/Lo) trip
- Thumbwheel switch setpoint adjustments
- Space-saving, easy-to-maintain, multi-channel installation base



MODEL: M8SED1-[1][2][3]-R[4]

ORDERING INFORMATION

- Code number: M8SED1-[1][2][3]-R[4]
Specify a code from below for each [1] through [4].
(e.g. M8SED1-A12-R/Q)
- Specify the specification for option code /Q
(e.g. /C01)

[1] INPUT

Current

A: 4 - 20 mA DC (Input resistance 250 Ω)

Voltage

4: 0 - 10 V DC (Input resistance 1 MΩ min.)

5: 0 - 5 V DC (Input resistance 1 MΩ min.)

6: 1 - 5 V DC (Input resistance 1 MΩ min.)

[2] OUTPUT 1

1: Hi trip (ON = tripped; OFF = untripped or no power)

2: Hi trip (OFF = tripped; ON = untripped or no power)

[3] OUTPUT2

1: Lo trip (ON = tripped; OFF = untripped or no power)

2: Lo trip (OFF = tripped; ON = untripped or no power)

POWER INPUT

DC Power

R: 24 V DC

(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[4] OPTIONS

blank: none

/Q: With options (specify the specification)

SPECIFICATIONS OF OPTION: Q

COATING (For the detail, refer to M-System's web site.)

/C01: Silicone coating

/C02: Polyurethane coating

/C03: Rubber coating

RELATED PRODUCTS

- Installation Base or Single Mount Base Socket (model: M8BSx)

This unit must be mounted on dedicated base or socket except Model M8BS2 base.

GENERAL SPECIFICATIONS

Construction: Plug-in

Mounting screw: M3 screw (torque 0.3 N·m)

Housing material: Flame-resistant resin (black)

Power supply: Via the Installation Base terminals (model: M8BSx)

Isolation: Input to output 1 to output 2 to power

Setpoint adjustments: Thumbwheel switches (front);

0 - 99 % independently; 1 % increments;

(factory setting: 50 %)

Hysteresis (deadband): Approx. 1 %

Front LEDs: Red light turns on when the coil for Hi output is energized.

Green light turns on when the coil for Lo output is energized.

Power ON timer: Relays de-energized for approx. 2 seconds after power is turned on.

INPUT SPECIFICATIONS

- DC Current: Input resistor incorporated

OUTPUT SPECIFICATIONS

- **Relay contact:** 30 V DC @0.5 A (resistive load) *

Maximum switching voltage: 60 V DC

Maximum switching power: 15 W (≤ 0.5 A)

Minimum load: 100 mV DC @100 μA

Mechanical life: 5 × 10⁶ cycles

* When used with a multi-channel installation base (e.g. M8BS-16), the ratings derated as following.

Terminal block type: 30 V DC @0.25 A

Cable connector type: 24 V DC @50 mA



	TRIP ACTION	OUT CODE	POWERED		UNPOWERED
			INP < SET	INP > SET	
OUT 1	Hi	1	OFF	ON	OFF
	Hi	2	ON	OFF	ON
OUT 2	Lo	1	ON	OFF	OFF
	Lo	2	OFF	ON	ON

INSTALLATION

Current consumption: Approx. 60 mA

Operating temperature: 0 to 55°C (32 to 131°F)

Operating humidity: 30 to 95 %RH (non-condensing)

Mounting: Installation Base (model: M8BSx)

Weight: 70 g (2.5 oz)

PERFORMANCE in percentage of span

Setpoint accuracy: $\pm 0.5\%$

Trip point repeatability: $\pm 0.05\%$

Temp. coefficient: $\pm 0.02\%/^{\circ}\text{C}$ ($\pm 0.01\%/^{\circ}\text{F}$)

Response time: ≤ 0.7 sec. (0 - 100 % at 90 % setpoint)

Line voltage effect: $\pm 0.1\%$ over voltage range

Insulation resistance: $\geq 100\text{ M}\Omega$ with 500 V DC

Dielectric strength: 1500 V AC @1 minute (input to output 1 to output 2 to power to ground)

SWC test: ANSI/IEEE-C37.90.1-1989

STANDARDS & APPROVALS

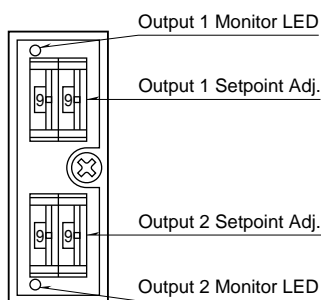
CE conformity:

EMC Directive (2004/108/EC)

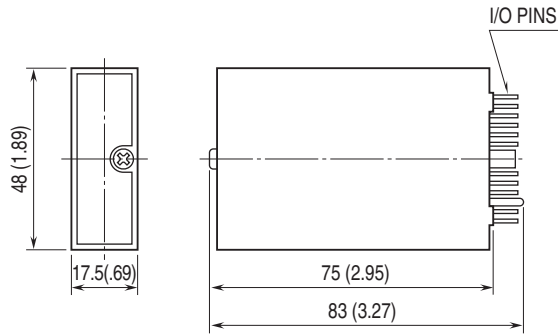
EMI EN 61000-6-4: 2007/A1: 2011

EMS EN 61000-6-2: 2005

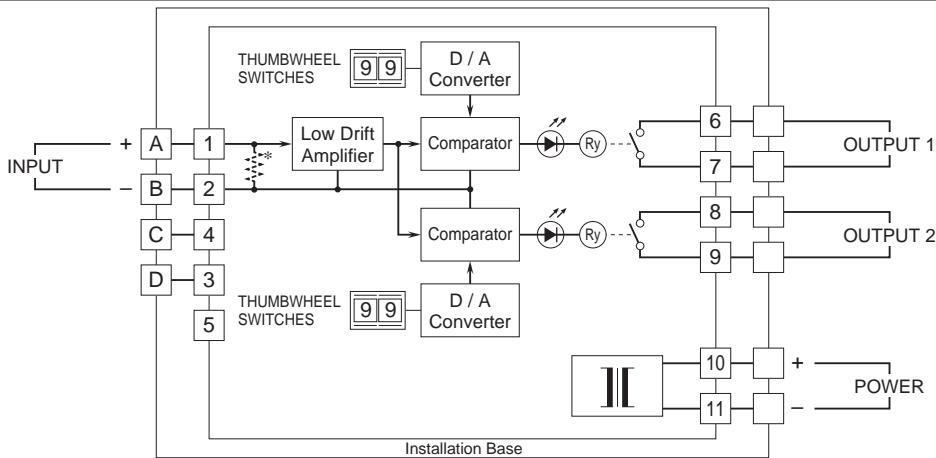
FRONT VIEW



DIMENSIONS unit: mm (inch)

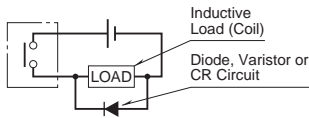


SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM



*Input shunt resistor incorporated for current input.

- Relay Protection
- DC Powered



Specifications are subject to change without notice.