

Loop Powered Setpoint Alarm

MCR Series



Shown larger than actual size.

The MCR-SPP is a primary or redundant industrial process control alarm. The MCR-SPP module features a loop powered threshold monitoring circuit with a bi-stable relay, LED indication of relay status, configurable hysteresis function and relay action. Setting of the threshold is accomplished by a 20-turn potentiometer, while the configurable functions are set by movable jumper settings.

The loop connections are made on the input side of the module through pluggable terminal blocks featuring proven wire clamping technology. Inputs and outputs are physically segregated to opposite sides of the module to ensure correct connection of the inputs and outputs. Relay connections are also made through pluggable terminal blocks.

Hysteresis may be set to 0.1 mA or 1.0 mA, depending upon the application. A 0.1 mA setting allows higher precision response for slowly varying signals, while the 1.0 mA setting is useful for applications

Model MCR-SPP

\$180

Basic Unit

- ✓ Loop Powered – No External 24 V Power Supply Required
- ✓ Low, 275Ω Burden on the 4-20 mA Loop
- ✓ Bistable Relay – Requires No Holding Current
- ✓ Configurable Relay Action – Latching or Non-Latching
- ✓ SPDT Relay Contact Rated 1A, 125 Vac
- ✓ Repeatability Better than 0.3 %

where the signal has significant overshoot and undershoot (such as tank levels with unstable liquids.)

Relay function may be set in one of two modes: latching or non-latching. Latching mode engages the relay when the input signal crosses the setpoint threshold, and prevents the relay from releasing when the signal drops below the setpoint threshold. A "RESET" button on the top of the module is used to release the relay. Non-latching mode allows the relay to release when the signal drops below the setpoint threshold and hysteresis level.

A combination of through hole and surface mount technology provides stable, low drift performance, even in harsh industrial environments. Rhodium-plated contacts ensure low contact resistance even when low-level signals are switched, while levels of up to 1 A and 125 Vac are also accommodated.

MCR-SPP modules snap onto standard 35 mm flat DIN-rail.



Specifications

INPUT

Input Signal: 4-20 mA
Voltage Drop: 5.5 V
Loop Burden: 275 Ohms
Setpoint Range: 4-20 mA
Hysteresis Range: 0.1 mA, 1.0 mA
Repeatability: ±60 µA=0.3%

OUTPUT

BI-STABLE RELAY
Contact Type: Form C
Contact Material: Rhodium Plating
Maximum Switching Voltage: 150 Vdc, 125 Vac
Maximum Inrush Current: 1 A
Maximum Continuous Current: 1 A
Maximum Switching Capacity: 30 WDC 60 VA AC

Test Voltage, Winding to Contact: 1.5 kV, 50 Hz

Mechanical Life: 108 switching cycles

Rated Duty: 100% duty factor

General Specifications

Operating Temperature: -20°C to 65°C (-4°F to 149°F)

Repeatability: 0.3%

Temperature Coefficient: <0.01%/K

Module Material: DRILEN-L

Termination Max. Wire Gauge: 14 to 24 AWG

Mounting: DIN rail, flat, 35 mm

Dimensions: 2.9" H x 0.88" W x 4.13" D (75 mm x 22.5 mm x 105 mm)

U.S. AND CANADA

For sales and service, call:

1-800-82-66342SM
1-800-TC-OMEGA

For technical assistance, call:

1-800-327-4333SM
1-800-DAS-TEEE

To Order (*Specify Model Number*)

Model Number	Price	Description
MCR-SPP/I-4	\$180	Loop powered setpoint alarm

Ordering Example: MCR-SSP/I-4 loop powered setpoint alarm, \$180.