MODEL: M60SVS

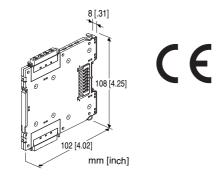
Base-free Interconnecting Ultra-Slim Signal Conditioners M60S Series

#### **SIGNAL TRANSMITTER**

(field-configurable)

#### **Functions & Features**

- Converts DC input from a sensor into a standard process signal
- Output range and response time selectable with DIP SW
- Power connector for interconnecting modules and collectively supplying power
- Spring clamp terminal connection for easy wiring
- 6-mm wide ultra-slim design
- Low profile allows mounting in a 120-mm deep panel
- · High-density mounting
- Power indicator LED



### MODEL: M60SVS-R[1]

#### ORDERING INFORMATION

• Code number: M60SVS-R[1] Specify a code from below for [1]. (e.g. M60SVS-R/Q)

 Specify the specification for option code /Q (e.g. /C01)

Default at shipment
Input range: 4 - 20 mA DC
Output range: 4 - 20 mA DC
Response time: Standard response

### **INPUT - Field-selectable**

Current

4 - 20 mA DC (Input resistance 50 Ω)

0 - 20 mA DC (Input resistance 50  $\Omega$ )

Voltage

0 - 10 V DC (Input resistance 200 k $\Omega$  min.)

2 - 10 V DC (Input resistance 200 k $\Omega$  min.)

 $0 - 5 \text{ V DC (Input resistance } 100 \text{ k}\Omega \text{ min.)}$ 

1 – 5 V DC (Input resistance 100 k $\Omega$  min.)

#### **OUTPUT - Field-selectable**

Current

4 – 20 mA DC (Load resistance 550  $\Omega$  max.)

0 - 20 mA DC (Load resistance 550  $\Omega$  max.)

Voltage

 $0 - 10 \text{ V DC (Load resistance } 10 \text{ k}\Omega \text{ min.)}$ 

2 - 10 V DC (Load resistance 10 k $\Omega$  min.)

 $0 - 5 \text{ V DC (Load resistance } 5000 \Omega \text{ min.)}$ 

1 – 5 V DC (Load resistance 5000  $\Omega$  min.)

#### **POWER INPUT**

DC Power

R: 24 V DC

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

### [1] OPTIONS

blank: none

**/Q**: Options other than the above (specify the specification)

### **SPECIFICATIONS OF OPTION: Q**

COATING (For the detail, refer to our web site.)

/C01: Silicone coating /C02: Polyurethane coating

### **GENERAL SPECIFICATIONS**

Connection

Input and output: Spring clamp terminal

Power input: Via the power connector or the spring clamp

terminal

Applicable wire size: 0.2 to 1.5 mm<sup>2</sup>, stripped length 8 mm

Housing material: Flame-resistant resin (black)

**Isolation**: Input to output to power **Zero adjustment**: -2 to +2 % (front) **Span adjustment**: 98 to 102 % (front)

Power indicator LED: Green LED turns on when the power is

supplied.

#### **INPUT SPECIFICATIONS**

■ DC Current: Input resistor incorporated

#### **INSTALLATION**

Power consumption: Max. 0.6 W

Power input: Max. 3 A (Total current consumed by the interconnected signal conditionerse must be 3 A or less.) Operating temperature: -20 to  $+55^{\circ}$ C (-4 to  $+131^{\circ}$ F) Operating humidity: 30 to 90 %RH (non-condensing)

Atmosphere: No corrosive gas or heavy dust

Mounting: DIN rail Weight: 65 g (2.3 oz)

MODEL: M60SVS

## **PERFORMANCE** in percentage of span

Accuracy: ±0.1 %

I/O setting accuracy: ±0.2 %

Temp. coefficient:  $\pm 0.01$  %/°C ( $\pm 0.006$  %/°F) Response time (0 - 90 %): selectable with DIP SW

Standard: ≤ 500 msec.

Fast: ≤ 5 msec.

Line voltage effect:  $\pm 0.1$  % over voltage range Insulation resistance:  $\geq 100$  M $\Omega$  with 500 V DC

Dielectric strength: 1500 V AC @1 minute (input to output

to power to ground)

### **STANDARDS & APPROVALS**

EU conformity:

**EMC Directive** 

EMI EN 61000-6-4

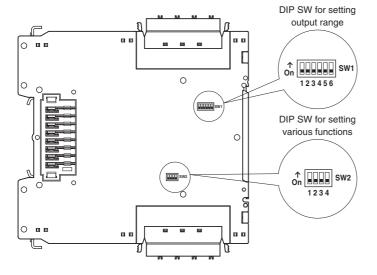
EMS EN 61000-6-2

**RoHS Directive** 

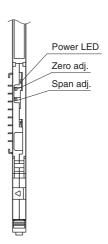
### **EXTERNAL VIEW**

Refer to the instruction manual for the setting procedure.

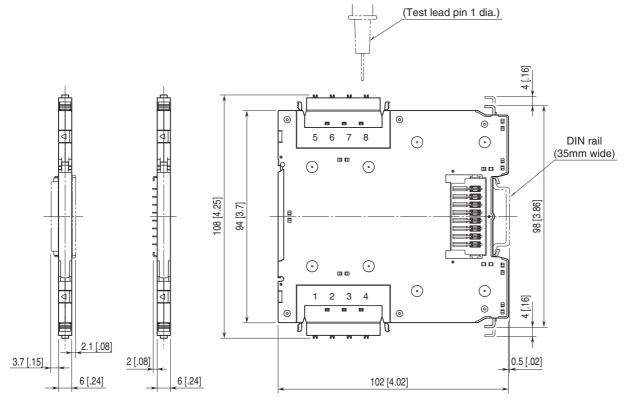
#### **■ LEFT SIDE VIEW**



### ■ FRONT VIEW (with the front cover removed)



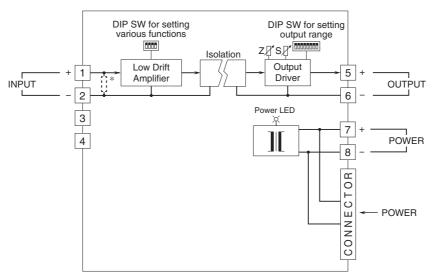
## **EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS** unit: mm [inch]



• With the end cover attached

• Capable of High-density mounting

# **SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM**



\* Input shunt resistor incorporated for current input.

 $\Lambda$ 

Specifications are subject to change without notice.