Super-space-saving Signal Conditioners
M3S-UNIT Series

ISOLATOR

Functions & Features
• Galvanically isolates the process instrumentation signals
• High-density mounting

MODEL: M3SYV-[1][2]-R[3]

ORDERING INFORMATION
• Code number: M3SYV-[1][2]-R[3]
Specify a code from below for each [1] through [3].
(e.g. M3SYV-6A-R/Q)
• Specify the specification for option code /Q
(e.g. /C01)

[1] INPUT
Current
A: 4 – 20 mA DC (Input resistance 250 Ω)
D: 0 – 20 mA DC (Input resistance 250 Ω)
DW: -20 – +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.)
4W: -10 – +10 V DC (Input resistance 1 MΩ min.)
5W: -5 – +5 V DC (Input resistance 1 MΩ min.)

[2] OUTPUT
Current
A: 4 – 20 mA DC (Load resistance 550 Ω max.)
D: 0 – 20 mA DC (Load resistance 550 Ω max.)
Voltage
4: 0 – 10 V DC (Load resistance 10 kΩ min.)
6: 1 – 5 V DC (Load resistance 5000 Ω min.)
4W: -10 – +10 V DC (Load resistance 10 kΩ min.)

POWER INPUT
DC Power
R: 24 V DC
(Operational voltage range 24 V ±10 %, ripple 10 %p-p max.)

[3] 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

GENERAL SPECIFICATIONS
Construction: Small-sized front terminal structure
Connection: Euro type connector terminal
Applicable wire size: 0.2 to 2.5 mm², stripped length 8 mm
Housing material: Flame-resistant resin (gray)
Isolation: Input to output to power
Overrange output: Approx. -10 to +120 % at 1 – 5 V
Zero adjustment: -2 to +2 % (front)
Span adjustment: 98 to 102 % (front)

INPUT SPECIFICATIONS
■ DC Current: Input resistor incorporated

INSTALLATION
Power consumption
• DC: 1 W
Operating temperature: -10 to +55°C (14 to 131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: DIN rail
Weight: 100 g (3.53 oz)

PERFORMANCE in percentage of span
Accuracy: ±0.1 %
Temp. coefficient: ±0.015 %/°C (±0.008 %/°F)
Response time: ≤ 0.5 sec. (0 – 90 %)
Line voltage effect: ±0.1 % over voltage range
Insulation resistance: ≥ 100 MΩ with 500 V DC
Dielectric strength: 2000 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
  - EN 50581

EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)

![Diagram]

- When mounting, no extra space is needed between units.

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

![Diagram]

* Shunt resistor incorporated for current input.

⚠️ Specifications are subject to change without notice.