Euro Terminal Ultra-Slim Signal Conditioners M6D Series

ISOLATOR

Functions & Features
- 5.9-mm wide ultra-slim design
- Low profile allows the M6D module mounted in a 120-mm deep panel
- Galvanically isolates process instrumentation signals
- High-density mounting
- Power indicator LED

MODEL: M6DYV-[1][2]-[3][4]

ORDERING INFORMATION
• Code number: M6DYV-[1][2]-[3][4]
  Specify a code from below for each [1] through [4].
  (e.g. M6DYV-4W4W-R/K/UL/Q)
• Specify the specification for option code /Q
  (e.g. /C01)

AA: 4 - 20 mA DC (Input resistance 50 Ω)
  / 4 - 20 mA DC (Load resistance 550 Ω max.)
A6: 4 - 20 mA DC (Input resistance 50 Ω)
  / 1 - 5 V DC (Load resistance 5000 Ω min.)
6A: 1 - 5 V DC (Input resistance 1 MΩ min.)
  / 4 - 20 mA DC (Load resistance 550 Ω max.)
66: 1 - 5 V DC (Input resistance 1 MΩ min.)
  / 1 - 5 V DC (Load resistance 5000 Ω min.)
4W4W: -10 - +10 V DC (Input resistance 1 MΩ min.)
  / -10 - +10 V DC (Load resistance 20 kΩ min.)

[3] POWER INPUT
AC Power
M2: 100 – 240 V AC (Operational voltage range 90 – 264 V, 47 – 66 Hz)
(UL not available)

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

[4] OPTIONS (multiple selections)
Response Time (0 - 90 %)
  blank: Standard (≤ 0.5 sec.)
  /K: Fast Response (Approx. 3.5 msec. voltage output;
      Approx. 25 msec. current output)
Standards & Approvals
  blank: CE marking
  /UL: UL approval, CE marking
Other Options
  blank: none
  /Q: Option other than the above (specify the specification)

SPECIFICATIONS OF OPTION: Q
COATING (For the detail, refer to M-System’s web site.)
/C01: Silicone coating
/C02: Polyurethane coating

GENERAL SPECIFICATIONS
Connection
  Input and output: Euro terminal (torque 0.3 N·m)
  Power input: Via the Installation Base (model: M6DBS)
  or Euro terminal (torque 0.3 N·m)
Applicable wire size: 0.2 to 2.5 mm², stripped length 8 mm
Housing material: Flame-resistant resin (black)
Isolation: Input to output to power
Zero adjustment: -2 to +2 % (front)
  (Output code 4W: Adjustable at 0 V.)
Span adjustment: 98 to 102 % (front)
Power LED: Green light turns on when the power is supplied.

INPUT SPECIFICATIONS
  ■ DC Current: Input resistor incorporated

INSTALLATION
Power Consumption
  • AC: Max. 2 VA
  • DC: Approx. 0.45 W
Operating temperature: -20 to +55°C (-4 to +131°F)
Operating humidity: 30 to 90 %RH (non-condensing)
Mounting: Installation Base (model: M6DBS) or DIN rail
Weight: 60 g (2.1 oz)

PERFORMANCE in percentage of span
Accuracy: ±0.1 %
Temp. coefficient: ±0.01 %/°C (±0.006 %/°F)
**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)

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**STANDARDS & APPROVALS**

**EU conformity:**
- EMC Directive
- EMI EN 61000-6-4
- EMS EN 61000-6-2
- Low Voltage Directive
  - EN 61010-1
  - Installation Category II
  - Pollution Degree 2
- Input or output to power: Reinforced insulation (300 V)
- Input to output: Basic insulation (300 V)
- RoHS Directive
  - EN 50581
- Approval:
  - UL/C-UL nonincendive Class I, Division 2,
    - Groups A, B, C, and D
    - (ANSI/ISA-12.12.01, CAN/CSA-C22.2 No.213)
  - UL/C-UL general safety requirements
    - (UL 61010-1, CAN/CSA-C22.2 No.61010-1)

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**EXTERNAL VIEW**

*(With the cover open)*

![Diagram](https://via.placeholder.com/150)
EXTERNAL DIMENSIONS & TERMINAL ASSIGNMENTS unit: mm (inch)

WIRE INSERTION ANGLE: approx. 7°

8-M3 EURO TERMINAL

DIN RAIL HOOK

DIN RAIL 35mm wide

35mm wide

5 6 7 8

1 2 3 4

WIRE INSERTION ANGLE: approx. 40°

EURO TERMINAL DIN RAIL

SCREWDRIVER INSERTION ANGLE: approx. 40°

102 (4.02)

[0.5 (.02)]

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

SCHEMATIC CIRCUITRY & CONNECTION DIAGRAM

* Input shunt resistor incorporated for current input.

** Available only for DC power input type

Specifications are subject to change without notice.