



Main

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|---------------------------|----------------------------|
| Range of product | Modicon TM5 |
| Product or component type | Safety discrete I/O module |
| Discrete input number | 2 |
| Discrete input voltage | 24 V |
| Discrete output number | 2 |
| Discrete output type | Relay |

Complementary

| | |
|--------------------------------|--|
| Range compatibility | PacDrive LMC motion controller |
| Product compatibility | PacDrive LMC Pro PacDrive LMC Pro 2 PacDrive LMC Eco |
| Discrete input voltage type | DC |
| Input voltage limits | 20.4...28.8 V |
| Discrete input logic | Sink |
| Discrete input current | 3.3 mA |
| Input impedance | 7.3 kOhm |
| Output voltage | 24 V DC |
| Output voltage limits | 20.4...28.8 V |
| Discrete output logic | Source |
| Colour | Red |
| Voltage state 0 guaranteed | ≤ 5 V |
| Voltage state 1 guaranteed | ≥ 15 V |
| Input filtering | ≤ 500 ms configurable by software ≤ 150 ms hardware |
| Protection type | Short-circuit protection Overload protection |
| Isolation | No insulation between channels 500 Vrms AC insulation between channel and bus |
| Maximum power consumption in W | 1.15 W for internal 0.26 W for bus |
| Local signalling | 1 LED green for power supply 1 LED red for power supply 2 LEDs green/red for input status 2 LEDs red for safety status 2 LEDs red/orange for output status |
| Electrical connection | 2 wires |
| Marking | CE |
| Safety level | SIL 3 conforming to IEC 61508 SIL 3 conforming to IEC 62061 PL = e conforming to EN 13849-1 |
| Safety reliability data | MTTFd > 100 years PFD < 1E-5 PFH < 1E-9 |
| Net weight | 0.025 kg |

Environment

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|---------------------------------------|---|
| Standards | CSA C22.2 No 142 IEC 62061 IEC 61131-2 IEC 61508 UL 508 EN 13849-1 |
| Product certifications | CSA CULus GOST-R |
| Ambient air temperature for operation | -10...50 °C (vertical installation) -10...55 °C (horizontal installation) |
| Ambient air temperature for storage | -40...70 °C |
| Relative humidity | 5...95 % without condensation |
| IP degree of protection | IP20 conforming to EN 60529 |
| Pollution degree | 2 conforming to IEC 60664 |
| Operating altitude | 0...2000 m |
| Storage altitude | 0...3000 m |
| Vibration resistance | 1 gn at 8.4...150 Hz on DIN rail 3.5 mm at 5...8.4 Hz on DIN rail |
| Shock resistance | 15 gn for 11 ms |
| Electromagnetic compatibility | Electrostatic discharge immunity test, 4 kV on contact conforming to EN/IEC 61000-4-2 Electrostatic discharge immunity test, 8 kV in air conforming to EN/IEC 61000-4-2 Susceptibility to electromagnetic fields, 10 V/m 80...2000 MHz conforming to EN/IEC 61000-4-3 Electrical fast transient/burst immunity test, 1 kV I/O conforming to EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 1 kV shielded cable conforming to EN/IEC 61000-4-4 Electrical fast transient/burst immunity test, 2 kV power lines conforming to EN/IEC 61000-4-4 1.2/50 µs shock waves immunity test, 0.5 kV differential mode conforming to EN/IEC 61000-4-5 1.2/50 µs shock waves immunity test, 1 kV common mode conforming to EN/IEC 61000-4-5 Conducted RF disturbances conforming to EN/IEC 61000-4-6 Conducted and radiated emissions conforming to CISPR 11 |

Packing Units

| | |
|------------------------------|---------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 102 g |
| Package 1 Height | 3 cm |
| Package 1 width | 6 cm |
| Package 1 Length | 10.5 cm |

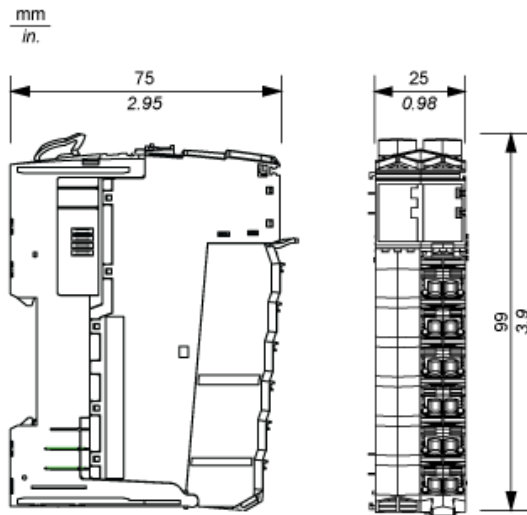
Offer Sustainability

| | |
|----------------------------|--|
| Sustainable offer status | Green Premium product |
| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Toxic heavy metal free | Yes |
| Mercury free | Yes |
| RoHS exemption information | Yes |
| China RoHS Regulation | China RoHS Declaration |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

| | |
|-----------------------------|---|
| WEEE | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |
| PVC free | Yes |
| Contractual warranty | |
| Warranty | 18 months |

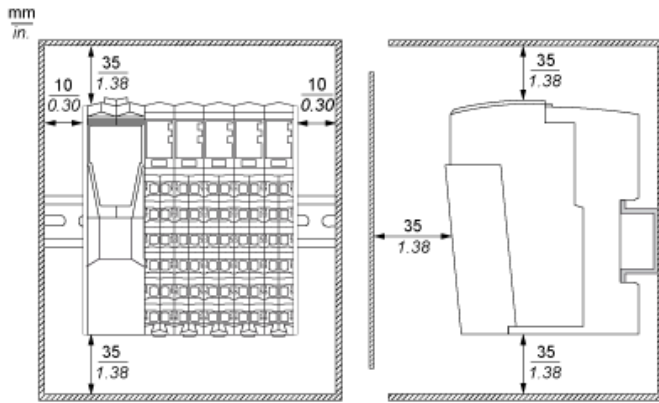
TM5 Slice

Dimensions

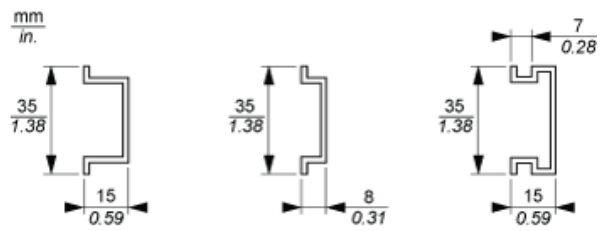


TM5 Safety System

Spacing Requirements



Mounting on a DIN Rail



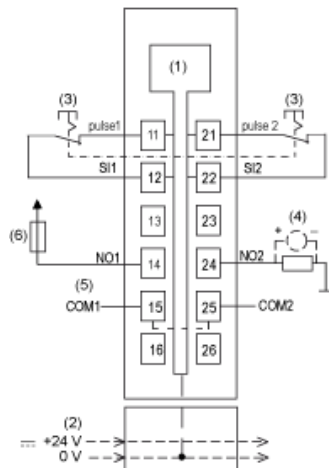
TM5 System Wiring Recommendations

Wire Sizes to Use with the Removable Spring Terminal Blocks

| mm in. |  |  |  |  |
|-----------------|---|---|---|---|
| mm ² | 0,08...2,5 | 0,25...2,5 | 0,25...1,5 | 2 x 0,25...2 x 0,75 |
| AWG | 28...14 | 24...14 | 24...16 | 2 x 24...2 x 18 |

Electronic Module 2DI/2DO Tr 2 Wires

Wiring Diagram



- (1) Internal electronics
- (2) 24 Vdc I/O power segment integrated into the bus bases
- (3) 2-wire sensor
- (4) relay outputs: NO1, COM1 and NO2, COM2; switching voltage range, 5 ... 24 Vdc, 5 ... 48 Vac switching current range, 5 mA ... 6 A
- (5) external bridge, COM1 - COM2
- (6) external fuse, type gL/gG, 6 A