



### Main

|                           |  |
|---------------------------|--|
| Range of Product          | Modicon TM3  |
| Product or Component Type | Discrete input module  |
| Range Compatibility       | Modicon M241<br>Modicon M251<br>Modicon M221<br>Modicon M262 |
| Discrete input number     | 8 input IEC 61131-2 Type 1                                   |
| Discrete input logic      | Sink or source (positive/negative)                           |
| Discrete input voltage    | 24 V   |
| Discrete input current    | 7 mA input   |

### Complementary

|  |   |
|--|---|
| Discrete I/O number                    | 8   |
| Current consumption                    | 5 mA 5 V DC via bus connector at state off)<br>0 mA 24 V DC via bus connector at state on)<br>0 mA 24 V DC via bus connector at state off)<br>24 mA 5 V DC via bus connector at state on) |
| Discrete input voltage type            | DC  |
| Voltage state 1 guaranteed             | 15...28.8 V input   |
| Current state 1 guaranteed             | >= 2.5 mA input)  |
| Voltage state 0 guaranteed             | 0...5 V input   |
| Current state 0 guaranteed             | <= 1 mA input)  |
| Input impedance                        | 3.4 kOhm  |
| Response time                          | 4 ms (turn-on)<br>4 ms (turn-off)   |
| Local signalling                       | For input status 1 LED per channel (green)  |
| Electrical connection                  | 11 x 2.5 mm <sup>2</sup> removable spring terminal block pitch 5.08 mm for inputs   |
| Maximum cable distance between devices | Unshielded cable <98.43 ft (30 m) regular input   |
| Insulation                             | Between input and internal logic 500 V AC<br>Non-insulated between inputs   |
| Marking                                | CE  |
| Mounting support                       | Top hat type TH35-15 rail IEC 60715<br>Top hat type TH35-7.5 rail IEC 60715<br>Plate or panel with fixing kit   |
| Height                                 | 3.54 in (90 mm)   |
| Depth                                  | 3.33 in (84.6 mm)   |
| Width                                  | 1.08 in (27.4 mm)   |
| Net Weight                             | 0.19 lb(US) (0.085 kg)  |

## Environment

|                                       |  |
|---------------------------------------|--|
| Standards                             | EN/IEC 61010-2-201<br>EN/IEC 61131-2   |
| Product Certifications                | CULus<br>C-tick  |
| Resistance to electrostatic discharge | 8 kV in air EN/IEC 61000-4-2<br>4 kV on contact EN/IEC 61000-4-2   |
| Resistance to electromagnetic fields  | 9.14 V/m (10 V/m) 80 MHz...1 GHz EN/IEC 61000-4-3<br>2.74 V/m (3 V/m) 1.4 GHz...2 GHz EN/IEC 61000-4-3<br>0.91 V/m (1 V/m) 2 GHz...3 GHz EN/IEC 61000-4-3      |
| Resistance to magnetic fields         | 98.43 A/m (30 A/m) 50/60 Hz EN/IEC 61000-4-8   |
| Resistance to fast transients         | 1 kV I/OEN/IEC 61000-4-4   |
| Surge withstand                       | 1 kV I/O common mode EN/IEC 61000-4-5 DC   |
| Resistance to conducted disturbances  | 10 V 0.15...80 MHz EN/IEC 61000-4-6<br>3 V spot frequency (2, 3, 4, 6.2, 8.2, 12.6, 16.5, 18.8, 22, 25 MHz) Marine specification (LR, ABS, DNV, GL)            |
| Electromagnetic emission              | Radiated emissions 40 dB $\mu$ V/m QP class A 10 m)30...230 MHz EN/IEC 55011<br>Radiated emissions 47 dB $\mu$ V/m QP class A 10 m)230...1000 MHz EN/IEC 55011 |
| Ambient Air Temperature for Operation | 14...95 °F (-10...35 °C) vertical installation<br>14...131 °F (-10...55 °C) horizontal installation  |
| Ambient Air Temperature for Storage   | -13...158 °F (-25...70 °C)   |
| Relative humidity                     | 10...95 %, without condensation in operation)<br>10...95 %, without condensation in storage)   |
| IP degree of protection               | IP20 with protective cover in place  |
| Pollution degree                      | 2  |
| Operating altitude                    | 0...6561.68 ft (0...2000 m)  |
| Storage altitude                      | 0.00...9842.52 ft (0...3000 m)   |
| Vibration resistance                  | 3.5 mm 5...8.4 Hz DIN rail<br>3 gn 8.4...150 Hz DIN rail<br>3.5 mm 5...8.4 Hz panel<br>3 gn 8.4...150 Hz panel   |
| Shock resistance                      | 15 gn 11 ms  |

## Ordering and shipping details

|                       |                                |
|-----------------------|--------------------------------|
| Category              | 22533 - M2XX PLC & ACCESSORIES |
| Discount Schedule     | MSX                            |
| GTIN                  | 3606480611377                  |
| Nbr. of units in pkg. | 1                              |
| Package weight(Lbs)   | 8.11 oz (230 g)                |
| Returnability         | Yes                            |
| Country of origin     | TW                             |

## Packing Units

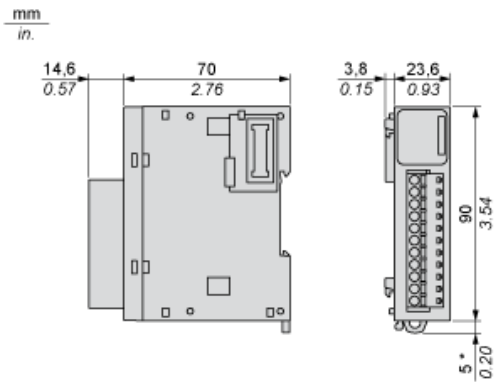
|                              |                         |
|------------------------------|-------------------------|
| Unit Type of Package 1       | PCE                     |
| Package 1 Height             | 2.95 in (7.5 cm)        |
| Package 1 width              | 4.13 in (10.5 cm)       |
| Package 1 Length             | 4.92 in (12.5 cm)       |
| Unit Type of Package 2       | S02                     |
| Number of Units in Package 2 | 9                       |
| Package 2 Weight             | 4.93 lb(US) (2.234 kg)  |
| Package 2 Height             | 5.91 in (15 cm)         |
| Package 2 width              | 11.81 in (30 cm)        |
| Package 2 Length             | 15.75 in (40 cm)        |
| Unit Type of Package 3       | S04                     |
| Number of Units in Package 3 | 27                      |
| Package 3 Weight             | 11.43 lb(US) (5.183 kg) |
| Package 3 Height             | 11.81 in (30 cm)        |

|                  |                  |
|------------------|------------------|
| Package 3 width  | 15.75 in (40 cm) |
| Package 3 Length | 23.62 in (60 cm) |

### Offer Sustainability

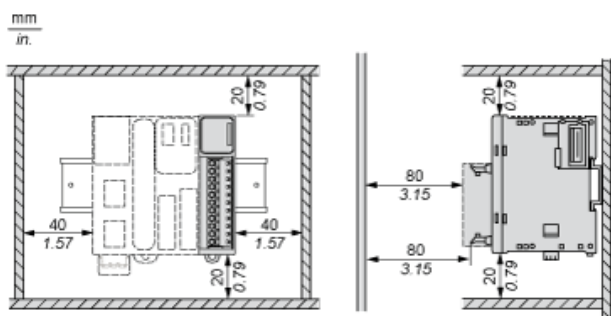
|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| REACH free of SVHC         | Yes   |
| EU RoHS Directive          | Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>  |
| Toxic heavy metal free     | Yes   |
| Mercury free               | Yes   |
| RoHS exemption information | <a href="#">Yes</a>   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>   |
| Circularity Profile        | <a href="#">End Of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.  |
| PVC free                   | Yes   |

Dimensions



(\*) 8.5 mm/0.33 in. when the clamp is pulled out.

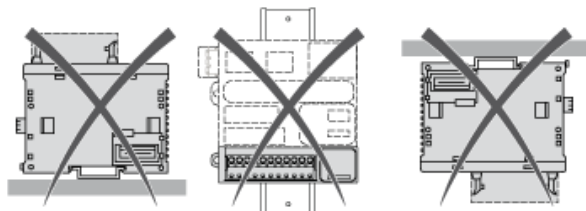
Spacing Requirements



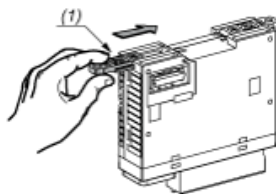
Mounting on a Rail



Incorrect Mounting

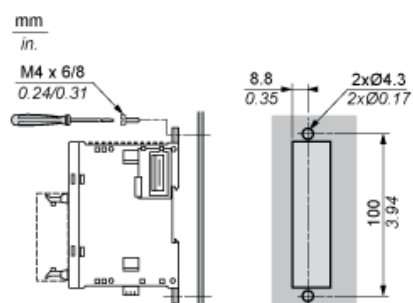


Mounting on a Panel Surface



- (1) Install a mounting strip

Mounting Hole Layout

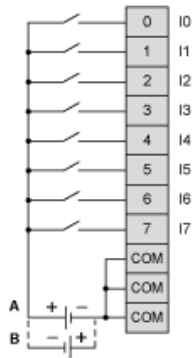


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## Digital Input Module (8-channel, 24 Vdc)

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### Wiring Diagram



The 3 COM terminals are connected internally.

- (A) Sink wiring (positive logic)
- (B) Source wiring (negative logic)