



### 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     | 32 input IEC 61131-2 Type 1                                  |
| Discrete input logic      | Sink or source (positive/negative)                           |
| Discrete input voltage    | 24 V                                                         |
| Discrete input current    | 5 mA input                                                   |

### Complementary

|                                        |                                                                                                                                                                                           |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Discrete I/O number                    | 32                                                                                                                                                                                        |
| 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>65 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                        | 4.4 kOhm                                                                                                                                                                                  |
| Response time                          | 4 ms (turn-on)<br>4 ms (turn-off)                                                                                                                                                         |
| Local signalling                       | For input status 1 LED per channel (green)                                                                                                                                                |
| Electrical connection                  | HE-10 connector 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                                  | 3.20 in (81.3 mm)                                                                                                                                                                         |
| Width                                  | 1.32 in (33.5 mm)                                                                                                                                                                         |
| Net Weight                             | 0.22 lb(US) (0.1 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 dBµV/m QP class A 10 m)30...230 MHz EN/IEC 55011<br>Radiated emissions 47 dBµV/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                  | 3606480611414                |
| Nbr. of units in pkg. | 1                            |
| Package weight(Lbs)   | 7.76 oz (220.0 g)            |
| Returnability         | Yes                          |
| Country of origin     | TW                           |

### Packing Units

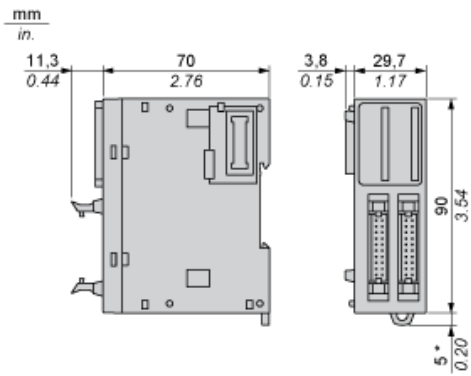
|                              |                          |
|------------------------------|--------------------------|
| Unit Type of Package 1       | PCE                      |
| Package 1 Height             | 3.01 in (7.639 cm)       |
| Package 1 width              | 4.15 in (10.55 cm)       |
| Package 1 Length             | 5.07 in (12.87 cm)       |
| Unit Type of Package 2       | CAR                      |
| Number of Units in Package 2 | 42                       |
| Package 2 Weight             | 23.00 lb(US) (10.431 kg) |
| Package 2 Height             | 11.65 in (29.6 cm)       |
| Package 2 width              | 15.87 in (40.3 cm)       |
| Package 2 Length             | 22.01 in (55.9 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>                                                                                                                                                                                                                                                      |

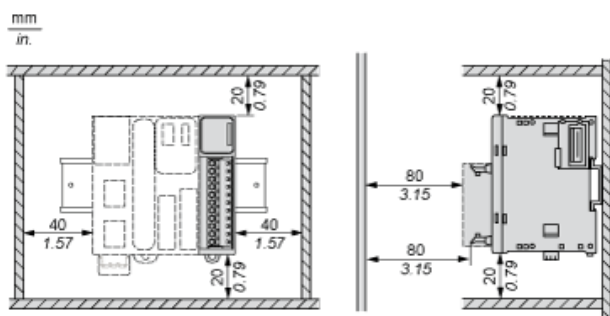
|                          |                                                                                                                              |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------|
| 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.

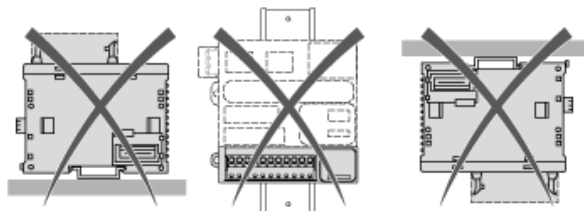
Spacing Requirements



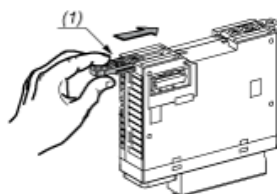
Mounting on a Rail



Incorrect Mounting

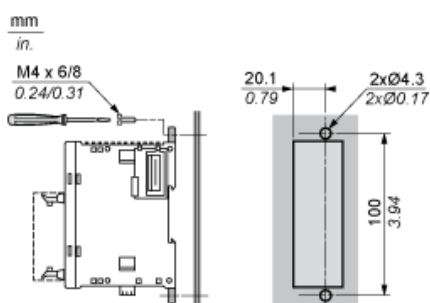


Mounting on a Panel Surface



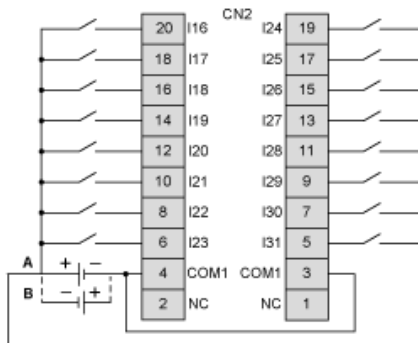
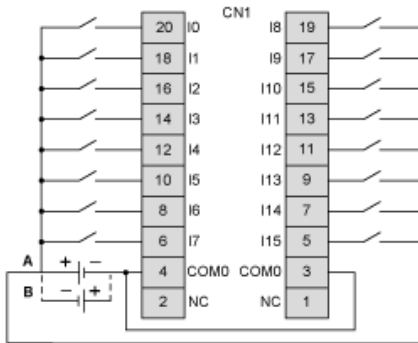
- (1) Install a mounting strip

Mounting Hole Layout



Digital Input Module (32-channel, 24 Vdc)

Wiring Diagram



The COM0 and COM1 terminals are not connected internally

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