



### Main

|                           |                                                                                   |
|---------------------------|-----------------------------------------------------------------------------------|
| Range of Product          | Modicon TM3                                                                       |
| Product or Component Type | Analog input module                                                               |
| Range Compatibility       | Modicon M221<br>Modicon M241<br>Modicon M251<br>Modicon M262                      |
| Analogue input number     | 4                                                                                 |
| Analogue input type       | Current 4...20 mA<br>Current 0...20 mA<br>Voltage 0...10 V<br>Voltage - 10...10 V |

### Complementary

|                                 |                                                                                                                                                                                   |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Analogue input resolution       | 12 bits<br>11 bits + sign                                                                                                                                                         |
| Permissible continuous overload | 13 V voltage<br>40 mA current                                                                                                                                                     |
| Input impedance                 | $\leq 50 \text{ Ohm}$ current<br>$\geq 1 \text{ MOhm}$ voltage                                                                                                                    |
| LSB value                       | 2.44 mV 0...10 V voltage<br>4.88 mV - 10...10 V voltage<br>4.88 $\mu\text{A}$ 0...20 mA current<br>3.91 $\mu\text{A}$ 4...20 mA current                                           |
| Conversion time                 | 1 ms + 1 ms per channel + 1 controller cycle time                                                                                                                                 |
| Sampling duration               | 1 ms                                                                                                                                                                              |
| Absolute accuracy error         | +/- 0.1 % of full scale 77 °F (25 °C)<br>+/- 1 % of full scale                                                                                                                    |
| Temperature Drift               | +/- 0.006 %FS/°C                                                                                                                                                                  |
| Repeat accuracy                 | +/-0.5 %FS                                                                                                                                                                        |
| Non-linearity                   | +/- 0.01 %FS                                                                                                                                                                      |
| Cross talk                      | $\leq 1 \text{ LSB}$                                                                                                                                                              |
| [Us] rated supply voltage       | 24 V DC                                                                                                                                                                           |
| Supply voltage limits           | 20.4...28.8 V                                                                                                                                                                     |
| Type of cable                   | Twisted shielded pairs cable <98.43 ft (30 m) input                                                                                                                               |
| Current consumption             | 35 mA 5 V DC via bus connector no load<br>45 mA 5 V DC via bus connector full load<br>30 mA 24 V DC via external supply                                                           |
| Local signalling                | For PWR 1 LED (green)                                                                                                                                                             |
| Electrical connection           | 10 x 1.5 mm <sup>2</sup> removable spring terminal block pitch 3.81 mm for inputs and supply<br>10 x 1.5 mm <sup>2</sup> removable spring terminal block pitch 3.81 mm for inputs |
| Insulation                      | Between input and supply 1500 V AC<br>Between input and internal logic 500 V AC                                                                                                   |
| Marking                         | CE                                                                                                                                                                                |
| Surge withstand                 | 1 kV power supply common mode EN/IEC 61000-4-5<br>0.5 kV power supply differential mode EN/IEC 61000-4-5<br>1 kV input common mode EN/IEC 61000-4-5                               |
| 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                           | 2.76 in (70 mm)                                                                                                                                                                   |

|            |                      |
|------------|----------------------|
| Width      | 0.93 in (23.6 mm)    |
| Net Weight | 0.22 lb(US) (0.1 kg) |

## Environment

|                                       |                                                                                                                                                           |
|---------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | EN/IEC 61010-2-201<br>EN/IEC 61131-2                                                                                                                      |
| 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) EN/IEC 61000-4-8                                                                                                                       |
| Resistance to fast transients         | 1 kV EN/IEC 61000-4-4 I/O)                                                                                                                                |
| 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        |
| Immunity to microbreaks               | 10 ms                                                                                                                                                     |
| Ambient Air Temperature for Operation | 14...131 °F (-10...55 °C) horizontal installation<br>14...95 °F (-10...35 °C) vertical 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                                                                                                                                                      |
| 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                                                                                                  |
| Shock resistance                      | 15 gn 11 ms                                                                                                                                               |

## Ordering and shipping details

|                       |                              |
|-----------------------|------------------------------|
| Category              | 22533-M2XX PLC & ACCESSORIES |
| Discount Schedule     | MSX                          |
| GTIN                  | 3606480648915                |
| Nbr. of units in pkg. | 1                            |
| Package weight(Lbs)   | 6.88 oz (195.0 g)            |
| Returnability         | No                           |
| Country of origin     | JP                           |

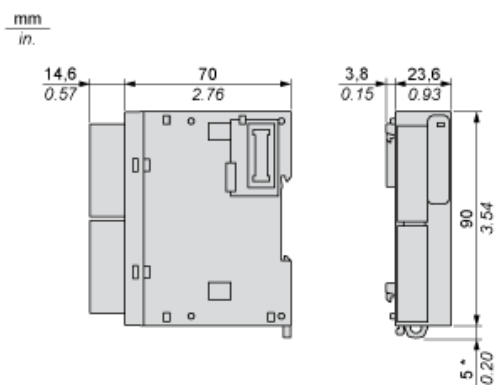
## Packing Units

|                              |                        |
|------------------------------|------------------------|
| Unit Type of Package 1       | PCE                    |
| Package 1 Height             | 2.95 in (7.5 cm)       |
| Package 1 width              | 4.92 in (12.5 cm)      |
| Package 1 Length             | 4.13 in (10.5 cm)      |
| Unit Type of Package 2       | S02                    |
| Number of Units in Package 2 | 9                      |
| Package 2 Weight             | 5.05 lb(US) (2.292 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)       |

## 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>                                                                                                                                                                                                                                                           |
| 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

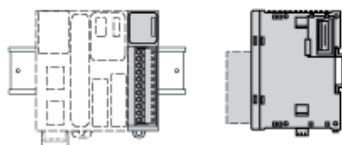


(\*) 8.5 mm/0.33 in when the clamp is pulled out.

## Spacing Requirements



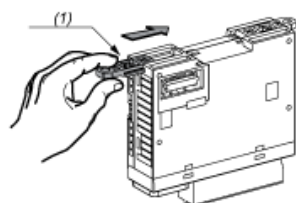
## Mounting on a Rail



## Incorrect Mounting



## Mounting on a Panel Surface



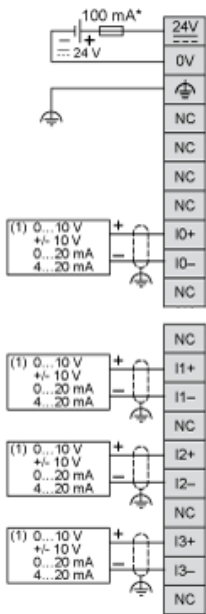
- (1) Install a mounting strip

## Mounting Hole Layout



Analogue Input Module

Wiring Diagram (Current / Voltage)



- (\*) Type T fuse  
(1) Current/Voltage analog output device

# Mouser Electronics

Authorized Distributor

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