



## Main

|                           |                                                                         |
|---------------------------|-------------------------------------------------------------------------|
| Range of product          | Modicon Quantum automation platform                                     |
| Product or component type | Analogue input module                                                   |
| Type of filter            | Single pole low pass - 3 dB at 20 Hz<br>Notch filter - 3 dB at 50/60 Hz |

## Complementary

|                                         |                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Analogue input number                   | 8                                                                                                                                                                                                                                                                                                              |
| Addressing requirement                  | 10 input words                                                                                                                                                                                                                                                                                                 |
| Analogue input type                     | Thermocouple - 50...1665 °C thermocouple S<br>Thermocouple - 50...1665 °C thermocouple R<br>Thermocouple - 270...400 °C thermocouple T<br>Thermocouple - 270...1370 °C thermocouple K<br>Thermocouple - 270...1000 °C thermocouple E<br>Thermocouple - 210...760 °C thermocouple J                             |
| Analogue input resolution               | 16 bits                                                                                                                                                                                                                                                                                                        |
| Input impedance                         | > 1 MOhm                                                                                                                                                                                                                                                                                                       |
| Absolute accuracy error                 | +/- 4 °C plus + 0.1 % of reading thermocouple S<br>+/- 4 °C plus + 0.1 % of reading thermocouple R<br>+/- 2 °C plus + 0.1 % of reading thermocouple T<br>+/- 2 °C plus + 0.1 % of reading thermocouple K<br>+/- 2 °C plus + 0.1 % of reading thermocouple J<br>+/- 2 °C plus + 0.1 % of reading thermocouple E |
| Linearity error                         | 1 °C, 0.1 °C, 1 F, 0.1 F - 50...1665 °C<br>1 °C, 0.1 °C, 1 F, 0.1 F - 270...400 °C<br>1 °C, 0.1 °C, 1 F, 0.1 F - 270...1370 °C<br>1 °C, 0.1 °C, 1 F, 0.1 F - 270...1000 °C<br>1 °C, 0.1 °C, 1 F, 0.1 F - 210...760 °C                                                                                          |
| Accuracy drift according to temperature | 0.15 µV/°C + 0.0015 % of reading/°C max low level voltage                                                                                                                                                                                                                                                      |
| Common mode rejection                   | >= 120 dB 50/60 Hz                                                                                                                                                                                                                                                                                             |
| Isolation between channels and bus      | 2500 V DC for 60 s<br>1780 V AC for 60 s                                                                                                                                                                                                                                                                       |
| Isolation between channels              | 220 V AC<br>300 V DC                                                                                                                                                                                                                                                                                           |
| Update time                             | 1000 ms                                                                                                                                                                                                                                                                                                        |
| Fault type                              | Overtaking scale<br>Broken wire                                                                                                                                                                                                                                                                                |
| Marking                                 | CE                                                                                                                                                                                                                                                                                                             |
| Cold junction compensation              | Internal 0...60 °C                                                                                                                                                                                                                                                                                             |
| Local signalling                        | 8 LEDs red channel fault<br>8 LEDs green channel is turned on<br>1 LED red external fault<br>1 LED green bus communication is present (Active)                                                                                                                                                                 |
| Bus current requirement                 | 280 mA                                                                                                                                                                                                                                                                                                         |
| Power dissipation in W                  | 1.5 W                                                                                                                                                                                                                                                                                                          |

|                |          |
|----------------|----------|
| Module format  | Standard |
| Product weight | 0.3 kg   |

## Environment

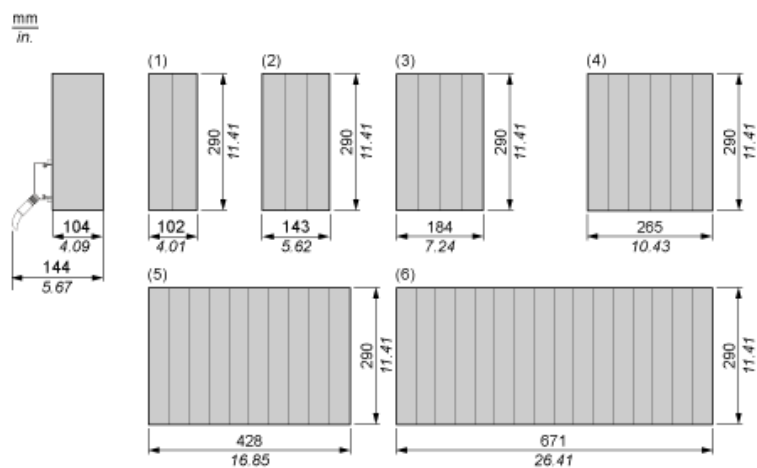
|                                       |                                                                             |
|---------------------------------------|-----------------------------------------------------------------------------|
| Protective treatment                  | Conformal coating Humiseal 1A33                                             |
| Standards                             | CSA C22.2 No 142<br>UL 508                                                  |
| Product certifications                | CUL<br>FM Class 1 Division 2                                                |
| Resistance to electrostatic discharge | 8 kV on air conforming to IEC 801-2<br>4 kV contact conforming to IEC 801-2 |
| Resistance to electromagnetic fields  | 10 V/m 80...1000 MHz conforming to IEC 801-3                                |
| Ambient air temperature for operation | 0...60 °C                                                                   |
| Ambient air temperature for storage   | -40...85 °C                                                                 |
| Relative humidity                     | 95 % without condensation                                                   |
| Operating altitude                    | <= 5000 m                                                                   |

## Offer Sustainability

|                                  |                                                                                       |
|----------------------------------|---------------------------------------------------------------------------------------|
| Sustainable offer status         | Green Premium product                                                                 |
| RoHS (date code: YYWW)           | Compliant - since 0901 - <a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold                                     |
| Product environmental profile    | Available <a href="#">Download Product Environmental</a>                              |
| Product end of life instructions | Need no specific recycling operations                                                 |

## Racks for Modules Mounting

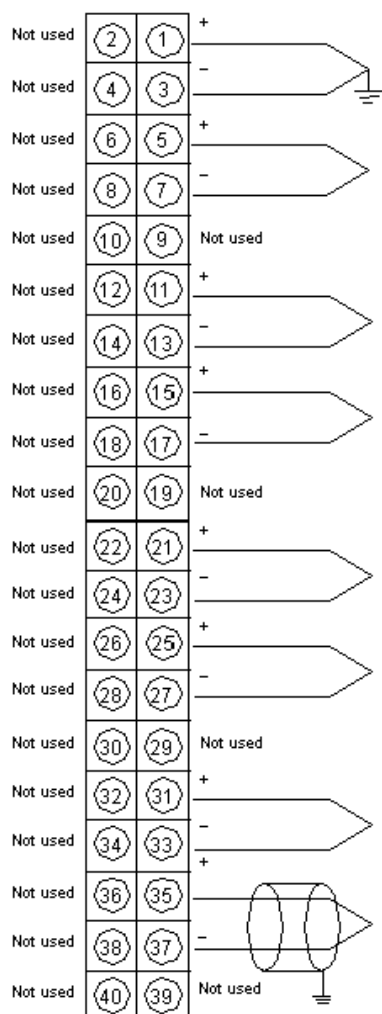
### Dimensions of Modules and Racks



- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots

## Thermocouple Input 8-Channel Module

### Wiring Diagram



### Using Cold Junction Compensation (CJC)

For temperature measurements, the module provides an internal CJC. However, a remote CJC can be used with the following TC types: J,K and T. The TC must be connected to Channel.

