

Product data sheet

Specifications



analog input module Modicon Quantum - 8 I multirange

140AVI03000

⚠ Discontinued on: Jan 15, 2023

⚠ To be end-of-service on: Dec 31, 2030

⚠ Discontinued - Service only

Product availability: Non-Stock - Not normally stocked in distribution facility

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 847 Hz +/- 20 % |

Complementary

| | |
|---|---|
| Analogue input number | 8 |
| Input type | Differential |
| Addressing requirement | 9 input words |
| Analogue input type | Bipolar current 20 mA Bipolar voltage +/- 10 V Bipolar voltage +/- 5 V Unipolar current 0...20 mA Unipolar voltage 0...10 V Unipolar voltage 0...5 V |
| Analogue input resolution | 16 bits +/- 10 V 16 bits +/- 5 V 16 bits 0...10 V 16 bits 0...20 mA 16 bits 0...5 V 16 bits 20 mA |
| Linear measuring range | (input range) x 1.024 mA (input range) x 1.024 V |
| Absolute maximum input | 50 V DC 25 mA |
| Input impedance | > 20 Ohm voltage 250 MOhm +/- 0.03 % |
| Absolute accuracy error | +/- 0.03 % +/- 0.05 % of full scale maximum |
| Linearity error | +/- 0.008 % |
| Accuracy drift according to temperature | +/- 0.0015 % of full scale/°C <= 0.004 % of full scale /°C |
| Common mode rejection | > - 80 dB 60 Hz |
| Isolation between channels and bus | 500 Vrms AC 60 s 750 V DC |
| Isolation between channels | 135 Vrms AC 200 V DC |
| Update time | 10 ms |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

| | |
|-------------------------|--|
| Fault type | Broken wire 4...20 mA Overtaking scale 1...5 V |
| Marking | CE |
| Local signalling | 1 LED (green) for bus communication is present (Active) 1 LED (red) for external fault 8 LEDs (green) for channel is turned on 8 LEDs (red) for channel fault |
| Bus current requirement | 280 mA |
| Power dissipation in W | 2.2 W |
| Module format | Standard |
| Net Weight | 0.7 lb(US) (0.3 kg) |

Environment

| | |
|---------------------------------------|---|
| Standards | UL 508 CSA C22.2 No 142 |
| Product Certifications | FM Class 1 Division 2 cUL |
| Resistance to electrostatic discharge | 4 kV contact IEC 801-2 8 kV on air IEC 801-2 |
| Resistance to electromagnetic fields | 9.1 V/m (10 V/m) 80...1000 MHz IEC 801-3 |
| Ambient Air Temperature for Operation | 32...140 °F (0...60 °C) |
| Ambient Air Temperature for Storage | -40...185 °F (-40...85 °C) |
| Relative Humidity | 95 % without condensation |
| Operating altitude | <= 16404.2 ft (5000 m) |

Ordering and shipping details

| | |
|-------------------|---------------|
| Category | US1PC2118155 |
| Discount Schedule | PC21 |
| GTIN | 3595861126619 |
| Returnability | Yes |

Packing Units

| | |
|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Nbr. of units in pkg. | 1 |
| Package 1 Height | 1.969 in (5.000 cm) |
| Package 1 Width | 6.496 in (16.500 cm) |
| Package 1 Length | 12.402 in (31.500 cm) |
| Package weight(Lbs) | 16.226 oz (460.000 g) |
| Unit Type of Package 2 | S03 |
| Number of Units in Package 2 | 7 |
| Package 2 Height | 11.811 in (30.000 cm) |
| Package 2 Width | 11.811 in (30.000 cm) |
| Package 2 Length | 15.748 in (40.000 cm) |
| Package 2 Weight | 8.144 lb(US) (3.694 kg) |

Contractual warranty


| | |
|----------------------|----|
| Warranty (in months) | 18 |
|----------------------|----|

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

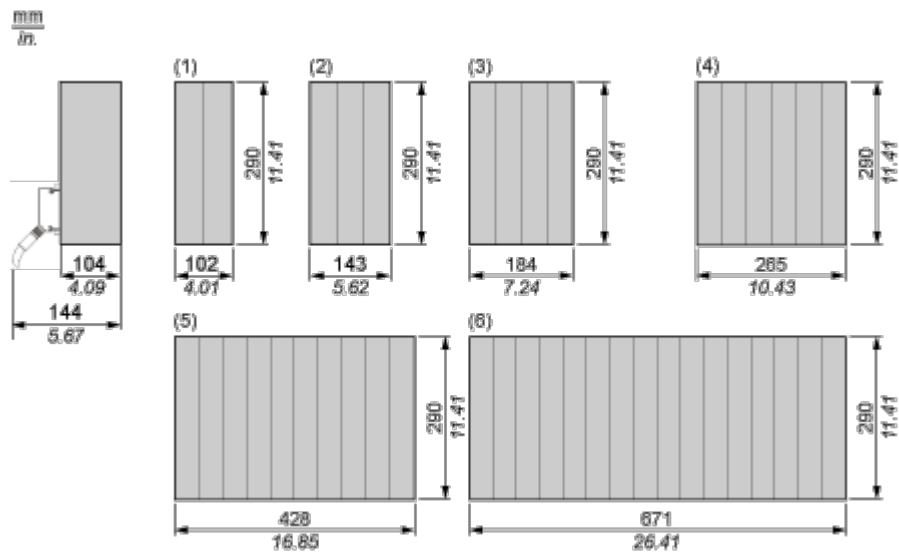
Use Better

|  Materials and Substances | |
|--|---|
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) |
| 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 www.P65Warnings.ca.gov |

Dimensions Drawings

Racks for Modules Mounting

Dimensions of Modules and Racks

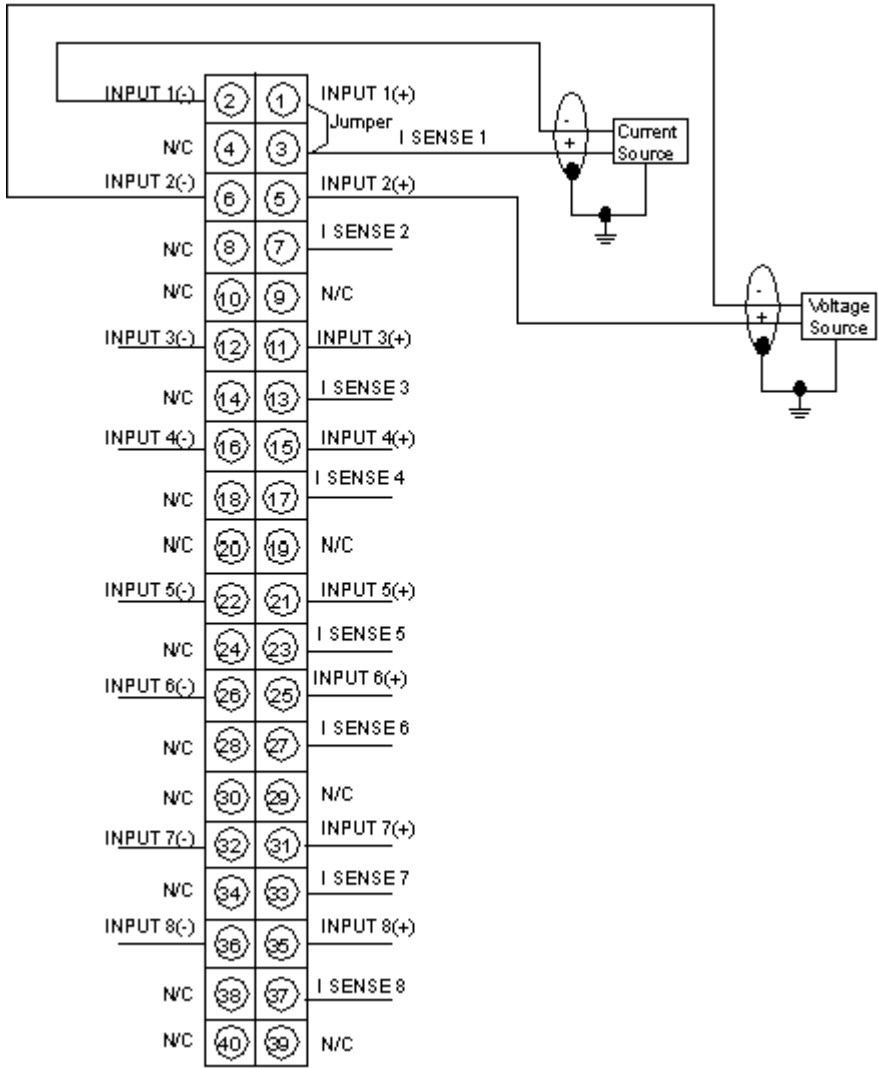


- (1) 2 slots
- (2) 3 slots
- (3) 4 slots
- (4) 6 slots
- (5) 10 slots
- (6) 16 slots

Connections and Schema

Analog Input 8-Channel Bipolar Module

Wiring Diagram



N/C Not Connected