

Product data sheet

Specifications



intrinsically safe current input module Modicon Quantum

140AI33010

Discontinued on: Jul 31, 2024

Discontinued

Main

Range of Product	Modicon Quantum automation platform
Product or Component Type	Intrinsically safe current input module
Software designation	Concept V2.2 and above ProWORX Unity Pro
Type of filter	Single low pass input filter -3 dB 15 Hz +/- 20 %

Complementary

Product destination	In conjunction with products for zone 20, 21 or 22
Analogue input number	8
Analogue input range	0...20 mA 0...25 mA 4...20 mA
Analogue input resolution	0...16000 counts 4...20 mA 0...20000 counts 0...20 mA 0...25000 counts 0...25 mA 0...4095 counts 4...20 mA
Absolute maximum input	25 mA internally limited
Input impedance	100 Ohm +/- 0.1 %
Absolute accuracy error	+/- 0.05 % typical of full scale 77 °F (25 °C) +/- 0.1 % of full scale maximum 77 °F (25 °C)
Accuracy drift according to temperature	+/- 0.0025 % typical of full scale/°C 0.005 % maximum of full scale/°C
Linearity error	0.003 % of full scale
Common mode rejection	> 100 dB 50/60 Hz
Update time	750 ms
Isolation between channels and bus	2500 V for 1 minute DC 1780 V 47...63 Hz AC
Fault type	Broken wire 4...20 mA
Power dissipation in W	7.5 W
Hot swapping fallback	Not allowed per intrinsic safety standards
Protection Type	Internal fuse
Marking	CE II1 G/D-EEEx ia IIC
Bus current requirement	1500 mA
Module format	Standard

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

Net Weight	0.7 lb(US) (0.3 kg)
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Environment

Standards	Directive ATEX 94/9/EC EN 50039 CSA C22.2 No 142 EN 50014 EN 50020 EN 50284 EN 50281-1-1 UL 508
Dust zone	Outside zone
Product Certifications	GOST C-tick FM Class 1 Division 2 SIRA 02ATEX2345X
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...2000 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	18155-QUANTUM I/O & POWER SUPPLIES
Discount Schedule	PC21
GTIN	3595860025616
Returnability	No
Country of origin	US

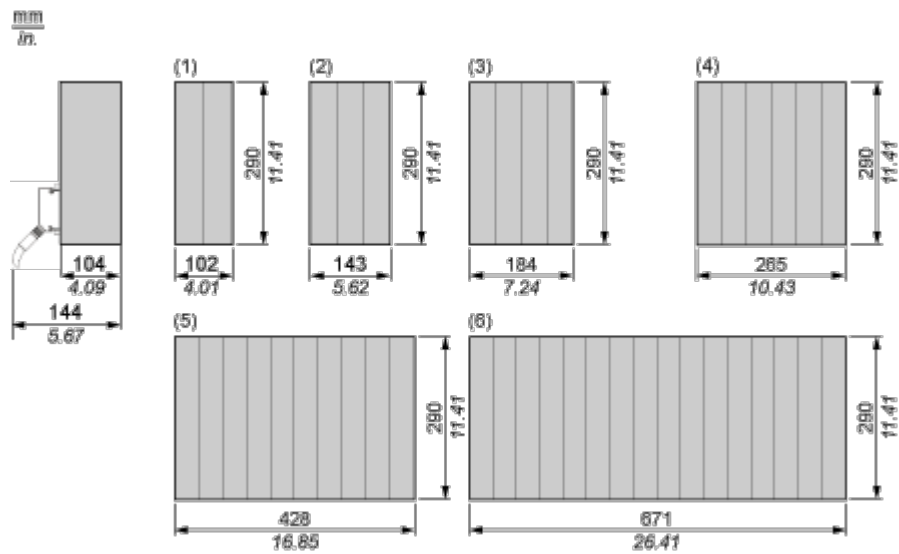
Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.9 in (4.7 cm)
Package 1 Width	6.4 in (16.2 cm)
Package 1 Length	12.4 in (31.5 cm)
Package weight(Lbs)	28.04 oz (795.0 g)

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

Intrinsically Safe Current Input Module

$$L_o = 2.9 \text{ mH/ch}$$

140 All 330 10 Wiring Diagram