

# Product datasheet

Specifications



## intrinsically safe current input module Modicon Quantum

140AI33010

⚠ Discontinued on: 31 Dec 2010

⚠ End-of-service on: 31 Dec 2012

⚠ Discontinued

EAN Code: 3595860025616

### Main

Range of product	Modicon Quantum automation platform
Product or component type	Intrinsically safe current input module
Software designation	Concept version 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 at 25 °C +/- 0.1 % of full scale maximum at 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-EEx ia IIC
Bus current requirement	1500 mA
Module format	Standard

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Net weight	0.3 kg
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## Environment

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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
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Dust zone	Outside zone
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Product certifications	GOST C-Tick FM Class 1 Division 2 SIRA 02ATEX2345X
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Resistance to electrostatic discharge	4 kV contact conforming to IEC 801-2 8 kV on air conforming to IEC 801-2
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Resistance to electromagnetic fields	10 V/m 80...2000 MHz conforming to IEC 801-3
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Ambient air temperature for operation	0...60 °C
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Ambient air temperature for storage	-40...85 °C
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Relative humidity	95 % without condensation
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Operating altitude	<= 5000 m
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## Packing Units

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Unit Type of Package 1	PCE
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Number of Units in Package 1	1
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Package 1 Height	4.7 cm
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Package 1 Width	16.2 cm
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Package 1 Length	31.5 cm
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Package 1 Weight	795.0 g
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## Contractual warranty

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Warranty (in months)	18
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## Environmental Data

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 Longer



#### Lifetime extension

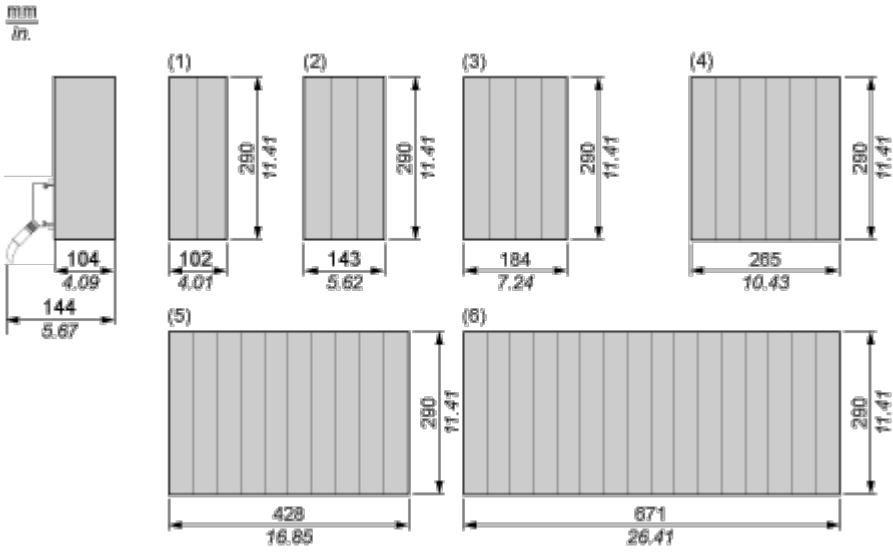
Repair

No

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

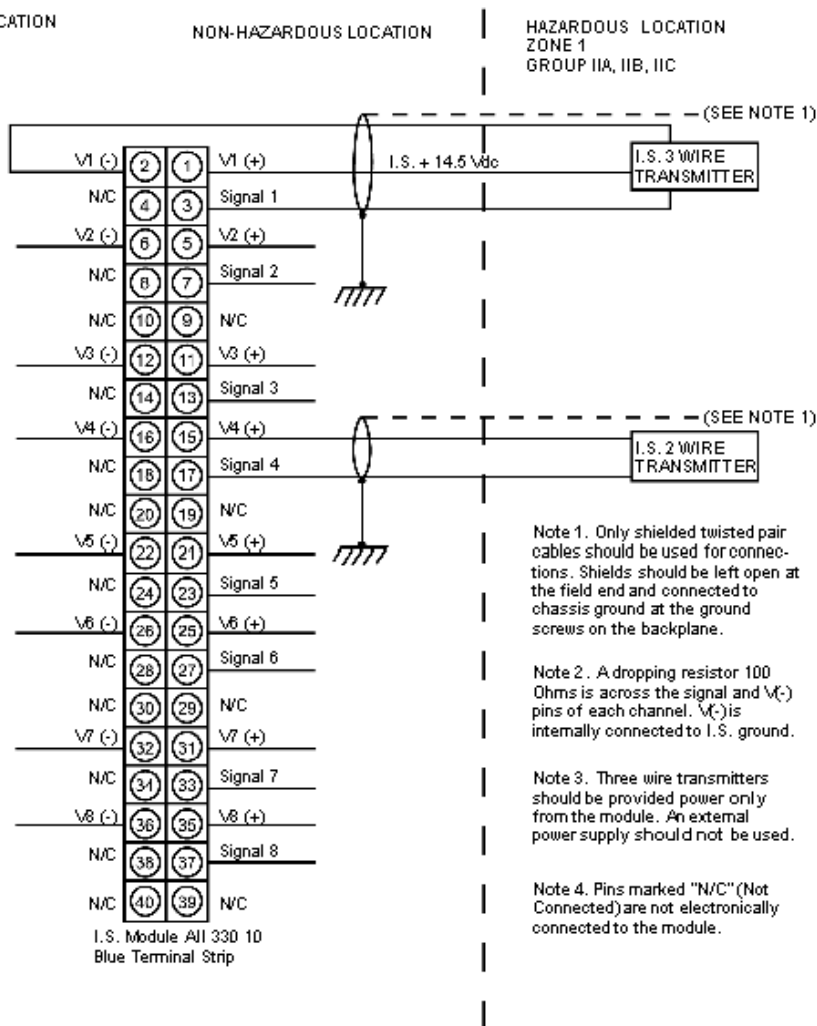
Connections and Schema

Intrinsically Safe Current Input Module

Cenelec Certified Wiring Diagram

CENELEC CERTIFICATION

Entity Parameters  
per Channel:  
 $V_b = 23.8 \text{ Vdc}$   
 $I_o = 112 \text{ mA/ch}$   
 $P_o = 622 \text{ mW/ch}$   
 $C_o = 127 \text{ nF/ch}$   
 $L_o = 2.9 \text{ mH/ch}$



31001363 Rev 00

140 AII 330 10 Wiring Diagram