

Schneider Service Manual

140ARI03010

3. Product Information

Schneider Electric 140ARI03010 Picture

analog input module Modicon Quantum - 8 I Ni / Pt 100, 200, 500, 1000

140ARI03010

Specifications

Main

Range of Product

Modicon Quantum automation platform

Product or Component Type

Analogue input module

Complementary

Analogue input number

8

Input type

Differential

Addressing requirement

9 input words

Analogue input type

Temperature probe - 100...450 °C Pt 100, Pt 200, Pt 500, Pt 1000

Temperature probe - 200...850 °C Pt 100, Pt 200, Pt 500, Pt 1000

Temperature probe - 60...180 °C Ni 100, Ni 200, Ni 500, Ni 1000

Temperature probe 0.5 mA Ni 100, Ni 200, Ni 500, Ni 1000

Temperature probe 2.5 mA Pt 100, Pt 200, Ni 100, Ni 200

Analogue input resolution

13 bits

Input impedance

>= 10 MOhm

Absolute accuracy error

0.1 °C

Linearity error

+/- 0.01 % full scale

+/- 0.5 °C

Accuracy drift according to temperature

+/- 0.5 °C 77 °F (25 °C)

+/- 0.9 °C 32...140 °F (0...60 °C)

Isolation between channels and bus

1780 V AC 47...63 Hz 60 s

2500 V DC 60 s

Isolation between channels

300 Vrms AC

Update time

1200 ms 3 wires

640 ms 2 wires/4 wires

Fault type

Broken wire

Overtacking scale

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

200 mA

Power dissipation in W

1 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

3595861133167

Returnability

No

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Package 1 Height

1.85 in (4.7 cm)

Package 1 Width

6.50 in (16.5 cm)

Package 1 Length

12.36 in (31.4 cm)

Package weight(Lbs)

15.5 oz (440.0 g)