

Schneider Service Manual

140ATI03000

3. Product Information

Schneider Electric 140ATI03000 Picture

analog input module Modicon Quantum - 8 I thermocouple

140ATI03000

Specifications

Main

Range of Product

Modicon Quantum automation platform

Product or Component Type

Analogue input module

Type of filter

Notch filter - 3 dB at 50/60 Hz

Single pole low pass - 3 dB at 20 Hz

Complementary

Analogue input number

8

Addressing requirement

10 input words

Analogue input type

Thermocouple - 210...760 °C thermocouple J

Thermocouple - 270...1000 °C thermocouple E

Thermocouple - 270...1370 °C thermocouple K

Thermocouple - 270...400 °C thermocouple T

Thermocouple - 50...1665 °C thermocouple R

Thermocouple - 50...1665 °C thermocouple S

Analogue input resolution

16 bits

Absolute accuracy error

+/- 2 °C plus + 0.1 % of reading thermocouple E

+/- 2 °C plus + 0.1 % of reading thermocouple J

+/- 2 °C plus + 0.1 % of reading thermocouple K

+/- 2 °C plus + 0.1 % of reading thermocouple T

+/- 4 °C plus + 0.1 % of reading thermocouple R

+/- 4 °C plus + 0.1 % of reading thermocouple S

Linearity error

1 °C, 0.1 °C, 1 F, 0.1 F - 210...760 °C

1 °C, 0.1 °C, 1 F, 0.1 F - 270...1000 °C

1 °C, 0.1 °C, 1 F, 0.1 F - 270...1370 °C

1 °C, 0.1 °C, 1 F, 0.1 F - 270...400 °C

1 °C, 0.1 °C, 1 F, 0.1 F - 50...1665 °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

1780 V AC 60 s

2500 V DC 60 s

Isolation between channels

300 V DC

220 V AC

Update time

1000 ms

Fault type

Broken wire

Overtacking scale

Marking

CE

Cold junction compensation

Internal 32...140 °F (0...60 °C)

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

1.5 W

Module format

Standard

Net Weight

0.7 lb(US) (0.3 kg)

Environment

Standards

CSA C22.2 No 142

UL 508

Product Certifications

cUL

FM Class 1 Division 2

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

3595861126602

Returnability

No

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Package 1 Height

1.97 in (5.000 cm)

Package 1 Width

6.50 in (16.500 cm)

Package 1 Length

12.40 in (31.500 cm)

Package weight(Lbs)

14.991 oz (425.000 g)