

# Schneider Service Manual

140AVI03000

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## 3. Product Information

Schneider Electric 140AVI03000

analog input module Modicon Quantum - 8 I multirange

140AVI03000

Specifications

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

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

1.97 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)

16.226 oz (460.000 g)

Unit Type of Package 2

S03

Number of Units in Package 2

7

Package 2 Height

11.81 in (30.000 cm)

Package 2 Width

11.81 in (30.000 cm)

Package 2 Length

15.75 in (40.000 cm)

Package 2 Weight

8.144 lb(US) (3.694 kg)