

Schneider Service Manual

140EHC20200

3. Product Information

Modicon Quantum - high-speed counter module - 500000 Hz

140EHC20200

Main

Range of Product

Modicon Quantum automation platform

Product or Component Type

High-speed counter module

Number of channels

2

Complementary

Addressing requirement

6 output words

6 input words

Data format

2147483647 dec 32 bits

65535 dec 16 bits

Counting input type

Incremental or quadrature

Counting frequency

500000 Hz

Discrete input voltage

< 30 V

Operating mode

Incremental or quadrature discrete input

Input resistance

10 kOhm discrete input

Operating threshold

0...11 V single ended mode 24 V DC at state off

0...2 V single ended mode 5 V DC at state on

0 V single ended mode 12 V DC at state on

13...24 V single ended mode 24 V DC at state on

2...7 V single ended mode 12 V DC at state off

>= 1.8 V differential mode

3.5...5 V single ended mode 5 V DC at state off

Discrete output number

4

Discrete output type

Field Effect Transistor (FET)

Discrete output voltage

0 V switch off DC

0.4 V switch on DC

Load current

0.5 A

Maximum leakage current

0.4 mA state off

Maximum voltage drop

<0.4 V state on

Protection type

36 V transorb discrete output

Isolation between channels and bus

1780 Vrms 60 s

Fault type

Loss of output field power

Output short-circuit protection

Blown fuse 2.5 A

Power dissipation

4 + (0.4 x total module load current)

Bus current requirement

650 mA

External power requirement
19.2...30 V
Rack type
Local
Remote
Distributed
Local signalling
2 LEDs for channel status
Marking
CE
Current consumption
<= 1050 mA 24 V DC external power supply
Module format
Standard
Environment
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)
Standards
UL 508
Product Certifications
C-Tick.1
CSA No 142
FM Class 1 Division 2
UL
Ordering and shipping details
Category
US1PC2118155
Discount Schedule
PC21
GTIN
3595861127104
Returnability
Yes
Packing Units
Unit Type of Package 1
PCE
Nbr. of units in pkg.
1
Package 1 Height
1.97 in (5.0 cm)
Package 1 Width
6.69 in (17.0 cm)
Package 1 Length
12.60 in (32.0 cm)
Package weight(Lbs)
15.7 oz (444.0 g)