

Schneider Series Service Manual

140DAO84010C

1. Description

The 140DAO84010C from Schneider Electric's Modicon Quantum series is a discrete output module featuring 16 isolated output channels. It operates with an output voltage range of 20 to 132 V AC and requires a single output word for addressing.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete output module
Product	Line Modicon Quantum
Part	Number 140DAO84010C
EAN	3595861137479
Output	Channels 16
Output	Type Isolated
Output	Voltage 20 to 132 V AC
Addressing	Requirement 1 output word
DV/dt	400 V/ms
Protection	Type Internal by RC filter
Fuse	Rating 5 A
Marking	CE
Format	Standard
Ambient	Temperature 0 to 60 °C
Standards	UL 508, CSA
Protective	Treatment Conformal coating

3. Product Information

The 140DAO84010C from Schneider Electric's Modicon Quantum series is a discrete output module featuring 16 isolated output channels. It operates with an output voltage range of 20 to 132 V AC and requires a single output word for addressing.

Technical specifications for 140DAO84010C

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Format Standard

Ambient Temperature 0 to 60 °C

Standards UL 508, CSA

Protective Treatment Conformal coating

Description

Schneider Electric's 140DAO84010C is designed as a discrete output module, part of the Modicon Quantum series. It is configured with 16 isolated output channels, allowing for efficient control over multiple connected devices. The voltage output spans from 20 to 132 V AC, adapting to various application requirements.

To address this module, a single output word is needed. One notable characteristic is its high DV/dt rating of 400 V/ms, which enables fast signal transition, crucial for dynamic applications. For added safety, the module incorporates internal protection via an RC filter, which helps to safeguard against electrical disturbances. Furthermore, it has a fuse rating of 5 A, providing additional security in the system.

The module's design adheres to standard specifications, with a weight of 0.485 kg, making it manageable in installation settings. It is effective in ambient temperatures ranging from 0 °C to 60 °C, ensuring reliable operation in diverse environments. The protective treatment is a conformal coating, enhancing its durability against environmental factors.

Additionally, the 140DAO84010C module meets stringent standards, including UL 508 and CSA certifications. Its CE marking signifies compliance with European safety directives, making it a dependable choice for industrial applications.

Range of Product

Modicon Quantum automation platform

Product or Component Type

AC discrete output modules

Discrete output number

16

Complementary

Discrete output type

Isolated

Group of channels

16 groups of 1 channel

Supply frequency

47...63 Hz

maximum voltage drop

1.5 V

Discrete output voltage

20...132 V AC

Addressing requirement

1 output word

Absolute maximum output

156 V 10 s AC

200 V during one cycle AC

Maximum load current

1 mA rms 24 V off state leakage/points

1 mA rms 48 V off state leakage/points

2 mA rms 115 V off state leakage/points

16 A rms per module

4 A rms sum of four points, continuous

4 A rms 20...132 V each point

Surge current
20 A during 2 cycles per point
30 A during 1 cycle per point
30 A during 3 cycles per point
DV/dt
400 V/ms
Response Time
<= 0.5 ms at state 0 to state 1
<= 0.5 ms at state 1 to state 0
Protection Type
Internal by RC filter
Power dissipation
1.85 + (1.1 V x total module load current)
Associated fuse rating
5 A
Marking
CE
Local signalling
1 LED (green) for bus communication is present (Active)
1 LED (red) for external fault detected (F)
16 LEDs (green) for input status
Bus current requirement
350 mA
Module format
Standard
Net Weight
1.069 lb(US) (0.485 kg)
Environment
Protective treatment
Conformal coating Humiseal 1A33
Product Certifications
FM Class 1 Division 2
cUL
Standards
UL 508
CSA C22.2 No 142
Electromagnetic compatibility
Electrostatic discharge immunity test - test level: 4 kV (contact discharge) conforming to IEC 801-2
Electrostatic discharge immunity test - test level: 8 kV (air discharge) conforming to IEC 801-2
Susceptibility to electromagnetic fields - test level: 10 V/m (80...1000 MHz) conforming to 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
18155-QUANTUM I/O & POWER SUPPLIES
Discount Schedule
PC21
GTIN
3595861137479
Returnability
No
Country of origin
CN

Packing Units
Unit Type of Package 1
PCE
Nbr. of units in pkg.
1
Package 1 Height
2.0 in (5.0 cm)
Package 1 Width
6.5 in (16.5 cm)
Package 1 Length
12.4 in (31.5 cm)
Package weight(Lbs)
22.1 oz (627.0 g)