

Schneider Series Service Manual

140DAO84010

1. Description

The 140DAO84010 module, part of the Modicon Quantum series by Schneider Electric, provides robust discrete output capabilities. This module is designed with 16 channels and offers output voltage ranging from 20 to 132V AC, supporting a variety of applications.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Line Modicon Quantum
Part	Number 140DAO84010
UPC	785901115717
Weight	2.00 lbs (0.91 kg)
Output	Type Discrete Outputs
Number	of Channels 16 Channels
Discrete	Output Voltage 20 to 132V AC
Isolated	Outputs Yes
Supply	Frequency 47-63 Hz
Maximum	Voltage Drop 1.5V
Groups	of Channels 16 Groups
Absolute	Maximum Output 156V at 10 s AC, 200V at 1 Cycle AC
DV/dt	Rating 400V/rms
Operating	Temperature Range 0°C to 60°C
Storage	Temperature Range -40°C to 85°C
Mounting	Type Rack Mountable
Maximum	Relative Humidity 95% Without Condensation
Module	Type Discrete Output Module
CE	Marking Yes

3. Product Information

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Technical specifications for 140DAO84010

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Product Line Modicon Quantum

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Storage Temperature Range -40°C to 85°C

Mounting Type Rack Mountable

Maximum Relative Humidity 95% Without Condensation

Module Type Discrete Output Module

CE Marking Yes

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)

Description

The Schneider Electric 140DA084010 is an advanced discrete output module tailored for industrial automation systems. This device excels with 16 separate channels, delivering output voltage levels between 20 and 132V AC. It's specifically designed to handle isolated outputs, thus providing enhanced protection for connected devices.

With the ability to operate efficiently at a supply frequency of 47-63 Hz, this module boasts a maximum voltage drop of only 1.5V. As a discrete output module, it is organized into 16 groups of channels, enabling flexible and organized use within various configurations. The module also features remarkable output capabilities, achieving an absolute maximum of 156V for durations of 10 seconds and up to 200V for one cycle of AC.

Thermal performance is robust, with an operational temperature range extending from 0°C to 60°C while storage conditions can safely reach from -40°C to 85°C. The product is rack mountable, allowing for streamlined installation. It is also designed to operate effectively in environments with a relative humidity level of up to 95%, so long as condensation is avoided. Enhanced safety and compliance are indicated with the CE marking, underlining its adherence to stringent European standards for equipment.