

Schneider 140DAO84210C Manual

Brand	Schneider
Product Series	Schneider
Product Type	Internal by RC filter

Description

The 140DAO84210C output module from Schneider Electric is designed to operate within voltage ranges of 100 to 230 V AC. This unit supports a total of 16 outputs, making it suitable for varied applications. It has a weight of 1.98 lbs and operates efficiently at supply frequencies of 47 to 63 Hz.

Technical specifications for 140DAO84210C

Manufacturer Schneider Electric

Product Line Modicon Quantum

Part Number 140DAO84210C

EAN 3595861136038

Product Output Module

Operating Voltage 100/230 V AC

Number of Outputs 16

Supply Frequency 47 to 63 Hz

Voltage Drop 1.5 V

Minimum Load 5A

Fault Indication Blown Fuse

Power Dissipation $1.85 + (1.1 \text{ V} \times \text{total module load current})$

Local Signalling 16 LEDs green input status

Bus Current Requirement 350 mA

Minimum Load Current 4A rms per group

Protection Type Internal by RC filter

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Description

The Schneider Electric 140DAO84210C output module is part of the Modicon Quantum series and is built for reliable performance in various systems. It functions on an operating voltage range of 100/230 V AC and is capable of supporting 16 individual outputs. Weighing in at 1.98 lbs, this module is designed for applications where space is at a premium.

The unit operates effectively at supply frequencies between 47 and 63 Hz, ensuring compatibility across different installations. One notable feature is its voltage drop of 1.5 V, which is essential for system efficiency. For optimal performance, the module has a minimum load requirement of 5 A, making it suitable for various industrial scenarios.

A blown fuse serves as the fault indication, providing immediate feedback on module status. This output module's power dissipation is a function of its load current, calculated as 1.85 plus 1.1 V multiplied by the total current flowing through the module. Local signaling is facilitated by 16 green LEDs, allowing users to easily track input status.

With a bus current requirement of 350 mA, the module is designed to work seamlessly in automated environments. It also necessitates a minimum load current of 4 A RMS for each group. Internal protection is established through an RC filter, ensuring the robustness of the electrical components. The 140DAO84210C output module exemplifies precision engineering tailored for rigorous operational demands.

Range of Product

Modicon Quantum automation platform

Product or Component Type

AC discrete output modules

Discrete output number

16

Complementary

Group of channels

4 groups of 4 channels

Supply frequency

47...63 Hz

maximum voltage drop

1.5 V

Discrete output voltage

83...253 V AC

Addressing requirement

1 output word

Absolute maximum output

300 Vrms 10 s AC

400 Vrms 1 cycle AC

Maximum load current

2 mA rms 115 Vrms off state leakage per output

2.5 mA rms 230 Vrms off state leakage per output

3 A rms 170...253 V per output

4 A rms 85...132 V per output

16 A rms per module

4 A rms per group

Surge current

10 A during 3 cycles per point

20 A during 2 cycles per point

30 A during 1 cycle per point

25 A during 3 cycles per group

30 A during 2 cycles per group

45 A during 1 cycle per group

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

Fault indication

Blown fuse

Loss of field power

Protection Type

Internal output protection by 5 A fuse

Internal by RC filter

Power dissipation

 $1.85 + (1.1 \text{ V} \times \text{total module load current})$

Marking

CE

Local signalling

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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

0.99 lb(US) (0.45 kg)

Environment

Protective treatment

Conformal coating Humiseal 1A33

Product Certifications

cUL

FM Class 1 Division 2

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

US1PC2118155

Discount Schedule

PC21

GTIN

3595861136038

Returnability

No

Packing Units

Unit Type of Package 1

PCE

Nbr. of units in pkg.

1

Package 1 Height

6.4 in (16.3 cm)

Package 1 Width

1.8 in (4.5 cm)

Package 1 Length

12.3 in (31.2 cm)

Package weight(Lbs)

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23.4 oz (664 g)

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