

Schneider Series Service Manual

140DDO35301C

1. Description

The 140DDO35301C is a discrete output module from Schneider Electric's Modicon Quantum series. This module features 32 output channels operating at 24 V DC for effective control in automation tasks.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete output module
Product	Line Modicon Quantum
Part	Number 140DDO35301C
EAN	3595862015325
Output	Channels 32
Output	Type Positive logic (source)
Addressing	Requirement 2 output words
Output	Voltage 24 V DC
Max	Leakage Current 1 mA
Surge	Current 2 A
Power	Dissipation 5 W
Marking	CE
Format	Standard
Bus	Current Requirement 330 mA
Ambient	Temperature 0 to 60 °C
Standards	UL 508, CSA
Protective	Treatment Conformal coating

3. Product Information

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Technical specifications for 140DDO35301C

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Format Standard

Bus Current Requirement 330 mA

Ambient Temperature 0 to 60 °C

Standards UL 508, CSA

Protective Treatment Conformal coating

Description

The 140DDO35301C module serves as a discrete output component within Schneider Electric's Modicon Quantum series. It is designed to provide 32 output channels, each utilizing positive logic (source) at an output voltage of 24 V DC. For communication purposes, the module needs 2 output words for addressing.

Current specifications indicate the module can handle a surge current of up to 2 A while maintaining a maximum leakage current of 1 mA, ensuring minimal waste during operation.

Power dissipation is noted at 5 W, making it efficient for a variety of applications. This discrete output module weighs 0.45 kg and has a bus current requirement of 330 mA.

With an operational temperature range from 0 to 60 °C, it is suitable for numerous environments, and its design adheres to key industry standards, including UL 508 and CSA certifications. Additionally, the device is marked with a CE compliance label and features a protective conformal coating to enhance durability under adverse conditions. The overall format of this module is standard, fitting seamlessly into existing setups.

Range of product

Modicon Quantum automation platform

Product or component type

Dc discrete output module

Discrete output number

32

Complementary

Group of channels

4 groups of 8

Discrete output logic

Positive logic (source)

Addressing requirement

2 output words

Discrete output voltage

24 V DC

Output voltage limits

19.2...30 V

Absolute maximum output

50 V for 1 s decaying pulse

Maximum voltage drop

<0.4 V 0.5 A

Maximum load current

16 A per module

4 A per group

Surge current

2 A

Response time

<= 0.1 ms at state 1 to state 0

<= 1 ms at state 0 to state 1

Maximum leakage current

1 mA 24 V

Load inductance

$\text{Inductance(H)} = 0.5 / ((\text{current(A)})^2 \times (\text{switching frequency(Hz)}))$

Fault indication

Blown fuse

Loss of field power

Associated fuse rating

3 A each point

5 A per group

Isolation between channels and bus

1780 Vrms DC for 1 minute

Isolation between group

500 Vrms DC for 1 minute

Protection type

Internal output protection by 5 A fuse per group

Power dissipation

5 W

Marking

CE

Local signalling

1 LED (green) for bus communication is present (Active)

1 LED (red) for external fault detected (F)

32 LEDs (green) for input status

Bus current requirement

330 mA

Module format

Standard

Net weight

0.45 kg

Environment

Protective treatment

Conformal coating Humiseal 1A33

Product certifications

RMRS

C-Tick

GOST

FM Class 1 Division 2

Standards

UL 508

CSA C22.2 No 142

Resistance to electrostatic discharge

4 kV contact conforming to IEC 801-2

8 kV on air conforming to IEC 801-2

Resistance to electromagnetic fields

10 V/m 80...2000 MHz conforming to IEC 801-3

Ambient air temperature for operation

0...60 °C

Ambient air temperature for storage

-40...85 °C

Relative humidity

95 % without condensation

Operating altitude

<= 5000 m

Packing Units

Unit Type of Package 1

PCE

Number of Units in Package 1

1

Package 1 Height

16.3 cm
Package 1 Width
4.5 cm
Package 1 Length
31.2 cm
Package 1 Weight
470 g