

Schneider Series Service Manual

140DDI35310C

1. Description

The 140DDI35310C from Schneider Electric is a discrete input module designed for use in Modicon Quantum applications. It features 32 input channels with a 24 V DC input voltage. Designed for demanding environments, this module operates effectively up to a temperature of 60 °C.

2. Specifications

Specification	Value
Manufacturer	Schneider Electric
Product	Type Discrete Input Module
Product	Line Modicon Quantum
Part	Number 140DDI35310C
EAN	3595861137134
Input	Channels 32
Input	Voltage 24 V DC
Addressing	Requirement 2 Input Words
Input	Impedance 2400 Ohm
Max	Leakage Current 200 mA
Protection	Type Input Protection by Resistor
Bus	Current Requirement 330 mA
Marking	CE
Format	Standard
Ambient	Temperature 0 to 60 °C
Standards	UL 508, CSA
Protective	Treatment Conformal Coating

3. Product Information

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Technical specifications for 140DDI35310C

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Bus Current Requirement 330 mA

Marking CE

Format Standard

Ambient Temperature 0 to 60 °C

Standards UL 508, CSA

Protective Treatment Conformal Coating

Description

Schneider Electric's 140DDI35310C is classified as a discrete input module specifically within the Modicon Quantum series. This component possesses 32 individual input channels, permitting extensive data monitoring and control capabilities. Designed to operate with a voltage of 24 V DC, this module ensures reliable performance across a wide range of industrial applications.

Addressing requirements are straightforward since two input words are needed for optimal operation. The input impedance is specified at 2400 Ohm, which can facilitate diverse applications efficiently. The module supports a maximum leakage current of 200 mA and requires a bus current of 330 mA to function properly.

A resistor is used to provide input protection, adding an additional layer of safety for both the module and the connected devices. The unit weighs 0.3 kg, making it manageable for installations. Furthermore, it is suitable for ambient temperatures from 0 to 60 °C, which defines its operational versatility in varied environment conditions. Protective treatment through conformal coating offers resistance against moisture and dust, enhancing durability in industrial settings.

This module also meets several industry standards, including UL 508 and CSA, further asserting its reliability. Lastly, it carries the CE marking, indicating compliance with EU safety standards.

Range of Product

Modicon Quantum automation platform

Product or Component Type

Low voltage dc discrete input modules

Discrete input number

32

Complementary

Group of channels

4

Logic input

Negative (source)

Discrete input voltage

24 V DC

Input voltage limits

19.2...30 V

Voltage state 1 guaranteed

-30...-15 V DC

Voltage state 0 guaranteed

-5...0 V DC

Current state 1 guaranteed

≥ 2.5 mA at $U_s = -14$ V

Current state 0 guaranteed

≤ 0.5 mA

Addressing requirement

2 input words

Input impedance

2400 Ohm

Maximum leakage current

200 mA at $U_s = 5.5\text{ V}$ and $U_{in} = 4\text{ V}$

Absolute maximum input

30 V continuous

50 V during 1 ms decaying pulse

Response Time

$\leq 1\text{ ms}$ from state 0 to state 1

$\leq 1\text{ ms}$ from state 1 to state 0

Protection Type

Input protection by resistor limited

Power dissipation

1.5 W + (0.26 x number of points on)

Isolation between group and bus

1780 Vrms for 1 minute

Isolation between group

500 Vrms for 1 minute

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

Marking

CE

Bus current requirement

330 mA

Module format

Standard

Net Weight

0.7 lb(US) (0.3 kg)

Environment

Protective treatment

Conformal coating Humiseal 1A33

Standards

CSA C22.2 No 142

UL 508

Product Certifications

RINA

GOST

C-tick

FM Class 1 Division 2

RMRS

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...2000 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

$\leq 16404.2\text{ ft}$ (5000 m)

Ordering and shipping details

Category

18155-QUANTUM I/O & POWER SUPPLIES

Discount Schedule

PC21

GTIN

3595861137134

Returnability

No

Country of origin

CN

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)

15.3 oz (435 g)