Specifications

Eaton 257891



Catalog Number: 257891

Eaton XIOC Digital input card for XC100/200, 24 V DC, 8DI

General specifications

Product Name
Eaton XIOC Accessory Input card

Catalog Number
257891

EAN
4015082578916

Product Length/Depth
100 mm

Product Height
95 mm

Product Width
30 mm

Product Weight
0.135 kg

Compliances
CE Marked
RoHS Compliant

Certifications
UL Listed
CSA Class No.: 2252-01
IEC/EN 61131-2
UL Category Control No.: NRAQ
CSA
UL File No.: E135462
CSA File No.: 012528
UL
CSA-C22.2 No. 0-M
CE
EN 50178
CSA-C22.2 No. 142-M
UL508

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Features & Functions

Electric connection type

Screw-/spring clamp connection

General

Admissible range

20.4 – 28.8 V (11.8 – 14.4 V), Power supply

Current consumption

26 mA, with fitted modules

Degree of protection

IP20

Number of channels

8

Overvoltage category

II

Pollution degree

2

Protection

Protection class: 1

Repetition rate

1 s

Residual ripple

≤ 5 %

Switching level

≤ 15 V DC, ON, Voltage level to IEC 61131-2, limit value type 1, Inputs
≤ 5 V DC, OFF, Voltage level to IEC 61131-2, limit value type 1, Inputs

Type

Digital module

Used with

XC100/200 (expandable with up to 15 XI/OC modules)

Voltage type

DC

Ambient conditions, mechanical

Impact resistance

500 g/ 50 mm ±25 g

Shock resistance

15 g, Mechanical, Shock duration 11 ms

Climatic environmental conditions

Ambient operating temperature - min

0 °C

Ambient operating temperature - max

55 °C

Vibration resistance

57 - 150 Hz ± 1.0 mm

10 - 57 Hz, ± 0.075 mm

Ambient storage temperature - min

-25 °C

Ambient storage temperature - max

70 °C

Electro magnetic compatibility

Emitted interference

Class A (according to DIN/EN 55011/22)

Voltage dips

10 ms

Terminal capacities

Terminals

Optionally, screw terminals

or spring-loaded terminals

for digital/analog modules

Plug-in terminal block

Electrical rating

Power loss

Max. 0.8 W

Rated operational voltage

24 (12) V DC

Short-circuit protection

Yes, Outputs

Supply voltage at AC, 50 Hz - min

0 VAC

Supply voltage at AC, 50 Hz - max

0 VAC

Supply voltage at DC - min

20.4 VDC

Supply voltage at DC - max

28.8 VDC

Communication

LED indicator

Status indication: Green LED

Input/Output

Delay time

≤ 5 ms typ., Digital inputs 24 V DC, Delay time from 0 to 1, Debounce ON

≤ 5 ms (normally 4 ms), Debounce ON

Input

Voltage (DC)

8 Inputs (24 V DC)

Input current

6.9 mA

Input current at signal 1

4 mA

Input impedance

3.5 kΩ

Input voltage

24 V DC (modules)

Number of inputs (digital)

8

Number of outputs (digital)

0

Output current

0 A

Safety

Explosion safety category for dust

None

Explosion safety category for gas

None

Potential isolation

Digital inputs: Opto-isolated

Design verification

Equipment heat dissipation, current-dependent Pvid

0 W

Heat dissipation capacity Pdiss

0 W

Heat dissipation per pole, current-dependent Pvid

0 W

Rated operational current for specified heat dissipation (In)

0 A

Static heat dissipation, non-current-dependent Pvs

0.8 W

10.2.2 Corrosion resistance

Meets the product standard's requirements.

10.2.3.1 Verification of thermal stability of enclosures

Meets the product standard's requirements.

10.2.3.2 Verification of resistance of insulating materials to normal heat

Meets the product standard's requirements.

10.2.3.3 Resist. of insul. mat. to abnormal heat/fire by internal elect. effects

Meets the product standard's requirements.

10.2.4 Resistance to ultra-violet (UV) radiation

Meets the product standard's requirements.

10.2.5 Lifting

Does not apply, since the entire switchgear needs to be evaluated.

10.2.6 Mechanical impact

Does not apply, since the entire switchgear needs to be evaluated.

Resources

Brochures

eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf

Slice card modular I/O system for the machine building industry XN300 - brochure

XC Series of high-performance PLCs

Declarations of conformity

DA-DC-00003857.pdf

DA-DC-00003438.pdf

Drawings

eaton-electronic-devices-dimensions-xioc-output-module-dimensions.eps

eaton-electronic-devices-local-inputoutput-xioc-output-module-3d-drawing.eps

eaton-electronic-devices-in-out-module-xioc-output-module-dimensions.eps

eCAD model

ETN.XIOC-8DI

Manuals and user guides

MN05002002Z_EN

mCAD model

DA-CD-xioc

DA-CS-xioc

Specifications and datasheets

Eaton Specification Sheet - XIOC-8DI

10.2.7 Inscriptions

Meets the product standard's requirements.

10.3 Degree of protection of assemblies

Meets the product standard's requirements.

10.4 Clearances and creepage distances

Meets the product standard's requirements.

10.5 Protection against electric shock

Does not apply, since the entire switchgear needs to be evaluated.

10.6 Incorporation of switching devices and components

Does not apply, since the entire switchgear needs to be evaluated.

10.7 Internal electrical circuits and connections

Is the panel builder's responsibility.

10.8 Connections for external conductors

Is the panel builder's responsibility.

10.9.2 Power-frequency electric strength

Is the panel builder's responsibility.

10.9.3 Impulse withstand voltage

Is the panel builder's responsibility.

10.9.4 Testing of enclosures made of insulating material

Is the panel builder's responsibility.

10.10 Temperature rise

The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.

10.11 Short-circuit rating

Is the panel builder's responsibility.

10.12 Electromagnetic compatibility

Is the panel builder's responsibility.

10.13 Mechanical function

The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.



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