Specifications

Eaton 257901

Catalog Number: 257901

Eaton XIOC Analog input card for XC100/200, 24 V DC, 4AI(Pt100/1000)



General specifications

Product Name
Eaton XIOC Accessory Input card

Catalog Number
257901

EAN
4015082579012

Product Length/Depth
100 mm

Product Height
95 mm

Product Width
30 mm

Product Weight
0.135 kg

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

Catalog Notes
In these cases, the resistance value is 7FFFhex

Features & Functions

Electric connection type

Screw-/spring clamp connection

Features

Analog outputs configurable

Input, resistance thermometer

Analog inputs configurable

Functions

Linearization

General

Admissible range

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

Current consumption

200 mA max., internal (5 V DC), Inputs

Degree of protection

IP20

Number of channels

4, Input

Overvoltage category

II

Pollution degree

2

Protection class

1

Repetition rate

1 s

Residual ripple

≤ 5 %

Resistance

Pt100 - IEC 751, Pt1000 (Platinum temperature resistance)

Max 0.4 kΩ (4 channels, impedance)

Resolution

15 Bit (signed, digital)

Type

Analog module

Used with

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

Ambient conditions, mechanical

Impact resistance

500 g/ 50 mm ±25 g

Shock resistance

15 g, Mechanical, Shock duration 11 ms

Vibration resistance

57 - 150 Hz ± 1.0 mm

Climatic environmental conditions

Ambient operating temperature - min

0 °C

Ambient operating temperature - max

55 °C

Ambient storage temperature - min

-25 °C

10 - 57 Hz, ± 0.075 mm

Ambient storage temperature - max

70 °C

Operating temperature - min

-20 °C

Operating temperature - max

400 °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. 4.8 W

Power supply

24 V DC (-15/+20 %), 100 mA

Rated operational voltage

24 (12) V DC

Communication

Connection type

Screened cable

Input/Output

Accuracy

3 %, -50 to 400 °C (Pt100)
0.5 %, -20 to 40 °C (Pt100)
6 %, -50 to 400 °C (Pt100)

Input

4 Inputs for temperature monitoring (Pt100/1000)

Number of inputs (analog)

4

Number of outputs (analog)

0

Temperature error

≤ -25 °C or ≥ +45 °C = resistance value 7FFFFhex, Error detection -20 °C to 40 °C, Inputs
≤ -60 °C or ≥ +410 °C = resistance value 7FFFFhex, Error detection -50 °C to 400 °C, Inputs

Safety

Explosion safety category for dust

None

Explosion safety category for gas

None

Potential isolation

Analog inputs: Opto-isolated

Analog outputs: no

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

4.8 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.

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.

Resources

Brochures

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

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

Declarations of conformity

DA-DC-00003397.pdf

DA-DC-00003821.pdf

Drawings

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

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

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

eCAD model

ETN.XIOC-4T-PT

Manuals and user guides

MN05002002Z_EN

mCAD model

DA-CD-xioc

DA-CS-xioc

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