Specifications

Eaton 257908



Catalog Number: 257908

Eaton XIOC Communication module for XC100/200, 24 V DC, PROFIBUS-DP master

General specifications

Product Name
Eaton XIOC Communication module

Catalog Number
257908

EAN
4015082579081

Product Length/Depth
100 mm

Product Height
95 mm

Product Width
30 mm

Product Weight
0.145 kg

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

Powering Business Worldwide

Features & Functions

Fitted with:

Potential separation

Functions

Master (Class 1)

PROFIBUS-DP interface

General

Current consumption

300 mA, Interfaces

300 mA (Ie), Interfaces

Degree of protection

IP20

Overvoltage category

II

Pollution degree

2

Protection class

1

Repetition rate

1 s

Residual ripple

≤ 5 %

Resistance

500 g/ 50 mm ±25 g (impact resistance)

Type

Communication module

PROFIBUS-DP master

module

Used with

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

Ambient conditions, mechanical

Shock resistance

15 g, Mechanical, Shock duration 11 ms

Vibration resistance

10 - 57 Hz, ± 0.075 mm

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

-20 °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

Electrical rating

Power loss

7.2 W

Rated operational voltage

24 (12) V DC

Supply voltage

20.4 – 28.8 (11.8 – 14.4) V DC, Admissible range, Power supply

Supply voltage at DC - max

5 V

Communication

Bus termination

Switchable

Data transfer rate

93.75 kBit/s with 1200 m
9.6 - 12000 kBit/s
500 kBit/s with 400 m
1500 kBit/s with 200 m
Transmit data: 3500 Byte
9.6 kBit/s with 1200 m
3000 kBit/s with 100 m
19.2 kBit/s with 1200 m
12000 kBit/s with 100 m
187.5 kBit/s with 1000 m
6000 kBit/s with 100 m
Receive data: 3500 Bytes

Interfaces

PROFIBUS DP, RS485, EN 50170 (built-in)
Max. 244 Bytes per slave (Inputs/outputs)

LED indicator

Status indication of Bus diagnostics: LED

Number of modules

3 (XC200)

Safety

Explosion safety category for dust

None

Explosion safety category for gas

None

Potential isolation

Interfaces: yes

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

7.2 W

124 (slaves)

1 (XC100)

Number of slots

3

Plug type

9-pole SUB-D socket

Protocol

PROFIBUS

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

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

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

Declarations of conformity

DA-DC-00003403.pdf

DA-DC-00003836.pdf

Drawings

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

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

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

eCAD model

DA-CE-ETN.XIOC-NET-DP-M

Installation instructions

IL05002002Z

Manuals and user guides

MN05002002Z_EN

mCAD model

DA-CD-xioc_net_dp

DA-CS-xioc_net_dp

Eaton Corporation plc
Eaton House
30 Pembroke Road
Dublin 4, Ireland
Eaton.com

© 2024 Eaton. All Rights Reserved.

Eaton is a registered trademark.

All other trademarks are property of their respective owners.

Eaton.com/socialmedia