

Specifications



Eaton 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
MODEL CODE	XIOC-NET-DP-M
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



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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

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) 124 (slaves) 1 (XC100)
NUMBER OF SLOTS	3
PROTOCOL	PROFIBUS
PLUG TYPE	9-pole SUB-D socket

Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	0 °C
AMBIENT STORAGE TEMPERATURE - MIN	-20 °C

Design verification

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.
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.
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

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

Electro magnetic compatibility	
EMITTED INTERFERENCE	Class A (according to DIN/EN 55011/22)
VOLTAGE DIPS	10 ms

Features & functions

FITTED WITH:	Potential separation
FUNCTIONS	Master (Class 1) PROFIBUS-DP interface

Safety

EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
POTENTIAL ISOLATION	Interfaces: yes

General information

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)

Terminal capacities

TERMINALS	Optionally, screw terminals or spring-loaded terminals for digital/analog modules
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Resources

BROCHURES

[eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf](#)

[Slice card modular I/O system for the machine building industry XN300 - brochure](#)

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

[DA-CE-ETN.XIOC-NET-DP-M](#)

INSTALLATION INSTRUCTIONS

[IL05002002Z](#)

MANUALS AND USER GUIDES

[MN05002002Z_EN](#)

MCAD MODEL

[DA-CS-xioc_net_dp](#)

[eaton-communication-modules-mcad-drawings-xioc-net-dp.dwg](#)

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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