

Specifications



Photo is representative

Eaton 257899

Eaton XIOC Analog input card for
XC100/200, 24 V DC, 8DI(0 to 10V)

General specifications

PRODUCT NAME	Eaton XIOC Accessory Input card
CATALOG NUMBER	257899
MODEL CODE	XIOC-8AI-U1
EAN	4015082578992
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 CSA-C22.2 No. 142-M EN 50178 UL File No.: E135462 UL508 CSA Class No.: 2252-01 IEC/EN 61131-2 UL CSA UL Category Control No.: NRAQ CSA File No.: 012528 CE

Ambient conditions, mechanical

IMPACT RESISTANCE	500 g/□ 50 mm ±25 g
SHOCK RESISTANCE	15 g, Mechanical, Shock duration 11 ms
VIBRATION RESISTANCE	10 - 57 Hz, ± 0.075 mm 57 - 150 Hz ± 1.0 mm

Communication

CONNECTION TYPE	2-core screened cable (≤ 20 m)
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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	-25 °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	0.5 W

Electrical rating

POWER LOSS	Max. 0.5 W
POWER SUPPLY	24 V DC (-15/+20 %), approx. 150 mA
RATED OPERATIONAL VOLTAGE	24 (12) V DC

Electro magnetic compatibility

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

Features & functions

ELECTRIC CONNECTION TYPE	Screw-/spring clamp connection
FEATURES	Analog outputs configurable Input, voltage Analog inputs configurable

Input/Output

CONVERSIONS	≤ 5 ms
INPUT	8 Inputs (0 - 10 V)
INPUT IMPEDANCE	100 kΩ
INPUT VOLTAGE	0 - 10 V DC (Input modules)
NUMBER OF INPUTS (ANALOG)	8
NUMBER OF OUTPUTS (ANALOG)	0
TOTAL ERROR	≤ ±1 % (of the full-scale value), Inputs

Terminal capacities

TERMINALS	• Optionally, screw terminals or spring-loaded terminals for digital/analog modules • Plug-in terminal block
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General information

ADMISSIBLE RANGE	20.4 – 28.8 V (11.8 – 14.4 V), Power supply
CURRENT CONSUMPTION	100 mA (typ.), internal (5 V DC), Inputs
DEGREE OF PROTECTION	IP20
OVERVOLTAGE CATEGORY	II
POLLUTION DEGREE	2
PROTECTION CLASS	1
REPETITION RATE	1 s
RESIDUAL RIPPLE	≤ 5 %
RESOLUTION	12 Bit (digital)
TYPE	Analog module
USED WITH	XC100/200 (expandable with up to 15 XI/OC modules)
NUMBER OF CHANNELS	8, Input

Safety

EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
POTENTIAL ISOLATION	Analog inputs: Opto-isolated Analog outputs: no

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-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	ETN.XIOC-8AI-U1
MANUALS AND USER GUIDES	MN05002002Z_EN
MCAD MODEL	eaton-modular-i-o-system-mcad-drawings-xioc.dwg
	DA-CS-xioc

PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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