

Specifications



Photo is representative

Eaton 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
MODEL CODE	XIOC-4T-PT
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

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 10 - 57 Hz, ± 0.075 mm

Communication

CONNECTION TYPE	Screened cable
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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
OPERATING TEMPERATURE - MAX	400 °C
OPERATING 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	4.8 W

Electrical rating

POWER LOSS	Max. 4.8 W
POWER SUPPLY	24 V DC (-15/+20 %), 100 mA
RATED OPERATIONAL VOLTAGE	24 (12) V DC

Features & functions

ELECTRIC CONNECTION TYPE	Screw-/spring clamp connection
FEATURES	Analog outputs configurable Input, resistance thermometer Analog inputs configurable
FUNCTIONS	Linearization

Electro magnetic compatibility

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

General information

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
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)
NUMBER OF CHANNELS	4, Input

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	$\leq -25\text{ °C}$ or $\geq +45\text{ °C}$ = resistance value 7FFFFhex, Error detection -20 °C to 40 °C, Inputs $\leq -60\text{ °C}$ or $\geq +410\text{ °C}$ = resistance value 7FFFFhex, Error detection -50 °C to 400 °C, Inputs

Terminal capacities

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

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

Resources

BROCHURES	Slice card modular I/O system for the machine building industry XN300 - brochure eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf
DRAWINGS	eaton-electronic-devices-local-inputoutput-xioc-output-module-3d-drawing.eps eaton-electronic-devices-dimensions-xioc-output-module-dimensions.eps eaton-electronic-devices-in-out-module-xioc-output-module-dimensions.eps
ECAD MODEL	ETN.XIOC-4T-PT
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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