

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



**Part no.** XIOC-4T-PT  
**257901**  
**EL Number** 4519673  
**(Norway)**

General specifications	
Product name	Eaton XIOC Accessory Input card
Part no.	XIOC-4T-PT
EAN	4015082579012
Product Length/Depth	100 millimetre
Product height	95 millimetre
Product width	30 millimetre
Product weight	0.135 kilogram
Certifications	UL UL Category Control No.: NRAQ IEC/EN 61131-2 UL File No.: E135462 CSA-C22.2 No. 142-M EN 50178 CSA-C22.2 No. 0-M UL508 CE CSA File No.: 012528 CSA CSA Class No.: 2252-01
Product Tradename	XIOC
Product Type	Accessory
Product Sub Type	Input card
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 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
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 10 - 57 Hz, ± 0.075 mm
Climatic environmental conditions	
Ambient operating temperature - min	0 °C
Ambient operating temperature - max	55 °C

Ambient storage temperature - min		-25 °C
Ambient storage temperature - max		70 °C
Operating temperature - min		-20 °C
Operating temperature - max		400 °C
<b>Electro magnetic compatibility</b>		
Emitted interference		Class A (according to DIN/EN 55011/22)
Voltage dips		10 ms
<b>Terminal capacities</b>		
Terminals		Optionally, screw terminals or spring-loaded terminals for digital/analog modules Plug-in terminal block
<b>Electrical rating</b>		
Power loss		Max. 4.8 W
Power supply		24 V DC (-15/+20 %), 100 mA
Rated operational voltage		24 (12) V DC
<b>Communication</b>		
Connection type		Screened cable
<b>Input/Output</b>		
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
<b>Safety</b>		
Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Analog inputs: Opto-isolated Analog outputs: no
<b>Design verification</b>		
Equipment heat dissipation, current-dependent Pvid		0 W
Heat dissipation capacity Pdis		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.

## Technical data ETIM 9.0

Programmable logic controllers PLC (EG000024) / PLC analogue I/O-module (EC001420)			
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Programmable logic control (SPS) / PLC analog input/output module (ecl@ss13-27-24-22-01 [AKE524019])			
Number of analogue inputs			4
Number of analogue outputs			0
Analogue inputs configurable			Yes
Analogue outputs configurable			Yes
Input, current			No
Input, voltage			No
Input, resistor			No
Input, resistance thermometer			Yes
Input, thermocouple			No
Input signal, configurable			No
Resolution of the analogue inputs		Bit	16
Output, current			No
Output, voltage			No
Output signal configurable			No
Resolution of the analogue outputs		Bit	0
Type of electric connection			Screw-/spring clamp connection
Suitable for safety functions			No
SIL according to IEC 61508			None
Performance level according to EN ISO 13849-1			None
Appendant operation agent (Ex ia)			No
Appendant operation agent (Ex ib)			No
Explosion safety category for gas			None
Explosion safety category for dust			None
Width		mm	30
Power consumption		W	
Height		mm	95
Depth		mm	100