

Analog I/O module for XC100/200, 24 V DC, 4AI, 2AO(0-10V)



Part no. XIOC-4AI-2AO-U1
262405
EL Number 4519678
(Norway)

General specifications	
Product name	Eaton XIOC I/O module
Part no.	XIOC-4AI-2AO-U1
EAN	4015082624057
Product Length/Depth	100 millimetre
Product height	95 millimetre
Product width	30 millimetre
Product weight	0.115 kilogram
Certifications	EN 50178 UL File No.: E135462 CE UL508 UL CSA Class No.: 2252-01 IEC/EN 61131-2 CSA CSA-C22.2 No. 0-M CSA-C22.2 No. 142-M CSA File No.: 012528 UL Category Control No.: NRAQ
Product Tradename	XIOC
Product Type	I/O module
Product Sub Type	None
Features & Functions	
Electric connection type	Screw-/spring clamp connection
Features	Input, voltage Analog outputs configurable Output, voltage Analog inputs configurable
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 200 mA, external, Outputs
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 %
Resolution	12 Bit 14 Bit (Analog outputs, current)
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	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	-25 °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 Plug-in terminal block
Electrical rating		
Power loss		Max. 1 W
Rated operational voltage		24 (12) V DC
Short-circuit protection		Yes, Short-circuit rating, Outputs
Communication		
Connection type		Plug-in terminal block, Outputs
Interfaces		Terminating resistor: $\leq 2 \text{ k}\Omega$
Input/Output		
Conversions		1 ms < 1 ms
Input		4 Inputs (0 - 10 V)
Input impedance		40 k Ω
Input voltage		0 - 10 V DC (Input modules)
Number of inputs (analog)		4
Number of outputs (analog)		2
Output		2 Outputs (0 - 10 V)
Output voltage		0 - 10 V DC
Total error		Normally 0.4 %, Inputs/Outputs
Safety		
Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Analog outputs: no Between Inputs and Outputs: no Analog inputs: no
Design verification		
Equipment heat dissipation, current-dependent P _{vid}		0 W
Heat dissipation capacity P _{diss}		0 W
Heat dissipation per pole, current-dependent P _{vid}		0 W
Rated operational current for specified heat dissipation (I _n)		0 A
Static heat dissipation, non-current-dependent P _{vs}		1 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			2
Analogue inputs configurable			Yes
Analogue outputs configurable			Yes
Input, current			No
Input, voltage			Yes
Input, resistor			No
Input, resistance thermometer			No
Input, thermocouple			No
Input signal, configurable			No
Resolution of the analogue inputs		Bit	14
Output, current			No
Output, voltage			Yes
Output signal configurable			No
Resolution of the analogue outputs		Bit	12
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