### **DATASHEET - XIOC-2AO-U2**



Analog output module for XC100/200, 24 V DC, 2AO(+/-10V)

XIOC-2AO-U2 Part no. Catalog No. 257904

**EL-Nummer** (Norway)

4519677



**Delivery program** 

Function	Analog modules
	Compact I/O system for connection to XC100/200 Modular PLCs XC100/200 expandable with up to 15 XI/OC modules Optionally, screw terminals or spring-loaded terminals for digital/analog modules
Description	Outputs 2 outputs, ±10 V

# **Technical data**

Standards			IEC/EN 61131-2 EN 50178
Ambient temperature		°C	0 - +55
Storage	θ	°C	-25 - +70
Vibration resistance			10 - 57 Hz ±0.075 mm 57 - 150 Hz ±1.0 mm
Mechanical shock resistance		g	15 Shock duration 11 ms
Impact resistance			500 g/∅ 50 mm ±25 g
Overvoltage category/pollution degree			11/2
Protection class			1
Degree of Protection			IP20
Emitted interference			DIN/EN 55011/22, Class A
Weight		kg	0.18
Power sunnly			

### Power supply

Rated voltage	U <sub>e</sub>	V DC	24 (12)
Admissible range			20.4 – 28.8 (11.8 – 14.4)
Residual ripple		%	≦5
Neutral poles			
Duration of dip		ms	10
Repetition rate		s	1
Maximum power loss	$P_{v}$	W	0.5

### Inputs

External power supply		24 V DC (-15/+20 %), approx. 150 mA
Resolution	Bit	12
Conversion time		≦5 ms
Outputs		

Outputs		
Output voltage	V DC	-10 - 10
Resolution	Bit	12
Potential isolation		
Circuit within each channel		Opto-isolated
between channels		No
Terminations		Plug-in terminal block
Internal current consumption (5 V DC)	mA	100
Conversion time		≦5 ms
Total error	%	≦ ±1 (of the full-scale value)

External load resistance	
Voltage output	≦ 10 kΩ
Quantity of outputs	
Output voltage	2
External power supply	24 V DC (-15/+20 %), approx. 150 mA
Connection type	2-core screened cable (≦20 m)

# Design verification as per IEC/EN 61439

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Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	P <sub>vs</sub>	W	0.5
Heat dissipation capacity	P <sub>diss</sub>	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
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.
$10.2.3.3\ Verification\ of\ resistance\ of\ insulating\ materials\ to\ abnormal\ heat\ and\ fire\ due\ to\ internal\ electric\ effects$			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 Insulation properties			
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 7.0**

PLC's (EG000024) / PLC analogue I/O-module (EC001420)				
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS analog input/output module (ecl@ss10.0.1-27-24-22-01 [AKE524014])				
Number of analogue inputs 0				
Number of analogue outputs	2			
Analogue inputs configurable	Yes			
Analogue outputs configurable	Yes			
Input, current	No			
Input, voltage	No			
Input, resistor	No			
Input, resistance thermometer	No			
Input, thermocouple	No			

Input signal, configurable		No
Resolution of the analogue inputs	Bit	0
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
Category according to EN 954-1		
SIL according to IEC 61508		None
Performance level acc. 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
Height	mm	100
Depth	mm	95

### **Approvals**

ML File No.  LC Category Control No.  CSA File No.  CSA Class No.  North America Certification  Specially designed for North America  Current Limiting Circuit-Breaker  Mo  E135462  NRAQ  012528  012528  UL listed, CSA certified  No  No  No	- PP	
UL Category Control No.  CSA File No.  CSA Class No.  CSA Class No.  North America Certification  Specially designed for North America  Current Limiting Circuit-Breaker  No  NRAQ  1012528  2252-01  UL listed, CSA certified  No  No	Product Standards	
CSA File No. 012528 CSA Class No. 2252-01  North America Certification UL listed, CSA certified  Specially designed for North America No  Current Limiting Circuit-Breaker No	UL File No.	E135462
CSA Class No. 2252-01  North America Certification UL listed, CSA certified  Specially designed for North America No  Current Limiting Circuit-Breaker No	UL Category Control No.	NRAQ
North America Certification  UL listed, CSA certified  Specially designed for North America  No  Current Limiting Circuit-Breaker  No	CSA File No.	012528
Specially designed for North America  No  Current Limiting Circuit-Breaker  No	CSA Class No.	2252-01
Current Limiting Circuit-Breaker No	North America Certification	UL listed, CSA certified
	Specially designed for North America	No
Degree of Protection IEC: IP20, UL/CSA Type: -	Current Limiting Circuit-Breaker	No
	Degree of Protection	IEC: IP20, UL/CSA Type: -

## **Dimensions**



