

Digital output module for XC100/200, 24 V DC, 12DO(R)



**Part no.** XIOC-12DO-R  
**257897**  
**EL Number** 4519666  
**(Norway)**

General specifications		
Product name		Eaton XIOC Output module
Part no.		XIOC-12DO-R
EAN		4015082578978
Product Length/Depth		100 millimetre
Product height		95 millimetre
Product width		30 millimetre
Product weight		0.175 kilogram
Certifications		CSA CSA-C22.2 No. 142-M UL508 UL Category Control No.: NRAQ IEC/EN 61131-2 EN 50178 CE CSA File No.: 012528 CSA-C22.2 No. 0-M CSA Class No.: 2252-01 UL UL File No.: E135462
Product Tradename		XIOC
Product Type		Output module
Product Sub Type		None
Features & Functions		
Electric connection type		Screw-/spring clamp connection
Functions		Overvoltage protection (external)
General information		
Admissible range		20.4 – 28.8 V (11.8 – 14.4 V), Power supply
Current consumption		40 mA, Internal current consumption (5 V DC), Outputs
Degree of protection		IP20
Number of channels		12, Output
Overvoltage category		II
Pollution degree		2
Protection		Protection class: 1
Repetition rate		1 s
Residual ripple		≤ 5 %
Type		Digital module
Used with		XC100/200 (expandable with up to 15 XI/OC modules)
Voltage type		DC AC/DC
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
Electro magnetic compatibility		
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
<b>Electrical rating</b>		
Leakage current		0.1 A
Mains voltage tolerance		24 V DC (-15/+20 %, max. 70 mA)
Power loss		Max. 0.2 W
Rated control voltage (Uc)		100/240 V AC
Rated operational current (Ie)		5 A at AC-3, 230 V 2 A at DC-13, 110 V
Rated operational voltage		24 (12) V DC
Short-circuit protection		Fuse, Outputs, External
Supply voltage at AC, 50 Hz - min		0 V AC
Supply voltage at AC, 50 Hz - max		0 V AC
Supply voltage at DC - min		20.4 V DC
Supply voltage at DC - max		28.8 V DC
<b>Communication</b>		
Connection type		Plug-in terminal block, Power supply
LED indicator		Status indication: Green LED
<b>Input/Output</b>		
Delay time		10 ms typ., Outputs, Delay time from 1 to 0, Debounce OFF 10 ms, Outputs, Off -> On, Debounce OFF
Input current at signal 1		0 mA
Load current		Min. 1 mA
Number of inputs (digital)		0
Number of outputs (digital)		12
Output		12 Relay Outputs Relay
Output current		2 A
Output voltage		24 V DC
<b>Safety</b>		
Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Outputs: Opto-isolated
<b>Design verification</b>		
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		0.2 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 digital I/O-module (EC001419)		
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Programmable logic control (SPS) / SPS digital input/output module (ecl@ss13-27-24-22-04 [AKE527019])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	20.4 - 28.8
Voltage type (supply voltage)		DC
Number of digital inputs		0
Number of digital outputs		12
Digital inputs configurable		No
Digital outputs configurable		No
Power consumption	W	
Input current at signal 1	mA	0
Permitted voltage at input	V	0 - 0
Type of voltage (input voltage)		DC
Type of digital output		Relay
Output current	A	2
Permitted voltage at output	V	100 - 240
Type of output voltage		DC
Short-circuit protection, outputs available		No
Redundancy		No
Type of electric connection		Screw-/spring clamp connection
Time delay at signal change	ms	10 - 10
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
Height	mm	95
Depth	mm	100