

Digital input card for XC100/200, 24 V DC, 8DI



**Part no.** XIOC-8DI  
**257891**  
**EL Number** 4519660  
**(Norway)**

<b>General specifications</b>	
Product name	Eaton XIOC Accessory Input card
Part no.	XIOC-8DI
EAN	4015082578916
Product Length/Depth	100 millimetre
Product height	95 millimetre
Product width	30 millimetre
Product weight	0.135 kilogram
Compliances	CE Marked RoHS Compliant
Certifications	UL Listed CSA Class No.: 2252-01 CSA CE EN 50178 UL508 CSA File No.: 012528 UL File No.: E135462 IEC/EN 61131-2 UL Category Control No.: NRAQ CSA-C22.2 No. 0-M CSA-C22.2 No. 142-M UL
Product Tradename	XIOC
Product Type	Accessory
Product Sub Type	Input card
<b>Features &amp; Functions</b>	
Electric connection type	Screw-/spring clamp connection
<b>General information</b>	
Admissible range	20.4 – 28.8 V (11.8 – 14.4 V), Power supply
Current consumption	26 mA, with fitted modules
Degree of protection	IP20
Number of channels	8
Overvoltage category	II
Pollution degree	2
Protection	Protection class: 1
Repetition rate	1 s
Residual ripple	≤ 5 %
Switching level	≤ 15 V DC, ON, Voltage level to IEC 61131-2, limit value type 1, Inputs ≤ 5 V DC, OFF, Voltage level to IEC 61131-2, limit value type 1, Inputs
Type	Digital module
Used with	XC100/200 (expandable with up to 15 XI/OC modules)
Voltage type	DC
<b>Ambient conditions, mechanical</b>	
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
<b>Climatic environmental conditions</b>	
Ambient operating temperature - min	0 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-25 °C
Ambient storage temperature - max	70 °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. 0.8 W
Rated operational voltage		24 (12) V DC
Short-circuit protection		Yes, Outputs
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>		
LED indicator		Status indication: Green LED
<b>Input/Output</b>		
Delay time		≤ 5 ms typ., Digital inputs 24 V DC, Delay time from 0 to 1, Debounce ON ≤ 5 ms (normally 4 ms), Debounce ON
Input		Voltage (DC) 8 Inputs (24 V DC)
Input current		6.9 mA
Input current at signal 1		4 mA
Input impedance		3.5 kΩ
Input voltage		24 V DC (modules)
Number of inputs (digital)		8
Number of outputs (digital)		0
Output current		0 A
<b>Safety</b>		
Explosion safety category for dust		None
Explosion safety category for gas		None
Potential isolation		Digital inputs: Opto-isolated
<b>Design verification</b>		
Equipment heat dissipation, current-dependent P <sub>vid</sub>		0 W
Heat dissipation capacity P <sub>diss</sub>		0 W
Heat dissipation per pole, current-dependent P <sub>vid</sub>		0 W
Rated operational current for specified heat dissipation (I <sub>n</sub> )		0 A
Static heat dissipation, non-current-dependent P <sub>vs</sub>		0.8 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 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 (ec1@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		8
Number of digital outputs		0
Digital inputs configurable		No
Digital outputs configurable		No
Power consumption	W	
Input current at signal 1	mA	4
Permitted voltage at input	V	20.4 - 28.8
Type of voltage (input voltage)		DC
Type of digital output		None
Output current	A	0
Permitted voltage at output	V	20.4 - 28.8
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	1 - 4
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