

Specifications



Eaton 257891

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

General specifications

PRODUCT NAME	Eaton XIOC Accessory Input card
CATALOG NUMBER	257891
MODEL CODE	XIOC-8DI
EAN	4015082578916
PRODUCT LENGTH/DEPTH	100 mm
PRODUCT HEIGHT	95 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.135 kg
COMPLIANCES	CE Marked RoHS Compliant
CERTIFICATIONS	UL Listed CSA Class No.: 2252-01 IEC/EN 61131-2 UL Category Control No.: NRAQ CSA UL File No.: E135462 CSA File No.: 012528 UL CSA-C22.2 No. 0-M CE EN 50178 CSA-C22.2 No. 142-M UL508



Powering Business Worldwide

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

Communication

LED INDICATOR	Status indication: Green LED
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Climatic environmental conditions

AMBIENT OPERATING TEMPERATURE - MAX	55 °C
AMBIENT STORAGE TEMPERATURE - MAX	70 °C
AMBIENT OPERATING TEMPERATURE - MIN	0 °C
AMBIENT STORAGE TEMPERATURE - MIN	-25 °C

Design verification

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.
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.
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	0.8 W

Electrical rating

POWER LOSS	Max. 0.8 W
RATED OPERATIONAL VOLTAGE	24 (12) V DC
SHORT-CIRCUIT PROTECTION	Yes, Outputs
SUPPLY VOLTAGE AT AC, 50 HZ - MAX	0 VAC
SUPPLY VOLTAGE AT AC, 50 HZ - MIN	0 VAC
SUPPLY VOLTAGE AT DC - MAX	28.8 VDC
SUPPLY VOLTAGE AT DC - MIN	20.4 VDC

Features & functions

ELECTRIC CONNECTION TYPE	Screw-/spring clamp connection
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Electro magnetic compatibility

EMITTED INTERFERENCE	Class A (according to DIN/EN 55011/22)
VOLTAGE DIPS	10 ms

General information

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
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
NUMBER OF CHANNELS	8

Input/Output

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
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INPUT	Voltage (DC) 8 Inputs (24 V DC)
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INPUT CURRENT	6.9 mA
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INPUT CURRENT AT SIGNAL 1	4 mA
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INPUT IMPEDANCE	3.5 kΩ
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INPUT VOLTAGE	24 V DC (modules)
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NUMBER OF INPUTS (DIGITAL)	8
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NUMBER OF OUTPUTS (DIGITAL)	0
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OUTPUT CURRENT	0 A
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Terminal capacities

TERMINALS	• Optionally, screw terminals or spring-loaded terminals for digital/analog modules • Plug-in terminal block
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Safety

EXPLOSION SAFETY CATEGORY FOR DUST	None
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EXPLOSION SAFETY CATEGORY FOR GAS	None
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POTENTIAL ISOLATION	Digital inputs: Opto-isolated
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Resources

	eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf
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BROCHURES	Slice card modular I/O system for the machine building industry XN300 - brochure
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	xc-series-of-high-performance-plcs-pa05003004e.pdf
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	eaton-electronic-devices-in-out-module-xioc-output-module-dimensions.eps
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DRAWINGS	eaton-electronic-devices-dimensions-xioc-output-module-dimensions.eps
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	eaton-electronic-devices-local-inputoutput-xioc-output-module-3d-drawing.eps
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ECAD MODEL	ETN.XIOC-8DI
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MANUALS AND USER GUIDES	MN05002002Z_EN
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	DA-CS-xioc
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MCAD MODEL	eaton-modular-i-o-system-mcad-drawings-xioc.dwg
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PROJECT NAME:

PROJECT NUMBER:

PREPARED BY:

DATE:



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