

Specifications



Photo is representative

Eaton 257896

Eaton XIOC Digital output module for
XC100/200, 24 V DC, 16DO(T)

General specifications

PRODUCT NAME	Eaton XIOC Output module
CATALOG NUMBER	257896
MODEL CODE	XIOC-16DO
EAN	4015082578961
PRODUCT LENGTH/DEPTH	100 mm
PRODUCT HEIGHT	95 mm
PRODUCT WIDTH	30 mm
PRODUCT WEIGHT	0.135 kg
CERTIFICATIONS	CSA-C22.2 No. 142-M CSA-C22.2 No. 0-M CSA File No.: 012528 IEC/EN 61131-2 UL File No.: E135462 EN 50178 UL Category Control No.: NRAQ CSA Class No.: 2252-01 UL508 CE CSA UL

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

Communication

CONNECTION TYPE	Plug-in terminal block, Power supply
LED INDICATOR	Status indication: Green LED

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	0.75 W

Electrical rating

LEAKAGE CURRENT	0.1 A
POWER LOSS	Max. 0.75 W
RATED CONTROL SUPPLY VOLTAGE	External voltage for outputs/module (20 mA for module supply) Us: 24 V DC (-15 %/+20 %)
RATED OPERATIONAL VOLTAGE	24 (12) V DC
SHORT-CIRCUIT PROTECTION	Yes, Outputs None, Fuse, 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
FUNCTIONS	Overvoltage protection (Diode) Short-circuit protection, outputs available

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	50 mA, Internal current consumption (5 V DC), Outputs
DEGREE OF PROTECTION	IP20
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
NUMBER OF CHANNELS	16, Output

Input/Output

DELAY TIME	0.3 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)	16
OUTPUT	Transistor (source type) 16 Digital Outputs (24 V DC, 0.5 A)
OUTPUT CURRENT	0.5 A
OUTPUT VOLTAGE	24 V DC (-15 %/+20 %)

Terminal capacities

TERMINALS	Optionally, screw terminals or spring-loaded terminals for digital/analog modules
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Safety

EXPLOSION SAFETY CATEGORY FOR DUST	None
EXPLOSION SAFETY CATEGORY FOR GAS	None
POTENTIAL ISOLATION	Outputs: Opto-isolated

Resources

BROCHURES	Slice card modular I/O system for the machine building industry XN300 - brochure eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf
DRAWINGS	eaton-electronic-devices-dimensions-xioc-output-module-dimensions.eps eaton-electronic-devices-local-inputoutput-xioc-output-module-3d-drawing.eps eaton-electronic-devices-in-out-module-xioc-output-module-dimensions.eps
ECAD MODEL	ETN.XIOC-16DO
MANUALS AND USER GUIDES	MN05002002Z_EN
MCAD MODEL	eaton-modular-i-o-system-mcad-drawings-xioc.dwg DA-CS-xioc

PROJECT NAME:
PROJECT NUMBER:
PREPARED BY:
DATE:



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