DATASHEET - XIOC-16D0

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



XIOC-16DO 257896 **EATON** Powering Business Worldwide^{**}

EL-Nummer (Norway)

Part no. Catalog No.

4519664

Delivery program

Function	Digital 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	16 outputs, 24 V DC, 0.3 A

Technical data

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Storage2233445333 <td>Standards</td> <td></td> <td></td> <td></td>	Standards			
Virzion resistanceIn provide a signatureIn provide a signat	Ambient temperature		°C	0 - +55
Ander de la d	Storage	9	°C	-25 - +70
Insert of sistance Insert of sistance Insert of sistance Insert of sistance Overvoltage category/pollution degree IV IV Portection lass IV IV Degree of Protection IV IV Ented interference IV IV Weight IV IV Read voltage IV IV Read voltage IV IV National field IV IV Read voltage IV IV Duration of dip IV IV Read voltage IV IV Duration of dip IV IV Read voltage IV IV Duration of dip IV IV Read voltage IV IV Duration of dip IV IV Read voltage IV IV Output voltage IV IV Output voltage IV IV Indeanum of words IV IV Indeanum of words <td>Vibration resistance</td> <td></td> <td></td> <td></td>	Vibration resistance			
Devolution degreeIV2Protection classIDegree of ProtectionIEntited interferenceIV2WeightIV2Power supplyRated voltageVMainsible rangeVRated voltageVBesidual rightIV2Rated voltageVRated v	Mechanical shock resistance		g	
Protection class Image: section for the section	Impact resistance			500 g/ \varnothing 50 mm ±25 g
Degree of Protection P20 Emitted interference INVEN 55011/22, Class A Weight L INVEN 55011/22, Class A Power supply L Reg Power supply V V Rade voltage V V V Admissible range V V V V Musted poles V V V V V Musted poles V	Overvoltage category/pollution degree			11/2
Inited interference Inited interference Inited interference Weight I Inited interference	Protection class			1
Weightkg1.6Pover supplyRated voltageVeVLQ24 (12)Admissible rangeVe24 - 28.8 (11.8 - 14.4)Nutral polesVeNE24 - 28.8 (11.8 - 14.4)Nutration dipNENENERepetition rateNENENERepetition rateNENENERadiual rippleNESSMaximum power lossPuWDOutput voltagePuVDSNutrativiting currentNEVDC24 (-15+20 %)Nutrativiting currentNENENEOutput voltageNENENEOutput delayNENENEOutput delayNENENEOutput delayNESSOutput delayNESSOutput denamesNENESNoture OFFNESSOutput denamesNENESOutput denamesNENESOutput denamesNENESNoture CIFFNENESOutput denamesNENENEOutput denamesNENENENoture CIFFNENENENoture CIFFNENENENoture CIFFNENENENoture CIFFNENENENoture CIFFNENENENoture CIFFNENENE	Degree of Protection			IP20
Pover supply Rate voltage Ug V DC 24(12) Admissible range 24 - 28.8 (11.8 - 14.4) 24 - 28.8 (11.8 - 14.4) Neutral poles ms 10 Duration of dip ms 10 Repetition rate s 1 Repetition rate % 5 Maximum power loss Pv W 05 Output type Main Tanistor (source type) Output type Main 10 Numum switching current Main 10 Leakage current Main 10 Output delay Mai	Emitted interference			DIN/EN 55011/22, Class A
Rete voltage Up VDC 24(12) Admissible range 24-28.8 (11.8-14.4) 24-28.8 (11.8-14.4) Neutral poles ms 0 Duration of dip ms 0 Repetition rate ms 0 Residual ripple Pv W 0 Maximum power loss Pv W 0 Output type Pv W 0 Output type F Maximum switching current Maximum switching current Leakage current MA 1 Maximum switching current Output delay MA 1 Maximum switching current Output channels MA 1 Maximum switching current Output delay MA 1 Maximum switching current Output channels MA 1 Maximum switching current	Weight		kg	0.16
Admissible rangeMethal polesDefault (1)Default (1)Defa	Power supply			
Netral poles Image: Marce of the section	Rated voltage	U _e	V DC	24 (12)
Duration of dip ns	Admissible range			20.4 – 28.8 (11.8 – 14.4)
Repetition rate s 1 Residual ripple % § Mainum power loss Pv W 0.75 Output some loss Output type VDC Tansistor (source type) Output voltage VDC 24 (-15+20%) Nimmum switching current MA 1 Leakage current MA 1 Output delay MA 1 Off ~ On mA 0.3 Dutput channels MA 0.3 Output channels MA 0.1 Output channels MA 0.3 Output channels MA 0.3 Output channels MA 0.1 Output channels MA 0.3 Output channels MA 0.3 Output channels MA 0.1 Output channels MA 0.1 Output channels MA 0.3 Output channels MA 0.1 Output channels MA MA	Neutral poles			
Residuaripple % % % Maximu power loss Pv W 0.75 Output so Tansistor (source type) Output vplage Output voltage V DC 24(-15+20 %) Minumu switching current MA 1 Leakage current MA 0.1 Output delay MA 0.1 Off ÷ On mA 0.1 Debounce OFF MA 0.3 Output the same reference potential Gt+ The Overvoltage protection Gt+ MA Fuse Mone None Short-circuit protection Store Yes	Duration of dip		ms	10
Maximu power loss Pv W Data Outputs Fansistor (source type) Fansistor (source type) Output voltage Image: Piter Sector S	Repetition rate		S	1
Outputs Output voltage Image: Construct (Source type) Output voltage V DC 24 (15+20 %) Minumum switching current MA 1 Leakage current MA 1 Output delay MA 0.1 Off → On ms Image: Construct (Source type) Ottput channels MA 0.3 Output channels MA 0.3 Overvoltage protection MA 0.4 Fuse MA MA Short_circuit protection MA MA	Residual ripple		%	≦5
Output type Iranisitor (source type) Output voltage V DC 24 (-15+20 %) Minumum switching current MA 1 Leakage current MA 0.1 Output delay MS MA Off → On MS 0.3 Output channels MA 0.3 Output channels MA 0.4 Overvoltage protection MA 0.3 Fuse MA 0.4 Short-circuit protection MA 0.4	Maximum power loss	Pv	W	0.75
Output voltage V DC 24 (-15+20 %) Minumum switching current MA 1 Leakage current MA 0.1 Output delay MA Off → On mS Debounce OFF MS Output channels Ctop MS Overvoltage protection Gtop MS Fuse Annel Short-circuit protection MA	Outputs			
Minumus witching current mA 1 Leakage current mA 0.1 Output delay mB 0.1 Off → On mS 0.1 Debounce OFF mS 0.3 Output channels Oty. 16 Overvoltage protection MA 10 Fuse A MA Short-circuit protection MA 10	Output type			Transistor (source type)
Leakage current mA n Output delay mA n Off > On ms ns Debounce OFF ms 0.3 Output channels Oty. 16 Overvoltage protection Chanels inde Fuse A None Short-circuit protection Ma Yes	Output voltage		V DC	24 (-15+20 %)
Output delay Image: Comparison of the comparison of th	Minumum switching current		mA	1
Off → OnmsDebounce OFFms0.3Output channelsCty.16Channels with the same reference potentialCty.16Overvoltage protectionCty.10FuseANoneShort-circuit protectionCty.Yes	Leakage current		mA	0.1
Debounce OFFns0.3Output channelsDty.16Channels with the same reference potentialCty.16Overvoltage protectionImage: Compare the same reference potentialImage: Compare the same reference potentialFuseANoneShort-circuit protectionImage: Compare the same reference potentialYes	Output delay			
Output channelsOty.6Channels with the same reference potentialOty.16Overvoltage protectionOty.16FuseANoneShort-circuit protectionImage: Short Science	Off → On		ms	
Channels with the same reference potential Dty. 16 Overvoltage protection Dide Dide Fuse A None Short-circuit protection Yes	Debounce OFF		ms	0.3
Overvoltage protection Diode Fuse A None Short-circuit protection Yes	Output channels		Qty.	16
Fuse A None Short-circuit protection Yes	Channels with the same reference potential		Qty.	16
Short-circuit protection Yes	Overvoltage protection			Diode
	Fuse		A	None
Potential isolation Opto-isolated	Short-circuit protection			Yes
	Potential isolation			Opto-isolated
Indication elements LED (green)	Indication elements			LED (green)

Terminations			Plug-in terminal block
Internal current consumption (5 V DC)		m۸	50
Internal current consumption (5 V DC)		mA	50
External voltage for outputs/module (30 mA for module supply)	Us	V	24 DC (-15/+20%)
Short-circuit protection			Yes
Notes			

The following applies to the external power supply for operating the relay: in UL applications the supply cables must be AWG 16 (1.3 mm²).

Design verification as per IEC/EN 61439

Design vernication as per 120/211 01455			
Technical data for design verification			
Rated operational current for specified heat dissipation	I _n	А	0
Heat dissipation per pole, current-dependent	P _{vid}	W	0
Equipment heat dissipation, current-dependent	P _{vid}	W	0
Static heat dissipation, non-current-dependent	P _{vs}	W	0.75
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	55
EC/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 digital I/O-module (EC001419)

Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS digital input/output module (ecl@ss10.0.1-27-24-22-04 [AKE527014])			
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 of supply voltage			DC
Number of digital inputs			0
Number of digital outputs			16
Digital inputs configurable			No

Digital outputs configurable		No
Input current at signal 1	mA	0
Permitted voltage at input	V	20.4 - 28.8
Type of voltage (input voltage)		DC
Type of digital output		Transistor
Output current	А	0.5
Permitted voltage at output	V	20.4 - 28.8
Type of output voltage		DC
Short-circuit protection, outputs available		Yes
Redundancy		No
Type of electric connection		Screw-/spring clamp connection
Time delay at signal exchange	ms	0.25 - 0.3
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

Product Standards	IEC: see Technical Data; UL508; CSA-C22.2 No. 0-M; CSA-C22.2 No. 142-M; CE marking
UL File No.	E135462
UL Category Control No.	NRAQ
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
Degree of Protection	IEC: IP20, UL/CSA Type: -



