



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



Powering Business Worldwide™


Part no. XIOC-16DO-S
Article no. 257895

Delivery program


Function			Digital modules
Description			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
			16 outputs, 24 V DC, 0.8 A short-circuit proof

Technical data

General

Standards			IEC/EN 61131-2 EN 50178
Ambient temperature		°C	0 - +55
Storage	θ	°C	-25 - +70
Vibration resistance			10 - 57 Hz ±0.075 mm 57 - 150 Hz ±1.0 mm
Mechanical shock resistance		g	15 Shock duration 11 ms
Impact resistance			500 g/  50 mm ±25 g
Overvoltage category/pollution degree			II/2
Protection class			1
Degree of Protection			IP20
Emitted interference			DIN/EN 55011/22, Class A
Weight		kg	0.16

Power supply

Rated voltage	U _e	V DC	24 (12)
Admissible range			20.4 – 28.8 (11.8 – 14.4)
Neutral poles			
Duration of dip		ms	10
Repetition rate		s	1
Residual ripple		%	 5
Maximum power loss	P _v	W	0.75

Outputs

Output type			Transistor (source type)
Output voltage		V DC	24 (-15...+20 %)
Minimum switching current		mA	1
Leakage current		mA	0.1
Maximum load current			
Per circuit		A	0.8
Per common potential terminal		A	5
Output delay			
Off → On		ms	
Debounce OFF		ms	0.3
On → Off		ms	
Debounce OFF		ms	1
Output channels		Qty.	16

Channels with the same reference potential		Qty.	16
Overvoltage protection			Built-in
Fuse		A	None
Short-circuit protection			Yes
Potential isolation			Opto-isolated
Indication elements			LED (green)
Terminations			Plug-in terminal block
Internal current consumption (5 V DC)		mA	50
External voltage for outputs/module (30 mA for module supply)	U_s	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

Technical data for design verification			
Rated operational current for specified heat dissipation	I_n	A	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
IEC/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 6.0

PLC's (EG000024) / PLC digital I/O-module (EC001419)

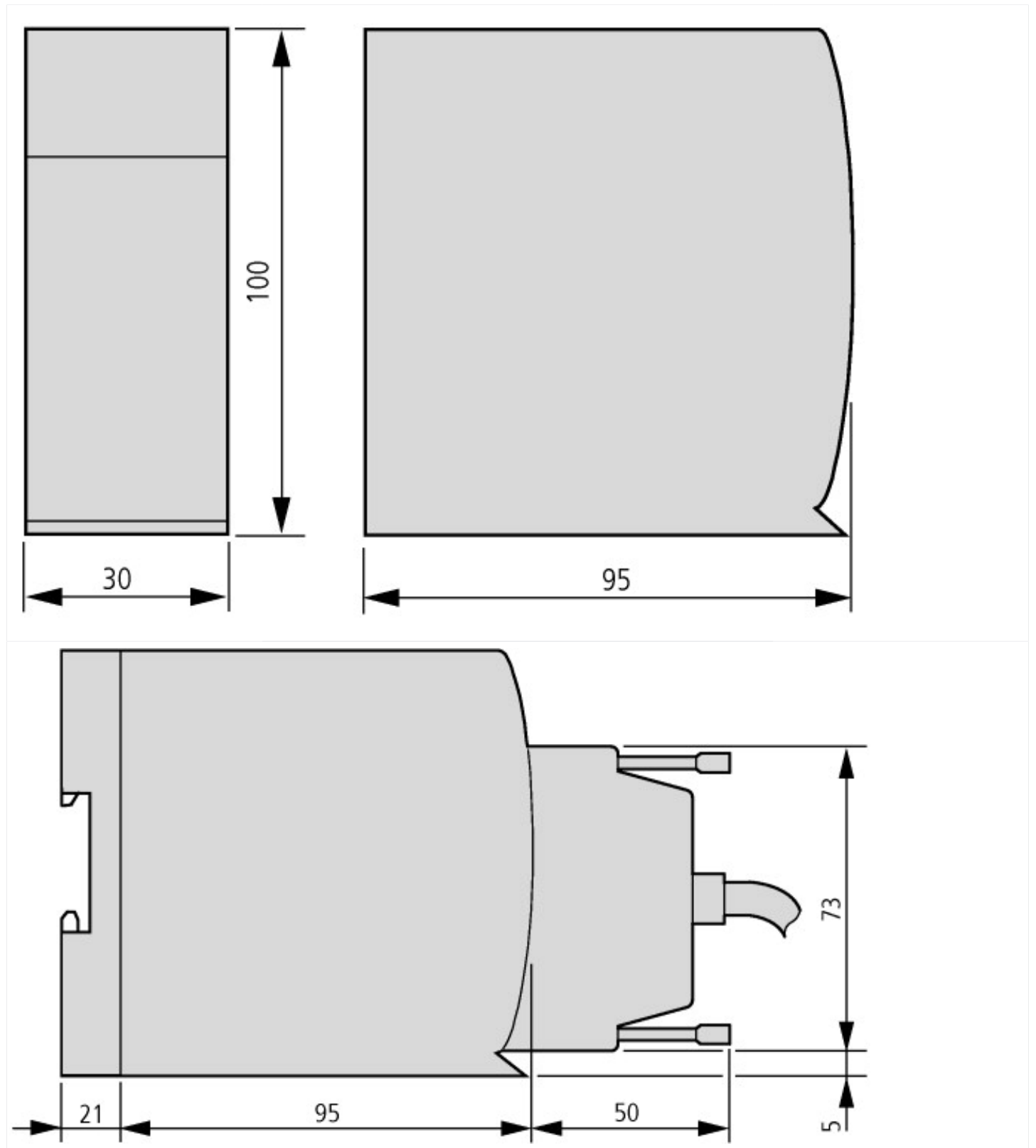
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS digital input/output module (ec@ss8.1-27-24-22-04 [AKE527011])

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	A	0.8
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	0.3 - 0.3
Suitable for safety functions		No
Category according to EN 954-1		
SIL according to IEC 61508		None
Performance level acc. 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	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: -

Dimensions



Additional product information (links)

MN05002002Z (AWB2725-1452) XIOC signal modules

MN05002002Z (AWB2725-1452) XIOC-Signalmodule - Deutsch

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002002Z_DE.pdf

MN05002002Z (AWB2725-1452) XIOC signal modules - English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05002002Z_EN.pdf