DATASHEET - XN-4DO-24VDC-0.5A-P



Digital output module XI/ON, 24 V DC, 4DO, 0.5A, pulse-switching

Part no. XN-4D0-24VDC-0.5A-P

Catalog No. 140148

EL-Nummer (Norway) 0004520640



Delivery program

- 1 P - 3 -	
Function	XI/ON I/O modules
Function	XN Slice module
Short Description	4 Digital output, 24 V DC/0.5 A Positive switching
For use with	XN-S4T-SBCS XN-S4S-SBCS XN-S6T-SBCSBC XN-S6S-SBCSBC

Technical data

Genera

Potential isolation Ambient temperature Ambient temperature, operation Storage, transport Relative humidity Relative humidity Ambient conditions, mechanical Degree of Protection Harmful gases Whetain sistance, operating conditions Mechanical shock resistance (EC/EN 80088-2-29) Toro and topigle Electromagnetic compatibility (EMC) Electromagnetic fields Burst Surage Relative flumidity Alicontact Relative humidity Alicontact Electromagnetic fields Wars Surage Relative humidity Alicontact Alicontact Surage Relative humidity - 73 %, no condensation (for storage at 45°C) Page 30; 10 (rel. humidity - 73%, no condensation) Hyst-1.0 (rel. humidity - 73%, no condensation) Hyst-1.0 (rel. humidity - 73%, no condensation) According to IEC/EN 80088-2-8 Page 3 coording to IEC/EN 80088-2-8 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-8 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-31 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation) Relative humidity - 73%, no condensation) According to IEC/EN 80088-2-31, free fall according to IEC 80088-2-32 Relative humidity - 73%, no condensation)	General			
Ambient temperature Ambient temperature, operation Ambient temperature, operation Storage, transport Relative humidity Relative humidity Ambient conditions, mechanical Degree of Protection Harmful gases Webhanical shock resistance, operating conditions Mechanical shock resistance (IEC/EN 60068-2-28) Drop and topple Electromagnetic compatibility (EMC) ESD Alizional shock resistance (IEC/EN 60068-2-28) Possible fields Burst	Standards			EN 61000-6-4
Ambient temperature, operation Comparison Compariso	Potential isolation			Yes, through optocoupler
Storage, transport Relative humidity Relative humidity Relative humidity Relative humidity Ambient conditions, mechanical Degree of Protection Harmful gases Vibration resistance, operating conditions Mechanical shock resistance (IEC/EN 60068-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Air/contact discharge Lectromagnetic fields Vibration resistance Quantity (Quantity (EMC) ESD Air/contact discharge Air/contact discharge Air/contact discharge Burst Surge Radiated RFI Emitted interference (radiated, high frequency) Vibrage fluctuations/voltage dips Type test Approvals	Ambient temperature			
Relative humidity Relative humidity Ambient conditions, mechanical Degree of Protection Harmful gases Vibration resistance, operating conditions Mechanical shock resistance (IEC/EN 60068-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Burst Surge Relative humidity Ambient conditions, mechanical Oos1)/ (1,42) / (2 Vim (1,42)) / (2	Ambient temperature, operation		°C	0 - +55
Relative humidity Ambient conditions, mechanical Dagree of Protection Harmful gases Vibration resistance, operating conditions Mechanical shock resistance Continuous shock resistance (IEC/EN 60088-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Burst Surge Burst Raided RH Emitted interference (radiated, high frequency) Vibration resistance, operating conditions Relative humidity < 75%, no condensation (for storage at 45°C) Ppm SO ₂ : 10 (rel. humidity < 75%, no condensation) HyS: 1.0 (rel	Storage, transport	8	°C	-25 - +85
Ambient conditions, mechanical Degree of Protection Harmful gases Vibration resistance, operating conditions Mechanical shock resistance Continuous shock resistance (IEC/EN 60068-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Burst Burst Surge Raided RFI Emitted interference (radiated, high frequency) Vibration resistance (radiated, high frequency) Vibration (30230 MHz) / (2301000 MHz)	Relative humidity			
Degree of Protection Harmful gases Ppm SO2: 10 (rel. humidity < 75%, no condensation) HzS: 1.0 (rel. humidity (rel. condensation) HzS: 1.0 (rel. humidity (rel. condensation) HzS: 1.0 (rel. humidity (rel. condensation) HzS: 1.0 (rel. condensation) HzS: 1.0 (rel. cooles-2-31, free fall according to IEC 6008-2-31, free fall according to IEC 6008-2-32 HzS: 1.0 (rel. c	Relative humidity			5 - $95~\%$ (indoor), Level RH-2, no condensation (for storage at $45^{\circ}\text{C})$
Harmful gases Ppm SO ₂ : 10 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) H ₂ S: 1.0 (rel. humidity < 75%, no condensation) according to IEC 60068-2-6 According to IEC 60068-2-7 According to IEC 60068-2-31 Ac	Ambient conditions, mechanical			
Ha St 1.0 (rel. humidity < 75 %, no condensation) Web taining resistance, operating conditions Second to the properties of the conditions Second to the properties of the conditions Second to the properties of the condition of the properties of the proper	Degree of Protection			IP20
Mechanical shock resistance Continuous shock resistance (IEC/EN 60068-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Air/contact discharge (I.42) / (227) GHz Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Air/contact (30230 MHz) / (2301000 MHz) Type test Approvals according to IEC 60068-2-29 According to IEC 60068-2-29, According to IEC 60068-2-31, free fall according to IEC 60068-2-32 According to IEC 60068-2-29, According to IEC 60068-2-32 According to IEC 60068-2-29, If ree fall according to IEC 60068-2-32 According to IEC 60068-2-29 According to IEC 60068-2-29 According to IEC 60068-2-29 According to IEC 60068-2-29 According to IEC 60068-2-31, free fall according to IEC 60068-2-32 According to IEC 60068-2-29 According to IEC 60068-2-31, free fall according to IEC 60068-2-32 According to IEC 60068-2-31, free fall according to IEC 60068-2-32 According to IEC 60068-2-31, free fall according to IEC 60068-2-32 According to IEC 60068-2-29 According to IEC 60068-2-31, free fall according to IEC 60068-2-31, fr	Harmful gases		ppm	
Continuous shock resistance (IEC/EN 60068-2-29) Drop and topple Electromagnetic compatibility (EMC) ESD Air/contact discharge Electromagnetic fields (0.081) / (1.42) / (2 2.7) GHz Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test According to IEC 60068-2-39 According to IEC 60068-2-31, free fall according to IEC 60068-2-32 EN 61000-4-2 EN 61000-4-2 EN 61100-4-2 EN 61100-4-5 EN 61100-4-6 EN 61100-4-6 EN 61100-4-6 EN 55016-2-3 MHz) / (2301000 MHz) / (2301000 MHz) Type test Approvals	Vibration resistance, operating conditions			according to IEC/EN 60068-2-6
Drop and topple Electromagnetic compatibility (EMC) ESD Air/contact discharge kV (1,42) / (22,7) GHz Burst Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Air/contact kV (2,7) GHz V EN 61100-4-2 EN 61100-4-5 EN 61100-4-6 EN 55016-2-3 EN 55016-2-3 EN 61131-2	Mechanical shock resistance		g	according to IEC 60068-2-27
Electromagnetic compatibility (EMC) ESD Air/contact discharge kV EN 61000-4-2 [1.42) / (2 27) GHz Burst Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Approvals Air/contact kV EN 61000-4-2 EN 61100-4-2 EN 61100-4-4 EN 61100-4-5 EN 61100-4-6 EN 61100-4-6 EN 61101-2-3 EN 61131-2 CE, CULus	Continuous shock resistance (IEC/EN 60068-2-29)			According to IEC 60068-2-29
ESD Air/contact discharge Clectromagnetic fields Closs1/ V/m (1,42)/(2 2,7) GHz Burst Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Approvals Air/contact kV EN 61000-4-2 Closs1/ V/m EN 61100-4-2 EN 61100-4-5 EN 61100-4-6 EN 61100-4-6 EN 61100-4-6 EN 61131-2 CE, cULus	Drop and topple			According to IEC 60068-2-31, free fall according to IEC 60068-2-32
Electromagnetic fields	Electromagnetic compatibility (EMC)			
Burst EN 61100-4-4 Surge EN 61100-4-5 Radiated RFI V EN 61100-4-6 Emitted interference (radiated, high frequency) MHz	ESD		kV	EN 61000-4-2
Surge Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Approvals EN 61100-4-5 EN 61100-4-6 EN 55016-2-3 MHz) / (2301000 MHz) EN 61131-2 CE, cULus	Electromagnetic fields	(1,42) / (2		EN 61100-4-2
Radiated RFI Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Approvals V EN 61100-4-6 EN 55016-2-3 MHz) / (2301000 MHz) EN 61131-2 EN 61131-2 CE, cULus	Burst			EN 61100-4-4
Emitted interference (radiated, high frequency) Voltage fluctuations/voltage dips Type test Approvals EN 55016-2-3 AB EN 55016-2-3 EN 61131-2 to EN 61131-2 CE, cULus	Surge			EN 61100-4-5
MHz) / (2301000 MHz) EN 61131-2 Type test to EN 61131-2 Approvals CE, cULus	Radiated RFI		٧	EN 61100-4-6
Type test to EN 61131-2 Approvals CE, cULus	Emitted interference (radiated, high frequency)	MHz) / (2301000	dB	EN 55016-2-3
Approvals CE, cULus	Voltage fluctuations/voltage dips			EN 61131-2
	Type test			to EN 61131-2
Other technical data (sheet catalogue) Technical Data	Approvals			CE, cULus
	Other technical data (sheet catalogue)			Technical Data

Analog input modules

Analog input modules			
Channels		Number	4
Rated voltage through supply terminal	U_L		24 V DC
Rated current consumption from supply terminal	IL	mA	25
Rated current consumption from module bus	I _{MB}	mA	≦ 30
Connectable sensors			Resistive loads Inductive loads Lamp loads
Diagnostics			1
Diagnostics			Yes
Analog output modules			

Channels		Number	4
Rated voltage through supply terminal	U_L		24 V DC
Rated current consumption from supply terminal	IL	mA	25
Rated current consumption from module bus	I _{MB}	mA	≦ 30
Load resistance			
Resistive load		Ω	≧ 48
Inductive load		h	1.2

Digital outputs

Channels Rated voltage through supply terminal Rated current consumption from the supply terminal (at load current = 0 mA) Rated current consumption from module bus	U _L I _L I _{MB}	Mumber mA mA	4 24 V DC 25
Rated current consumption from the supply terminal (at load current = 0 mA)	I _L		
	I _{MB}		25
Rated current consumption from module bus		mA	
·	P		≦ 30
Power loss		W	Normally 1
Output voltage			
High level	U_H/U_A		> U _L - 1 V DC
Output current		Α	
High level (rated value)	I _H		0.5 A
High level (permissible range)	I _H	Α	< 0.6
Number of outputs switched in parallel	max.		4
Module total current		Α	2
Delay on signal change and resistive load			
from Low to High level		μs	250
From High to Low signal		μs	250
Load resistance range			> 48 Ω
Utilization factor	%	g	100
Can be connected			Resistive loads Inductive loads Lamp loads
Resistive load		Ω	≧ 48
Inductive load		h	1.2
Lamp load	R_{LL}	W	≦6
Switching frequency			
With resistive load	f	Hz	1000 ($R_{LO} < 1 \text{ k}\Omega$)
with inductive load			<2
Switching frequency with lamp load	f	Hz	10
Number of diagnostic bytes			1
Diagnostics			Yes
Outputs to EN 61131-2			short-circuit proof
Reset after short-circuit rectified	Ii		Automatic
Base modules			
with C connection			4-wire XN-S4x-SBCS 4 x 2-/3-wire XN-S4x-SBCSBC

Digital inputs

Channels		Number	4
Rated voltage through supply terminal	U_L		24 V DC

Rated current consumption from supply terminal	IL	mA	25
Rated current consumption from module bus	I _{MB}	mA	≦ 30
Input voltage			
High level	U _e H	V	min. L+ (1 V)
Base modules			
with C connection			4-wire XN-S4x-SBCS 4 x 2-/3-wire XN-S4x-SBCSBC
Relay modules			
Rated voltage through supply terminal	UL		24 V DC
Rated current consumption from supply terminal	IL	mA	25
Rated current consumption from module bus	I_{MB}	mA	≦ 30
Power loss	Р	W	Normally 1
Can be connected			Resistive loads Inductive loads Lamp loads
Utilization factor	g	%	100
Base modules			
with C connection			4-wire XN-S4x-SBCS 4 x 2-/3-wire XN-S4x-SBCSBC
Power supply module			
Rated voltage through supply terminal	UL		24 V DC
Rated current consumption from supply terminal	IL	mA	25
Rated current consumption from module bus	I _{MB}	mA	≦ 30
Diagnostics			1
Power loss	P	W	1
Counter module			
Channels		Number	
Channels	UL	Number	4 24 V DC
	U _L	Number mA	
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus			24 V DC
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs	I _L	mA	24 V DC 25
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage	I _L	mA mA	24 V DC 25 ≤ 30
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level	I _L	mA	24 V DC 25
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs	I _L	mA mA	24 V DC 25 ≤ 30
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current	I _L IMB U _e H	mA mA V	24 V DC 25 ≤ 30 min. L+ (1 V)
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range)	I _L I _{MB} U _e H	mA mA	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value)	I _L IMB U _e H	mA mA V	24 V DC 25 ≤ 30 min. L+ (1 V)
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency	I _L I _{MB} U _e H	mA mA	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load	I _L I _{MB} U _e H	mA mA V	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load	I _L I _{MB} U _e H I _H I _H	mA mA	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load	I _L I _{MB} U _e H I _H	mA mA V A A	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating	I _L I _{MB} U _e H I _H I _H	mA mA V A A Hz	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes	I _L I _{MB} U _e H I _H I _H	mA mA V A A Hz	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics	I _L I _{MB} U _e H I _H I _H	mA mA V A A Hz	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces	I _L I _{MB} U _e H I _H I _H f R _{LL}	mA mA V A A Hz	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces Rated voltage through supply terminal	I _L I _{MB} U _e H I _H I _H I _U	mA mA V A Hz Hz W	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof 1
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces Rated voltage through supply terminal Rated current consumption from supply terminal	I _L I _{MB} U _e H I _H I _H f R _{LL} U _L	mA mA V A A Hz Hz W	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof 1 24 V DC 25
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces Rated voltage through supply terminal Rated current consumption from module bus	IL IMB UeH IH IH IL IL IMB	mA mA V A A Hz Hz W mA	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof 1 24 V DC 25 ≤ 30
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Power loss	I _L I _{MB} U _e H I _H I _H f R _{LL} U _L	mA mA V A A Hz Hz W	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof 1 24 V DC 25 ≤ 30 Normally 1
Channels Rated voltage through supply terminal Rated current consumption from supply terminal Rated current consumption from module bus Digital inputs Input voltage High level Digital outputs Output current High level (permissible range) High level (rated value) Switching frequency Inductive load Switching frequency with lamp load Lamp load Short-circuit rating Measuring modes Diagnostics Interfaces Rated voltage through supply terminal Rated current consumption from module bus	IL IMB UeH IH IH IL IL IMB	mA mA V A A Hz Hz W mA	24 V DC 25 ≤ 30 min. L+ (1 V) < 0.6 0.5 A 2 10 ≤ 6 short-circuit proof 1 24 V DC 25 ≤ 30

The supply terminal (U_L) provides power for the module electronics and for the consumers at the outputs. The total current required for each module consists of the sum of all partial currents

 $Part of the XI/ON \ module's \ electronics \ is \ supplied \ with \ module \ bus \ voltage \ (5 \ V \ DC), \ the \ other \ part \ through \ the \ supply \ terminal \ (U_L).$

To increase the maximum output current to up to 1 A, two outputs can be connected in parallel.

Note for table header		The rated current from supply terminal data apply at zero load current.
		Applies for resistive load: RLO < $1k\Omega$

Design verification as per IEC/EN 61439

Design vernication as per icc/civ 01433			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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	1
Heat dissipation capacity	P _{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	55
Degree of Protection			IP20
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 7.0

PLC's (EG000024) / Fieldbus, decentr. periphery - o	digital I/O module (EC001599)
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Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - digital I/O module (ecl@ss10.0.1-27-24-26-04

[BAA055014])		
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	18 - 30
Voltage type of supply voltage		DC
Number of digital inputs		0
Number of digital outputs		4
Digital inputs configurable		No
Digital outputs configurable		No
Input current at signal 1	mA	0
Permitted voltage at input	V	0 - 0
Type of voltage (input voltage)		DC

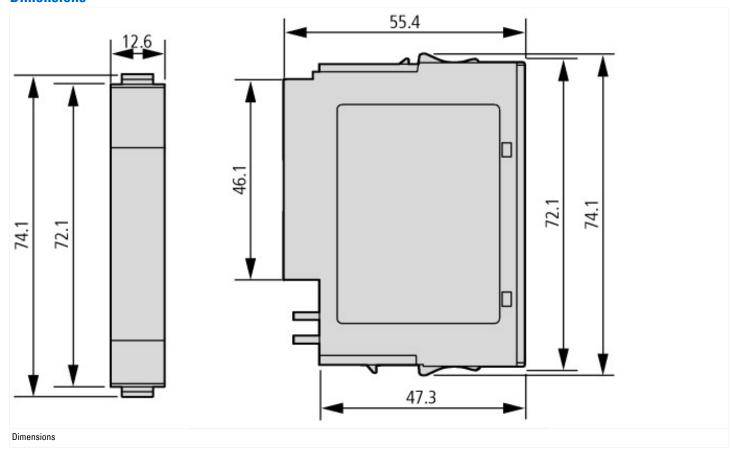
Type of digital output Output current Permitted voltage at output Type of output voltage	A V	Other 0.5 0 - 29
Permitted voltage at output Type of output voltage		
Type of output voltage	V	
		DC
Sport-circuit protection, outpute available		Yes
Short-circuit protection, outputs available Number of HW-interfaces industrial Ethernet		
Number of interfaces industrial Ethernet Number of interfaces PROFINET		0
		0
Number of HW-interfaces RS-232 Number of HW-interfaces RS-422		0
Number of HW-interfaces RS-485		0
		0
Number of HW-interfaces serial TTY		0
Number of HW-interfaces parallel		0
Number of HW-interfaces Wireless		0
Number of HW-interfaces USB		0
Number of HW-interfaces other		1
With optical interface		No
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		Yes
Supporting protocol for CAN		Yes
Supporting protocol for INTERBUS		No No
Supporting protocol for ASI		No No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		Yes
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		No
Supporting protocol for SERCOS		No
Supporting protocol for Foundation Fieldbus		No
Supporting protocol for EtherNet/IP		No
Supporting protocol for AS-Interface Safety at Work		No
Supporting protocol for DeviceNet Safety		No
Supporting protocol for INTERBUS-Safety		No
Supporting protocol for PROFIsafe		No
Supporting protocol for SafetyBUS p		No
Supporting protocol for other bus systems		Yes
Radio standard Bluetooth		No
Radio standard WLAN 802.11		No
Radio standard GPRS		No
Radio standard GSM		No No
Radio standard UMTS		No No
10 link master		No
System accessory		Yes
Degree of protection (IP)		IP20
Type of electric connection	n	Plug-in connection
Time delay at signal exchange	ms	0 - 0.25
Fieldbus connection over separate bus coupler possible		Yes
Rail mounting possible		Yes
Wall mounting/direct mounting		No
Front build in possible		No
Rack-assembly possible		No
Suitable for safety functions		No
Category according to EN 954-1		None

SIL according to IEC 61508		None
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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	12.6
Height	mm	74.1
Depth	mm	55.4

Approvals

Product Standards	UL 508; CSA-C22.2 No. 142; IEC/EN 6113-2; CE marking
UL File No.	E205091
UL Category Control No.	NRAQ, NRAQ7
CSA File No.	UL report applies to both US and Canada
CSA Class No.	2252-01, 2252-81
North America Certification	UL recognized, certified by UL for use in Canada
Specially designed for North America	No
Current Limiting Circuit-Breaker	No
Degree of Protection	IEC: IP20, UL/CSA Type: -

Dimensions



Additional product information (links)

Additional product information (mixs)		
Manual Digital XI/ON modules, power supply module MN05002010Z		
Benutzerhandbuch XI/ON-Module, Stromversorgungsmodul MN05002010Z - Deutsch	https://es-assets.eaton.com/D0CUMENTATION/AWB_MANUALS/MN05002010Z_DE.pdf	
Manual Digital XI/ON modules, power supply module MN05002010Z - English	https://es-assets.eaton.com/DOCUMENTATION/AWB_MANUALS/MN05002010Z_EN.pdf	
Technical Data	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=14.111	