




Serial interface module, data from two SSI encoders via RS422, 32 bits / 125 kHz, 250kHz, 500kHz, 1MHz

Part no. XN-322-2SSI
Article no. 178773
Catalog No. XN-322-2SSI

Delivery program

Photo			
Function			XN300 technology modules
Connection technique			Push-in spring-cage terminal
Function			XN-322 serial interface module for XN300
Short Description			Serial interface module, data from two SSI encoders via RS422, 32-bit / 125 kHz, 250 kHz, 500 kHz, 1 MHz
Description			Interface module for interpreting data from two absolute encoders via the RS422 interface, specifically designed with SSI encoders (e.g., absolute linear encoders) in mind. Natural binary and Gray code encoders (Gray code is internally converted to natural binary) are supported. 32-bit / 125 kHz, 250 kHz, 500 kHz, 1 MHz.
For use with			XN-312-...

Technical data

General

Standards			IEC/EN 61131-2 IEC/EN 61000-6-2 IEC/EN 61000-6-4
Electromagnetic compatibility (EMC)			
ESD	Air/contact discharge	kV	8 / 4
Electromagnetic fields	(0.08...1) / (1,4...2) / (2...2,7) GHz	V/m	10 / 3 / 1
Burst			
Supply cable		kV	2
Signal cable		kV	1
Surge			
Supply cable (balanced/unbalanced)		kV	0,5 / 0,5
Signal cable (unbalanced)		kV	1
Radiated RFI		V	10
Emitted interference (radiated, high frequency)	(30...230 MHz) / (230...1000 MHz)	dB	40 / 47 class A
Voltage fluctuations/voltage dips			Yes / 10 ms
Umgebungsbedingungen			
Klima			
Climatic proofing			Dry heat to IEC 60068-2-2 Damp heat as per EN 60068-2-3
Air pressure (operation)		hPa	795 - 1080
Relative humidity			0 - 95%, non condensing

Condensation			prevent with suitable measures
Temperature			
Betrieb		°C	0 - +60
Storage, transport	θ	°C	-20 - +85
Degree of Protection			IP20
Mounting position			Horizontal
Free fall, packaged (IEC/EN 60068-2-32)		m	1
Vibrations	3,5 mm / 1 g	Hz	5 - 8.4 / 8.4 -150
Mechanical shock resistance	Semisinusoida Impacts		18
	15 g/11 ms		

Terminations

Rated operational data			
Insulating material group			I
Overvoltage category / pollution degree			III / 3
Rated operating voltage		V	160
Maximum load current/cross-sectional area		A / mm ²	X (not specified by plug manufacturer)
Connection design in TOP direction			Push-in spring-cage terminal (plug-in connection)
Stripping length		mm	10
Gauge pin IEC/EN 60947-1			A1
Anschlussvermögen			
"e" solid H07V-U		mm ²	0.2 - 1.5
"f" flexible H 07V-K		mm ²	0.2 - 1.5
"f" with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)		mm ²	0.25 - 1.5
"f" with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)		mm ²	0.25-1,5
Cable size		AWG	24 - 16

Supply

Power supply - Input			
Power supply			
Current consumption for +24 V power supply	I	mA	(typ.) 27
Potential isolation	PE	(polyethylene)	no
Heat dissipation			
Heat dissipation (without active channels)		W	1
Max. heat dissipation		W	1.06
Notes on heat dissipation			The max. heat dissipation is specified as the maximum power produced inside the device's housing.

Digital inputs

Absolute encoder			
Channels		Quantity	2
Connection type			RS422
Bus termination resistor			internal
Transmission channels			CL, D
Baud rate			parameterizable
Resolution		Bit	32
Coding			binary/gray
Potential isolation			no
Heat dissipation (per active channel)		W	0.036

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
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 6.0

PLC's (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)

Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss8.1-27-24-26-08 [BAA073010])

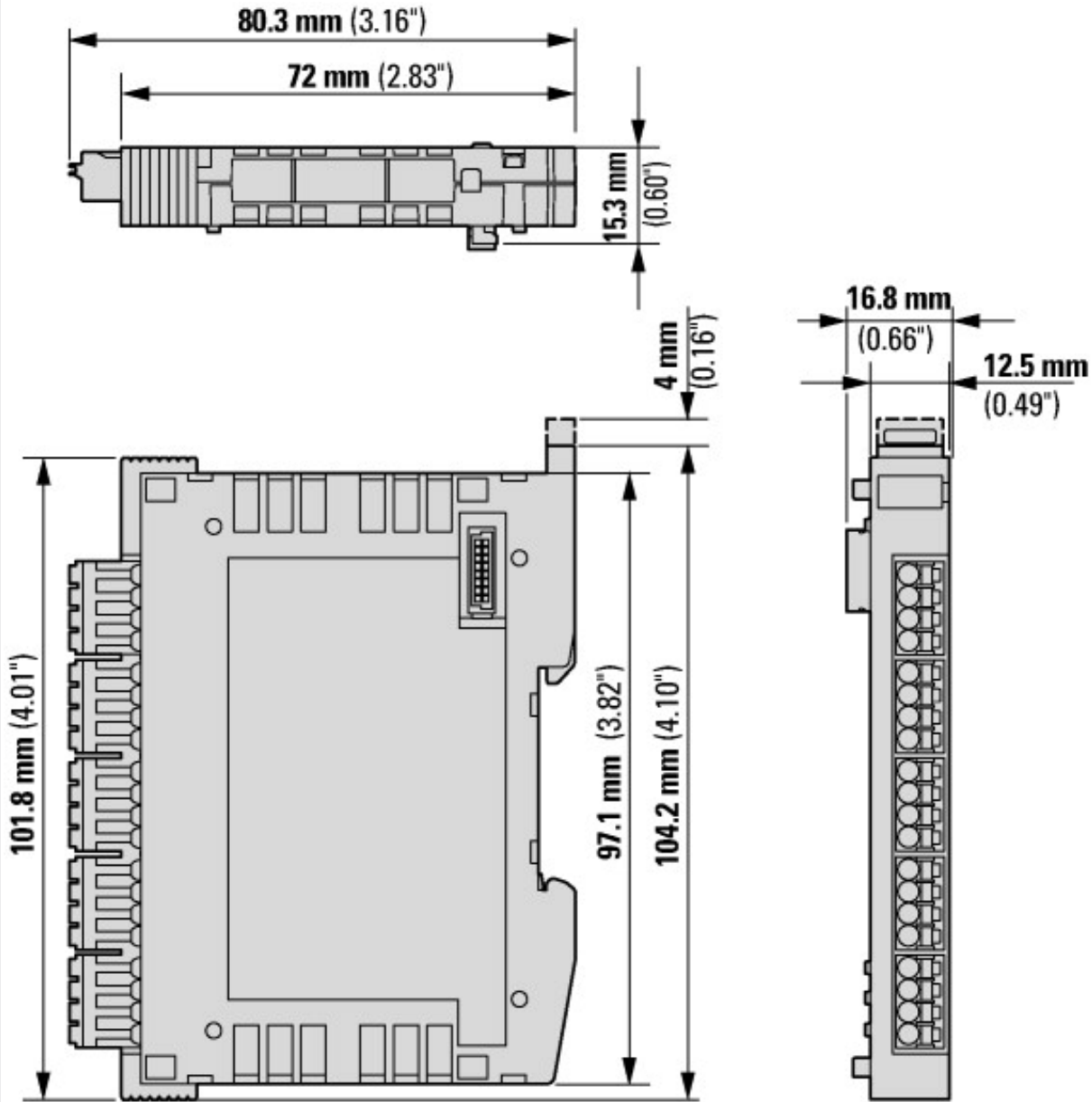
Supply voltage AC 50 Hz	V	0 - 0
Supply voltage AC 60 Hz	V	0 - 0
Supply voltage DC	V	18 - 30
Voltage type of supply voltage		DC
Supporting protocol for TCP/IP		No
Supporting protocol for PROFIBUS		No
Supporting protocol for CAN		No
Supporting protocol for INTERBUS		No
Supporting protocol for ASI		No
Supporting protocol for KNX		No
Supporting protocol for MODBUS		No
Supporting protocol for Data-Highway		No
Supporting protocol for DeviceNet		No
Supporting protocol for SUCONET		No
Supporting protocol for LON		No
Supporting protocol for SERCOS		No
Supporting protocol for PROFINET IO		No
Supporting protocol for PROFINET CBA		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			No
Radio standard Bluetooth			No
Radio standard WLAN 802.11			No
Radio standard GPRS			No
Radio standard GSM			No
Radio standard UMTS			No
IO link master			No
System accessory			Yes
Degree of protection (IP)			IP20
With potential separation			No
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			-
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	16.8
Height		mm	104.2
Depth		mm	80.3

Approvals

Product Standards			CE, cULus
UL File No.			E135462

Dimensions



Notes: The plugs/connectors used depend on the version.

Additional product information (links)

MN050002 Manual XN300 digital I/O modules, analog I/O modules, power supply modules, technology modules

MN050002 Manual XN300 digital I/O modules, analog I/O modules, power supply modules, technology modules - Deutsch

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN050002_DE.pdf

MN050002 Manual XN300 digital I/O modules, analog I/O modules, power supply modules, technology modules - English

ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN050002_EN.pdf