Gateway to bus system CANopen

Part no.	**XN-312-GW-CAN**
Article no.	**178782**
Catalog No.	**XN-312-GW-CAN**

Powering Business Worldwide™

Delivery program

Photo			
Function			XN300 gateway
Connection technique			Push-in spring-cage terminal
Function			CANopen XN-312 gateway for XN300
Short Description			XN300 CANopen gateway for running XN300 slice modules on a CANopen field bus
Description			Digital gateway for CANopen field bus in the form of an XN300 I/O system slice module
Field bus connection			CANopen®
Service interface			Mini USB Type B
For use with			XN-322-…

Technical data

General

Standards			EN 61000-6-2 EN 61000-6-4 EN 61131-2
Potential isolation			yes
Ambient temperature		°C	-25 - +85
Storage	ϑ	°C	-40 - +80

Relative humidity			5-95%, non condensing
Vibration			according to IEC/EN 60068-2-6
Mechanical shock resistance		g	according to IEC 60068-2-27
Drop and topple			As per IEC 60068-2-31, free fall as per IEC 60068-2-32
Degree of Protection			IP20
Electromagnetic compatibility (EMC)			
ESD	Air/contact discharge	kV	EN 61131-2
Electromagnetic fields	(0.08…1) / (1,4…2) / (2… 2,7) GHz	V/m	EN 61131-2
Burst			EN 61131-2
Surge			EN 61131-2
Radiated RFI		V	EN 61131-2
Emitted interference (radiated, high frequency)	(30...230 MHz) / (230...1000 MHz)	dB	EN 61131-2
Voltage fluctuations/voltage dips			EN 61131-2
Type test			EN 61131-2
Approvals			CE, cULus
Static heat dissipation, non-current-dependent	P_{vs}	W	2.4

Terminations

Rated data			according to VDE 0611 Part 1/8.92/IEC/EN 60947-7-1
Connection design in TOP direction			Push-In spring-cage terminals
Stripping length		mm	10
Connectable conductors			
Solid		mm^2	0.2 -1.5
Flexible without ferrule		mm^2	0.2 -1.5
Flexible with ferrule		mm^2	0.25 -1.5
Flexible with ferrule		mm^2	0.25 -1.5
Gauge pin IEC/EN 60947-1			A1

Networking

Bus			CANopen®
Bus protocol			CANopen®
Maximum station configuration			32 modules (XN-322) in slice design
System supply	U_{sys}	V DC	24
Coordination type "2"	U_{sys}	V DC	4.7 … 5.3
Coordination type "1"	U_{sys}	V DC	19.2 … 30
Field voltage	U_L		24 V DC
Admissible range			18-30 V DC
Residual ripple		%	According to EN 61131-2
Service interface			Mini USB Type B
Connection design for field bus			Push-In spring-cage terminals
Data transfer rate		kBit/s	10, 20, 50, 125, 250, 500, 800, 1000
Data transfer rate setting			Through DIP switch or automatically
Addressing			DIP switches
Field bus termination			Via DIP switch

Design verification as per IEC/EN 61439

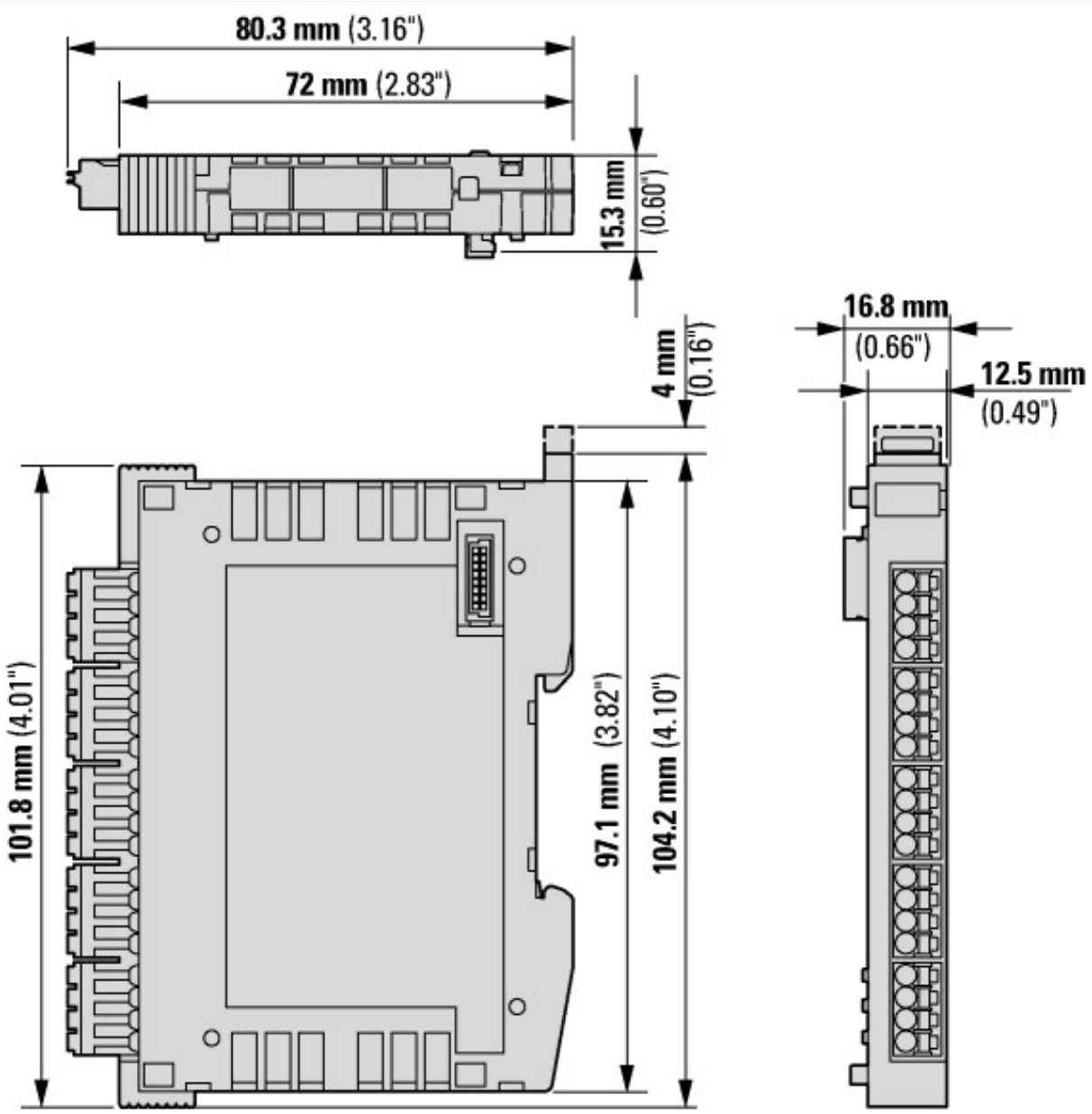
Technical data for design verification			
Static heat dissipation, non-current-dependent	P_{vs}	W	2.4
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	85
Degree of Protection			IP20
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			

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.

Approvals

Product Standards	UL508; CE
UL File No.	E135462

Dimensions



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

Additional product information (links)

MN050003 Manual XN300 XN-312 CANopen gateway	
MN050003 Handbuch XN300 Gateway XN-312 CANopen - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN050003_DE.pdf
MN050003 Manual XN300 XN-312 CANopen gateway - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN050003_EN.pdf