DATASHEET - XN-312-GW-CAN

Gateway to bus system CANopen

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

Delivery program

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
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
Approvals			
Approvals			CE, cULus EAC
shipping classification			DNV GL
Potential isolation			yes
Ambient temperature		°C	-25 - +85
Storage	ϑ	°C	-40 - +80
Operating ambient temperature min.		°C	-25
Operating ambient temperature max.		°C	+ 85
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
Static heat dissipation, non-current-dependent	P_{vs}	W	2.4
Current consumption for +24 V power supply	I	mA	(typ.) max. 2 A
Dimensions (W x H x D)		mm	16.8 x 104.2 x 80.3

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
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.

Technical data ETIM 8.0

Programmable logic controllers PLC (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@ss10.0.1-27-24-26-08 [BAA073013])			
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			Yes
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			Yes
Radio standard Bluetooth			No
Radio standard Wi-Fi 802.11			No
Radio standard GPRS			No
Radio standard eGPRS			No
Radio standard GSM			No
Radio standard LTE			No
Radio standard UMTS			No
IO link master			No
System accessory			Yes
Degree of protection (IP)			IP20
With potential separation			Yes
Fieldbus connection over separate bus coupler possible			Yes
Rail mounting possible			Yes
Wall mounting/direct mounting			No
Front built-in possible			No
Rack-assembly possible			No
Suitable for safety functions			No
SIL according to IEC 61508			None
Performance level according 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	80.3
Height		mm	16.8
Depth		mm	104.2