DATASHEET - XN-312-GW-CAN

Gateway to bus system CANopen

Part no. **XN-312-GW-CAN**
178782

Powering Business Worldwide

General specifications	
Product name	Eaton XN-312 Gateway
Part no.	XN-312-GW-CAN
EAN	7640130098442
Product Length/Depth	104.2 millimetre
Product height	16.8 millimetre
Product width	80.3 millimetre
Product weight	0.061 kilogram
Certifications	UL508 UL File No.: E135462 CE IEC/EN 61000-6-2 IEC/EN 61131-2 Rated data for terminations according to IEC/EN 60947-7-1 IEC/EN 61000-6-4 CULus DNV GL
Product Tradename	XN-312
Product Type	Gateway
Product Sub Type	None
Features & Functions	
Features	Fieldbus connection over separate bus coupler possible
Fitted with:	Potential separation
General information	
Admissible range	18 - 30 V DC, Networking 19.2 - 30 V DC, Networking
Configuration	Maximum station configuration: 32 modules (XN-322) in slice design
Degree of protection	IP20
Mounting method	Rail mounting possible
Residual ripple	According to EN 61131-2
Type	CANopen XN-312 gateway for XN300 Digital gateway for CANopen field bus in the form of an XN300 I/O system slice module XN300 CANopen gateway for running XN300 slice modules on a CANopen field bus XN300 gateway
Used with	XN-322-… XN300
Voltage type	DC
Ambient conditions, mechanical	
Drop and topple	According to IEC 60068-2-31, free fall according to IEC 60068-2-32
Shock resistance	Mechanical, According to IEC/EN 60068-2-27
Vibration resistance	According to IEC/EN 60068-2-6
Climatic environmental conditions	
Ambient operating temperature - min	-25 °C
Ambient operating temperature - max	85 °C
Ambient storage temperature - min	-40 °C
Ambient storage temperature - max	80 °C
Relative humidity	5 - 95 % (non-condensing)
Electro magnetic compatibility	
Air discharge	According to EN 61131-2
Burst impulse	According to IEC/EN 61131-2
Contact discharge	According to EN 61131-2
Electromagnetic fields	According to EN 61131-2
Emitted interference	30 - 230 MHz (radiated, high frequency, according to EN 61131-2)

	230 - 1000 MHz (radiated, high frequency, according to EN 61131-2)
Radiated RFI	IEC/EN 61131-2
Surge rating	According to IEC/EN 61131-2
Voltage dips	According to EN 61131-2 (Voltage fluctuations/voltage dips)
Terminal capacities	
Terminal capacity	0.2 - 1.5 mm^2, flexible without ferrule, H07V-K 0.25 - 1.5 mm^2, with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight) 0.2 - 1.5 mm^2, solid, H07V-U 0.25 - 1.5 mm^2, with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)
Gauge pin	A1 (according to IEC/EN 60947-1)
Stripping length (main cable)	10 mm
Electrical rating	
Supply voltage	4.7 - 5.3 V DC
Supply voltage at AC, 50 Hz - min	0 V
Supply voltage at AC, 50 Hz - max	0 V
Supply voltage at DC - min	18 V
Supply voltage at DC - max	30 V
Communication	
Addressing	Address set via DIP switch
Bus termination	Via DIP switch, Networking
Connection type	Push-In spring-cage terminals, Field bus Push-In spring-cage terminals, Connection design in TOP direction
Data transfer rate	Setting through DIP switch or automatically 1000 kBit/s, Networking 10 kBit/s, Networking 125 kBit/s, Networking 20 kBit/s, Networking 500 kBit/s, Networking 50 kBit/s, Networking 250 kBit/s, Networking 800 kBit/s, Networking
Field voltage	24 V DC (UL)
Interfaces	CANopen®, Field bus connection Mini-USB Type B (Service interface)
Protocol	CAN CANopen® Other bus systems
Safety	
Explosion safety category for dust	None
Explosion safety category for gas	None
Potential isolation	Yes
Design verification	
Static heat dissipation, non-current-dependent Pvs	2.4 W
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 Resist. of insul. mat. to abnormal heat/fire by internal elect. 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.
10.9.2 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 9.0

Programmable logic controllers PLC (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604)

Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications module (ecl@ss13-27-24-26-08 [BAA073018])

Supply voltage AC 50 Hz		V	0 - 0
Supply voltage AC 60 Hz		V	0 - 0
Supply voltage DC		V	18 - 30
Voltage type (supply voltage)			DC
Number of HW-interfaces CAN			1
Number of HW-interfaces industrial Ethernet			
Number of interfaces PROFINET			
Number of HW-interfaces RS-232			
Number of HW-interfaces RS-422			
Number of HW-interfaces RS-485			
Number of HW-interfaces serial TTY			
Number of HW-interfaces USB			1
Number of HW-interfaces parallel			
Number of HW-interfaces wireless			
Number of HW-interfaces other			1
Supporting protocol for EtherCAT			No
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 WLAN 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
Certified for UL hazardous location class I			No
Certified for UL hazardous location class II			No
Certified for UL hazardous location class III			No
Certified for UL hazardous location division 1			No
Certified for UL hazardous location division 2			No
Certified for UL hazardous location group A (acetylene)			No
Certified for UL hazardous location group B (hydrogen)			No
Certified for UL hazardous location group C (ethylene)			No
Certified for UL hazardous location group D (propane)			No
Certified for UL hazardous location group E (metal dusts)			No
Certified for UL hazardous location group F (carbonaceous dusts)			No
Certified for UL hazardous location group G (non-conductive dusts)			No
Width		mm	80.3
Height		mm	16.8
Depth		mm	104.2