DATASHEET - XN-312-GW-EC

Gateway to bus system EtherCAT

Part no. **XN-312-GW-EC**
178785

General specifications	
Product name	Eaton XN-312 Gateway
Part no.	XN-312-GW-EC
EAN	7640130098473
Product Length/Depth	104.2 millimetre
Product height	29.3 millimetre
Product width	80.3 millimetre
Product weight	0.095 kilogram
Certifications	IEC/EN 61131-2 CE UL508
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	
Degree of protection	IP20
Mounting method	Rail mounting possible
Type	XN300 gateway EtherCAT gateway
Used with	Brightlayer XN300
Voltage type	DC
Ambient conditions, mechanical	
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	55 °C
Electro magnetic compatibility	
Surge rating	0.5 kV, Supply cable, Surge (IEC/EN 61131-2:2008, Level 1), EMC
Terminal capacities	
Terminal capacity	0.25 - 1.5 mm^2, solid 0.25 - 0.75 mm^2, with ferrules with plastic collar
Gauge pin	A1 (according to IEC/EN 60947-1)
Stripping length (main cable)	10 mm
Electrical rating	
Supply voltage	18-36 V DC, Power supply, permissible voltage
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	
Field voltage	24 V DC (UL)
Interfaces	Ethernet (Ethernet-IP protocol), Field bus connection Mini-USB (Service interface)
Protocol	EtherCAT Other bus systems

Safety			
Explosion safety category for dust			None
Explosion safety category for gas			None
Design verification			
Static heat dissipation, non-current-dependent Pvs			2.5 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			
Number of HW-interfaces industrial Ethernet			2
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			Yes
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		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	29.3
Depth	mm	104.2

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