DATASHEET - XNE-GWBR-PBDP



ECO gateway for XI/ON I/O system, PROFIBUS DP

Part no. XNE-GWBR-PBDP Catalog No. 140045

EL-Nummer (Norway) 4520001



Delivery program

Function	XI/ON ECO gateways	
Connection technique	Push-in spring-cage terminal	
Function	XNE-Gateway with integrated supply	
Short Description	supports up to 48 disc-type modules (XN, XNE) Address set with DIP switch Address range: 1 – 125 (dec.)	
Field bus connection	PROFIBUS-DP (DPV0/DPV1 protocol)	
Terminal capacity (field bus/supply voltage)	Spring-cage terminals	
Service interface	PS/2 socket	
Data transfer rate	9.6 Kbit/s to 12 Mbit/s	
Instructions Bus refreshing module is already integrated.		
Information about equipment supplied The delivery package for all gateways includes: 2 x end bracket XN-WEW-32/2-SW, 1 x end plate XN-ABPL		

Technical data

Genera

General			
Standards			EN 61000-6-2 EN 61000-6-4 EN 61131-2
Approvals			
Approvals			CE, cULus EAC
Potential isolation			Yes, through optocoupler
Ambient temperature		°C	0 - +55
Storage	θ	°C	-25 - +85
Relative humidity			5 - $95~\%$ (indoor), Level RH-2, no condensation (for storage at $45^{\circ}\text{C})$
Harmful gases		ppm	SO_2 : 10 (rel. humidity < 75%, no condensation) H_2S : 1.0 (rel. humidity < 75 %,no condensation)
Vibration			according to IEC/EN 60068-2-6
Mechanical shock resistance		g	according to IEC 60068-2-27
Continuous shock resistance (IEC/EN 60068-2-29)			According to IEC 60068-2-29
Drop and topple			According to IEC 60068-2-31, free fall according to IEC 60068-2-32
Degree of Protection			IP20
Electromagnetic compatibility (EMC)			
ESD	Air/contact discharge	kV	EN 61000-4-2
Electromagnetic fields	(0.081) / (1,42) / (2 2,7) GHz	V/m	EN 61100-4-2
Burst			EN 61100-4-4
Surge			EN 61100-4-5
Radiated RFI		V	EN 61100-4-6
Emitted interference (radiated, high frequency)	(30230 MHz) / (2301000 MHz)	dB	EN 55016-2-3
Voltage fluctuations/voltage dips			EN 61131-2
Type test			to EN 61131-2
Approvals			CE, cULus EAC

Static heat dissipation, non-current-dependent	P_{vs}	W	6
Other technical data (sheet catalogue)			Technical Data
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	8
Clamping range			max. 0.14 - 1.5 mm ²
Connectable conductors			
Solid		mm ²	0.25 - 1.5
Flexible without ferrule		mm^2	0.25 - 1.5
Flexible with ferrule		mm^2	0.25 - 1.5
Flexible with ferrule		mm^2	0.25 - 0.75
Gauge pin IEC/EN 60947-1			A1
Networking			
Bus			PROFIBUS-DP
Bus protocol			PROFIBUS-DPV0 and PROFIBUS-DPV1
Maximum station configuration			48 cards (XN, XNE) of slice design or max. length of station: 1 m
System supply	U_{sys}	V DC	24/5
Coordination type "2"	$\mathbf{U}_{\mathrm{sys}}$	V DC	4.7 5.3
Coordination type "1"	U_{sys}	V DC	18 30
Field voltage	U_L		24 V DC
Admissible range			18-30 V DC
Residual ripple		%	According to EN 61131-2
Service interface			PS/2 socket
Connection design for field bus			Push-In spring-cage terminals
Data transfer rate		kBit/s	9.6 - 12000
Data transfer rate setting			automatic
Addressing			DIP switches
Field bus termination			Via DIP switch
Number of parameter bytes			2 bytes
Number of diagnostic bytes			2 bytes
Address range			1 - 125 decimal

Design verification as per IEC/EN 61439

Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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	6
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 7.0

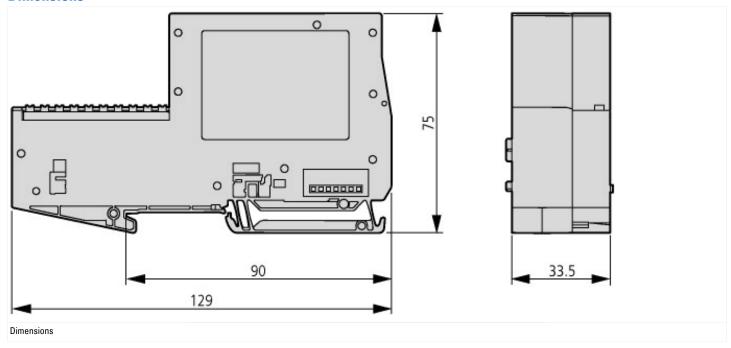
Technical data ETIM 7.0	Technical data ETIM 7.0			
PLC's (EG000024) / Fieldbus, decentr. periphery - communication module (EC001604	4)			
Electric engineering, automation, process control engineering / Control / Field bus, decentralized peripheral / Field bus, decentralized peripheral - communications 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		Yes		
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		
10 link master		No		
System accessory		Yes		
Degree of protection (IP)		IP20		
With potential separation		No		

Rail mounting possible Wall mounting/direct mounting Front build in possible Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height No No No No No No No No No N			
Wall mounting/direct mounting Front build in possible Rack-assembly possible Rock-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height No No No No No No No No No N	Fieldbus connection over separate bus coupler possible		Yes
Front build in possible Rack-assembly possible Routable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for dust Width Height No No No No No No No No No N	Rail mounting possible		Yes
Rack-assembly possible Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Appendant operation agent (Ex ib) Appendant operation safety category for gas Explosion safety category for dust Width mm 33.5 Height No No No No No No No No No N	Wall mounting/direct mounting		No
Suitable for safety functions Category according to EN 954-1 SIL according to IEC 61508 None Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) No Appendant operation agent (Ex ib) No Explosion safety category for gas None Explosion safety category for dust Width mm 33.5 Height 129	Front build in possible		No
Category according to EN 954-1 SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for dust Width mm 129 None None None None None 129	Rack-assembly possible		No
SIL according to IEC 61508 Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Width mm Mm Mm Mm Mm Mm Mm Mm Mm M	Suitable for safety functions		No
Performance level acc. EN ISO 13849-1 Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height None	Category according to EN 954-1		
Appendant operation agent (Ex ia) Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height No No None None 129	SIL according to IEC 61508		None
Appendant operation agent (Ex ib) Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height No None None	Performance level acc. EN ISO 13849-1		None
Explosion safety category for gas Explosion safety category for dust Width mm 33.5 Height 129	Appendant operation agent (Ex ia)		No
Explosion safety category for dust Width mm 33.5 Height 129	Appendant operation agent (Ex ib)		No
Width mm 33.5 Height mm 129	Explosion safety category for gas		None
Height mm 129	Explosion safety category for dust		None
	Width	mm	33.5
Depth mm 75	Height	mm	129
	Depth	mm	75

Approvals

Product Standards	IEC/EN 6113-2; CE marking
North America Certification	Request filed for UL and CSA
Specially designed for North America	No
Current Limiting Circuit-Breaker	No
Degree of Protection	IEC: IP20, UL/CSA Type: -

Dimensions



Assets (links)

Declaration of CE Conformity 00002416

Additional product information (links)

Technical Data	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=14.111
Product overview (WEB)	http://www.eaton.eu/xion