Gateway, Profibus 12MB, 85 50 225161

Part no. XN-GW-PBDP-12MB
Article no. 140048

Powering Business Worldwide

Delivery programme

Function			XN gateway without integrated supply
Short Description			supports up to 74 disc-type modules (XN) 1 x 9-pole SUB-D socket Address setting with two hexadecimal rotary coding switch Address range: 1 – 125 (dec.)
Field bus connection			PROFIBUS-DP (DPV0 protocol)
Service interface			PS/2 socket
Data transfer rate			9.6 Kbit/s to 12 Mbit/s
Instructions The supply module XN-BR-24VDC-D must be mounted immediately next to the gateway to provide the supply for the gateway.			
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

General

Standards			EN 61000-6-2 EN 61000-6-4 EN 61131-2
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°C)
Harmful gases		ppm	SO_2: 10 (rel. humidity < 75%, no condensation) H_2S: 1.0 (rel. humidity < 75 %,no condensation)
Vibration resistance, operating conditions			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			EN 61100-4-2
Electromagnetic fields			EN 61100-4-2
Burst			EN 61100-4-4
Surge			EN 61100-4-5
HF unsymmetric			EN 61100-4-6
Emitted interference (radiated, high frequency)			EN 55016-2-3
Voltage fluctuations			EN 61131-2
Type test			to EN 61131-2
Approvals			CE, cULus
Maximum power loss	P_v	W	2.5
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			Spring-loaded/screw terminal
Stripping length		mm	8
Clamping range			max. 0.5 - 2.5 mm^2
Connectable conductors			
"e" solid H07V-U		mm^2	0.5 - 2.5
"f" flexible H 07V-K		mm^2	0.5 - 1.5

"f" with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)		mm^2	0.5 - 1.5
"f" with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)		mm^2	0.5 - 1.5
Gauge pin IEC/EN 60947-1			A1

Networking

Field bus			PROFIBUS DP
Bus protocol			PROFIBUS-DPV0
Maximum station configuration			74 cards (XN) of slice design or max. length of station: 1 m
System supply	U_{sys}	V DC	24 /5
Operational voltage		V DC	5 (from bus refreshing module)
Admissible range			4.7-5.3 V DC
Residual ripple		%	According to EN 61131-2
Rated current consumption from module bus	I_{MB}	mA	430
Service interface			PS/2 socket
Connection design for field bus			1 x D-SUB socket, 9-pin
Data transfer rate		kBit/s	9.6 - 12000
Addressing			2 hexadecimal rotary switches
Field bus termination			through SUB-D plug
Number of parameter bytes			5 bytes
Number of diagnostic bytes			3 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	I_n	A	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	2.5
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 4.0

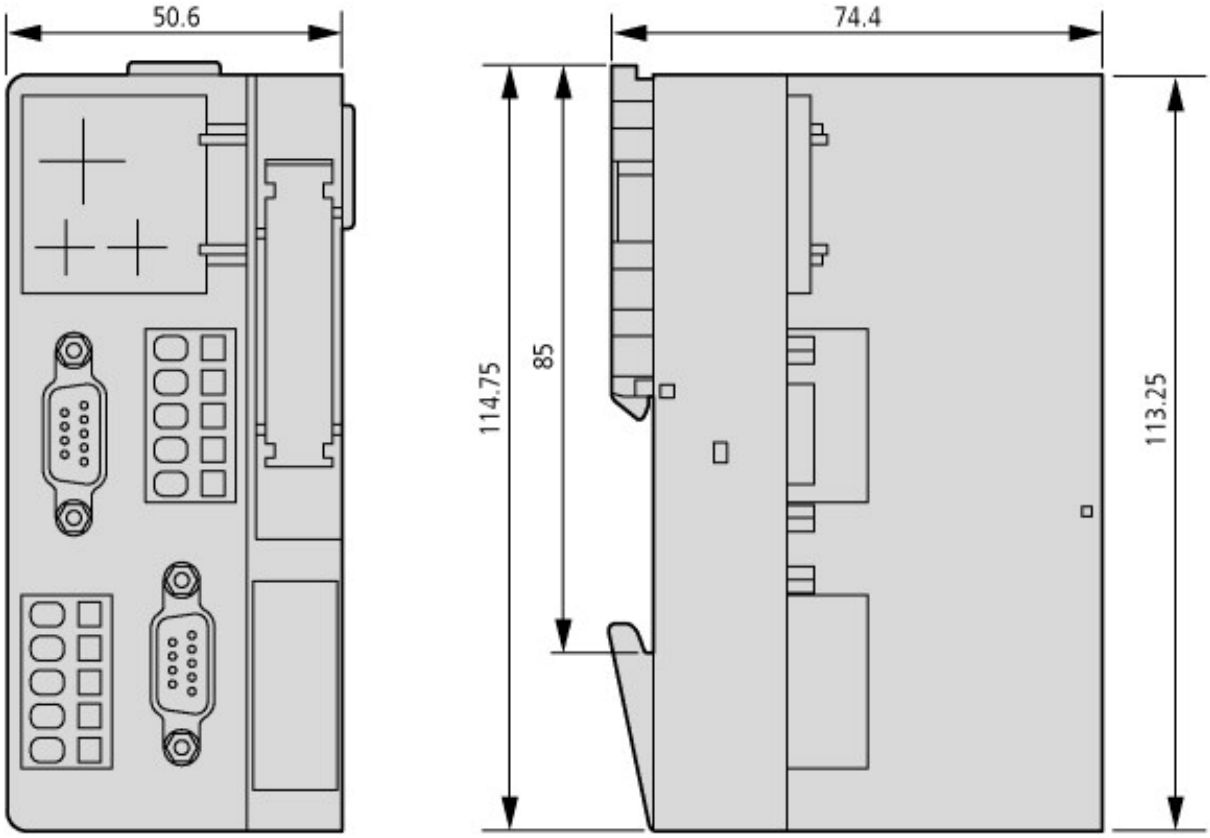
Supply voltage AC 50 Hz		V	0 - 0
Supply voltage AC 60 Hz		V	0 - 0
Supply voltage DC		V	18 - 30
Voltage type of supply voltage			DC
Supporting protocol in-bound for TCP/IP			No
Supporting protocol in-bound for PROFIBUS			Yes
Supporting protocol in-bound for CAN			No
Supporting protocol in-bound for INTERBUS			No
Supporting protocol in-bound for ASI			No
Supporting protocol in-bound for EIB/KNX			No
Supporting protocol in-bound for MODBUS			No
Supporting protocol in-bound for Data-highway			No
Supporting protocol in-bound for DeviceNet			No
Supporting protocol in-bound for SUCONET			No
Supporting protocol in-bound for LON			No
Supporting protocol in-bound for SERCOS			No
Supporting protocol in-bound for PROFINET IO			No
Supporting protocol in-bound for PROFINET CBA			No
Supporting protocol in-bound for Foundation Fieldbus			No
Supporting protocol in-bound for EtherNet/IP			No
Supporting protocol in-bound for AS-Interface Safety at Work			No
Supporting protocol in-bound for DeviceNet Safety			No
Supporting protocol in-bound for INTERBUS-Safety			No
Supporting protocol in-bound for PROFIsafe			No
Supporting protocol in-bound for SafetyBUS p			No
Supporting protocol in-bound for other bus systems			No
Supporting protocol out-bound for TCP/IP			No
Supporting protocol out-bound for PROFIBUS			Yes
Supporting protocol out-bound for CAN			No
Supporting protocol out-bound for INTERBUS			No
Supporting protocol out-bound for ASI			No
Supporting protocol out-bound for EIB/KNX			No
Supporting protocol out-bound for MODBUS			No
Supporting protocol out-bound for Data-highway			No
Supporting protocol out-bound for DeviceNet			No
Supporting protocol out-bound for SUCONET			No
Supporting protocol out-bound for LON			No
Supporting protocol out-bound for SERCOS			No
Supporting protocol out-bound for PROFINET IO			No
Supporting protocol out-bound for PROFINET CBA			No
Supporting protocol out-bound for Foundation Fieldbus			No
Supporting protocol out-bound for EtherNet/IP			No
Supporting protocol out-bound for AS-Interface Safety at Work			No
Supporting protocol out-bound for DeviceNet Safety			No
Supporting protocol out-bound for INTERBUS-Safety			No
Supporting protocol out-bound for PROFIsafe			No
Supporting protocol out-bound for SafetyBUS p			No
Supporting protocol out-bound for other bus systems			No
Radiostandard Bluetooth			No
Radiostandard WLAN 802.11			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 build in possible		No
Rack-assembly possible		No
Suited for safety functions		No
Safety class according to DIN V 19250		0
Category according to EN 954-1		-
SIL according to IEC 61508		0
SIL according to IEC 62061		0
Performance level acc. to EN ISO 13849-1		-
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	50.6
Height	mm	114.8
Depth	mm	74.4

Approvals

Product Standards		UL 508; CSA-C22.2 No. 142; IEC/EN 6113-2; CE marking
UL File No.		E205091
UL Category Control No.		NRAQ, NRAQ7
CSA File No.		UL report applies to both US and Canada
CSA Class No.		2252-01, 2252-81
North America Certification		UL recognized, certified by UL for use in Canada
Specially designed for North America		No
Current Limiting Circuit-Breaker		No
Degree of Protection		IEC: IP20, UL/CSA Type: -

Dimensions



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

Dimensions

Additional product information (links)

MN05002004Z User manual XI/ON gateways for Profibus-DP	
	MN05002004Z Benutzerhandbuch XI/ON Gateways für Profibus-DP - Deutsch
	MN05002004Z User manual XI/ON gateways for Profibus-DP - English
Technical Data	http://ecat.moeller.net/flip-cat/?edition=HPLEN&startpage=14.111