DATASHEET - XN-1RS232

Serial interface module XI/ON, RS232

Part no.	**XN-1RS232**
	140151
EL Number (Norway)	**4520687**

General specifications

Product name	Eaton XN Communication module
Part no.	XN-1RS232
EAN	7640130120075
Product Length/Depth	55.4 millimetre
Product height	74.1 millimetre
Product width	12.6 millimetre
Product weight	0.031 kilogram
Certifications	UL Recognized IEC/EN 61131-2 CSA Class No.: 2252-01, 2252-81 IEC/EN 61000-6-4 CULus IEC/EN 6113-2 UL Category Control No.: NRAQ, NRAQ7 CSA-C22.2 No. 142 IEC/EN 61000-6-2 UL report applies to both US and Canada Certified by UL for use in Canada CE UL 508 UL File No.: E205091
Product Tradename	XN
Product Type	Communication module
Product Sub Type	None
Catalog Notes	-7 - 12

Features & Functions

Features	Fieldbus connection over separate bus coupler possible
Fitted with:	Potential separation

General information

Cable length	15 m, RS232 Interface
Channels	RxD, TxD, RTS, CTS
Current consumption	0 mA, from supply terminal 140 mA, from module bus, Analog input modules
Degree of protection	IP20
Insulation resistance	500 V, Control/main circuit 500 V, Control/main circuit enclosure
Mounting method	Rail mounting possible
Suitable for	Base modules without C-Connection, for sensor feeding: 4-wire
Type	RS232, Interface XI/ON technology module
Used with	XN-S4T-SBBS XN-S4S-SBBS
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 Continuous according to IEC/EN 60068-2-29
Vibration resistance	According to IEC/EN 60068-2-6

Climatic environmental conditions

Ambient operating temperature - min	0 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-25 °C
Ambient storage temperature - max	85 °C
Environmental conditions	Harmful gases - H2S: 1 ppm (relative humidity < 75%, no condensation)

	Harmful gasses - SO2: 10 ppm (relative humidity < 75%, no condensation)
Relative humidity	5 - 95 % (indoor, Level RH-2, non-condensing for storage at 45°C)
Electro magnetic compatibility	
Air discharge	According to EN 61100-4-2
Burst impulse	According to IEC/EN 61000-4-4
Contact discharge	According to EN 61100-4-2
Electromagnetic fields	According to IEC EN 61100-4-2
Emitted interference	230 - 1000 MHz (radiated, high frequency, according to EN 55016-2-3) 30 - 230 MHz (radiated, high frequency, according to EN 55016-2-3)
Radiated RFI	IEC/EN 61100-4-6
Surge rating	According to IEC/EN 61000-4-5 Level 4
Voltage dips	According to EN 61131-2 (Voltage fluctuations/voltage dips)
Electrical rating	
Power loss	Normally 1 W
Rated operational voltage	24 V DC (supply terminal)
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	
Data transfer rate	Selectable up to 115200 Bit/s 64 Byte, Data buffer, Transmit Max. 115200 bit/s (parameterizable), default setting: 9600 Bit/s, 7 data bits, odd parity, 2 stop bits 128 Byte, Data buffer, Reception
Interfaces	Full-duplex RS232 interface
Number of bytes	4 parameter bytes 1 diagnostic byte
Protocol	Other bus systems
Safety	
Explosion safety category for dust	None
Explosion safety category for gas	None
Potential isolation	Through optocoupler: yes
Design verification	
Equipment heat dissipation, current-dependent Pvid	0 W
Heat dissipation capacity Pdiss	0 W
Heat dissipation per pole, current-dependent Pvid	0 W
Rated operational current for specified heat dissipation (In)	0 A
Static heat dissipation, non-current-dependent Pvs	1 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			
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			
Number of HW-interfaces parallel			
Number of HW-interfaces wireless			
Number of HW-interfaces other			
Supporting protocol for EtherCAT			No
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	12.6
Height	mm	74.1
Depth	mm	55.4

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