DATASHEET - XIOC-SER

Communication module for XC100/200, 24 V DC, serial, modbus, SUCOM-A, suconet K

Powering Business Worldwide™

Part no.	**XIOC-SER**
	267191
EL Number (Norway)	**4519690**

General specifications

Product name	Eaton XIOC Communication module
Part no.	XIOC-SER
EAN	4015082671914
Product Length/Depth	100 millimetre
Product height	95 millimetre
Product width	30 millimetre
Product weight	0.145 kilogram
Certifications	CSA-C22.2 No. 142-M CSA File No.: 012528 UL Category Control No.: NRAQ UL508 UL CSA UL File No.: E135462 EN 50178 IEC/EN 61131-2 CSA Class No.: 2252-01 CE CSA-C22.2 No. 0-M
Product Tradename	XIOC
Product Type	Communication module
Product Sub Type	None
Catalog Notes	MODBUS Master/Slave Modes of operation: RS232C, RS485, RS422 Serial interface SUCOM-A Suconet-K slave Transparent mode

General information

Cable type	RTS, CTS, DTR, DSR, DCD
Current consumption	275 mA (Ie), Interfaces 275 mA, max. internal current consumption, Interface modules
Degree of protection	IP20
Overvoltage category	II
Pollution degree	2
Protection class	1
Repetition rate	1 s
Residual ripple	≤ 5 %
Resistance	500 g/∅ 50 mm ±25 g (impact resistance)
Type	Communication module RS232, RS 422, RS485, Interfaces
Used with	XC100/200 (expandable with up to 15 XI/OC modules)

Ambient conditions, mechanical

Shock resistance	15 g, Mechanical, Shock duration 11 ms
Vibration resistance	57 - 150 Hz ± 1.0 mm 10 - 57 Hz, ± 0.075 mm

Climatic environmental conditions

Ambient operating temperature - min	0 °C
Ambient operating temperature - max	55 °C
Ambient storage temperature - min	-20 °C
Ambient storage temperature - max	70 °C

Electro magnetic compatibility

Emitted interference	Class A (according to DIN/EN 55011/22)

Voltage dips	10 ms
Terminal capacities	
Terminals	Optionally, screw terminals or spring-loaded terminals for digital/analog modules
Electrical rating	
Power loss	6.6 W
Rated operational voltage	24 (12) V DC
Supply voltage	20.4 – 28.8 (11.8 – 14.4) V DC, Admissible range, Power supply
Communication	
Addressing	Address range: 2 - 31
Bus termination	Switchable for RS485, RS422
Character formats	8E1, 8O1, 8N1, 8N2, 7E2, 7O2, 7N2, 7E1
Connection type	9-pole SUB-D connector (male), RS232 6-pole spring-loaded terminal block, RS422/RS485
Data transfer rate	0.3 kBit/s, Interface, Transparent mode 2.4 kBit/s, Interface, Transparent mode 4.8 kBit/s, Interface, Transparent mode 9.6 kBit/s, Interface, Transparent mode 0.6 kBit/s, Interface, Transparent mode 250 Byte per slave, Transmit/receive data 187.5 kBit/s, 375 kBit/s (Suconet) 38.4 kBit/s, Interface, Transparent mode 0.3 - 57.6 kBit/s 1.2 kBit/s, Interface, Transparent mode 120 Byte per slave (Suconet-K slave), Transmit/receive data 19.2 kBit/s, Interface, Transparent mode 57.6 kBit/s, Interface, Transparent mode 187.5 or 375 kBit/s, Suconet-K slave
Interfaces	Number of active interfaces/modules: 1 RTS, CTS, DTR, DSR, DCD (Operating mode Transparent mode, Control and signal cables, Analog control inputs) RS485 RS422 RS232(C), RS422, RS485 (built-in)
Number of bytes	250 bytes (per Com)
Number of modules	2 (XC100) 4 (XC200)
Number of slots	As required
Plug type	RS485, 422: plug terminal block RS232: 9 pole SUB-D plug
Protocol	MODBUS Other bus systems RS485 (Interface) SUCONET
Input/Output	
Rapid counter inputs	250 bytes per Com
Safety	
Explosion safety category for dust	None
Explosion safety category for gas	None
Potential isolation	Interfaces (RS485, RS422): 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	6.6 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) / PLC communication module (EC001423)	
Electric engineering, automation, process control engineering / Control, Process Control System (PCS) / Programmable logic control (SPS) / SPS communication module (ecl@ss13-27-24-22-08 [AKE531019])	
Number of HW-interfaces industrial Ethernet	0
Number of interfaces PROFINET	0
Number of HW-interfaces CAN	
Number of HW-interfaces RS-232	1
Number of HW-interfaces RS-422	1
Number of HW-interfaces RS-485	1
Number of HW-interfaces serial TTY	0
Number of HW-interfaces USB	0
Number of HW-interfaces parallel	0
Number of HW-interfaces wireless	0
Number of HW-interfaces other	0
With optical interface	No
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	Yes
Supporting protocol for Data-Highway	No
Supporting protocol for DeviceNet	No
Supporting protocol for SUCONET	Yes
Supporting protocol for LON	No
Supporting protocol for PROFINET IO	No
Supporting protocol for PROFINET CBA	No
Supporting protocol for SERCOS	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 GSM			No
Radio standard UMTS			No
IO link master			No
Redundancy			No
Type of data transmission			Serial
Transmission rate		kBit/s	375
With potential separation			No
SIL according to IEC 61508			None
Suitable for safety functions			No
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
Power consumption		W	
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	30
Height		mm	95
Depth		mm	100