

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



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

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