



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

Part no. XIOC-SER
Catalog No. 267191
EL-Nummer (Norway) 4519690

Delivery program

Function		Communication modules
Description		Compact I/O system for connection to XC100/200 Modular PLCs XC100/200 expandable with up to 15 XI/OC modules Optionally, screw terminals or spring-loaded terminals for digital/analog modules Serial interface RS232C, RS485, RS422 Modes of operation: Transparent mode MODBUS Master/Slave SUCOM-A Suconet-K slave

Technical data

General

Standards			IEC/EN 61131-2 EN 50178
Ambient temperature		°C	0 - +55
Storage	θ	°C	-20 - +70
Vibration resistance			10 - 57 Hz ±0.075 mm 57 - 150 Hz ±1.0 mm
Mechanical shock resistance		g	15 Shock duration 11 ms
Impact resistance			500 g/∅ 50 mm ±25 g
Overvoltage category/pollution degree			II/2
Protection class			1
Degree of Protection			IP20
Emitted interference			DIN/EN 55011/22, Class A
Weight		kg	0.2

Power supply

Rated voltage	U _e	V DC	24 (12)
Admissible range			20.4 – 28.8 (11.8 – 14.4)
Residual ripple		%	≤ 5
Neutral poles			
Duration of dip		ms	10
Repetition rate		s	1
Maximum power loss	P _v	W	6.6

Interfaces

Built-in interfaces			RS232(C), RS422, RS485
Protocol			Transparent-Modus, MODBUS Master/Slave, SUCOM-A, Suconet-K-Slave
Character formats			8E1, 8O1, 8N1, 8N2, 7E2, 7O2, 7N2, 7E1
Control and signal cables			RTS, CTS, DTR, DSR, DCD
Data transfer rate		kBit/s	0.3 ... 57.6 187.5, 375 (Suconet)
Potential isolation			Yes (RS485, RS422)
Transmit/receive data			250 Byte per slave 120 Byte per slave (Suconet-K slave)
Bus terminating resistors			Switchable for RS485, RS422
Plug arrangement			RS232: 9 pole SUB-D plug RS485, 422: plug terminal block

Current consumption	I_e	mA	275
Number of modules			XC100: 2 XC200: 4
Slots			As required

Interface modules

Number of modules (COM interfaces)			
XC100			2
XC200			4
Active interface/module			1
Max. internal current consumption		mA	275
Potential isolation			
RS232			No
RS 422/RS485			Yes
Connection options			
RS232			9-pole Sub-D connector (male)
RS 422/RS485			6-pole spring-loaded terminal block
Operating mode Transparent mode			
Type of interface			RS232, RS 422, RS485
Control and signal cables			RTS, CTS, DTR, DSR, DCD
Data transfer rate		kBit/s	0.3 ... 57.6 187.5, 375 (Suconet)
Data transfer rate		kbit/s	0.3, 0.6, 1.2, 2.4, 4.8, 9.6, 19.2, 38.4, 57.6
Character formats			8E1, 8O1, 8N1, 8N2, 7E2, 7O2, 7N2, 7E1
Number of transmit bytes in one block Com2, 3, 4, 5			250 bytes per Com
Number of receive bytes in one block Com2, 3, 4, 5			250 bytes per Com
Operating mode			
			Suconet K (slave)
Type of interface		Number	RS485
Data transfer rate		KBit/s	187.5 or 375
Message format			Suconet K
Addresses			2 to 31
Transmit/receive data			250 Byte per slave 120 Byte per slave (Suconet-K slave)

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	6.6
Heat dissipation capacity	P_{diss}	W	0
Operating ambient temperature min.		°C	0
Operating ambient temperature max.		°C	55
IEC/EN 61439 design verification			
10.2 Strength of materials and parts			
10.2.2 Corrosion resistance			
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

PLC's (EG000024) / PLC communication module (EC001423)		
Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS communication module (ecl@ss10.0.1-27-24-22-08 [AKE531014])		
Number of HW-interfaces industrial Ethernet		0
Number of interfaces PROFINET		0
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 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
Category according to EN 954-1		
SIL according to IEC 61508		None
Suitable for safety functions		No
Performance level acc. 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
Width	mm	30
Height	mm	100
Depth	mm	95

Approvals

Product Standards		IEC: see Technical Data; UL508; CSA-C22.2 No. 0-M; CSA-C22.2 No. 142-M; CE marking
UL File No.		E135462
UL Category Control No.		NRAQ
CSA File No.		012528
CSA Class No.		2252-01
North America Certification		UL listed, CSA certified
Specially designed for North America		No
Current Limiting Circuit-Breaker		No
Degree of Protection		IEC: IP20, UL/CSA Type: -

Dimensions



