DATASHEET - XIOC-NET-SK-M



Communication module for XC100/200, 24 V DC, suconet-K Master

Part no. XIOC-NET-SK-M Catalog No. 289982

EL-Nummer (Norway) 4519695



Delivery program

Function	Communication modules
	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
Description	Suconet K master module

Technical data

General

Standards			IEC/EN 61131-2 EN 50178
Ambient temperature		°C	0 - +55
Storage	8	°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/Ø 50 mm ±25 g
Overvoltage category/pollution degree			11/2
Protection class			1
Degree of Protection			IP20
Emitted interference			DIN/EN 55011/22, Class A
Weight		kg	0.2
Devices example:			

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_{ν}	W	6.6

Interfaces

Interfaces			
Built-in interfaces			RS485
Protocol			Suconet K, K1
Data transfer rate		kBit/s	187.5, 375
Function			Master
Potential isolation			Yes
Number of slaves			16
Transmit/receive data			250 bytes per COM
Bus terminating resistors			Switchable
Plug arrangement			Plug-in terminal block
Current consumption	I _e	mA	275
Baud rate/length		kBd	187.5 or 375 Kbit/s
Bus diagnostics			LED
Number of modules			XC100: 2 XC200: 4
Slots			As required

Interface modules

Active interface/module		1
Operating mode Transparent mode		
Data transfer rate	kBit/s	187.5, 375
Operating mode		
Message format		Suconet K/K1
Transmit/receive data		250 bytes per COM

Design verification as per IEC/EN 61439

Design Verification as per IEG/EN 61439			
Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	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
EC/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 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	0		
Number of HW-interfaces RS-422	0		
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 No
Supporting protocol for TCP/IP			No 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			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			No
Radio standard Bluetooth			No
Radio standard WLAN 802.11			No
Radio standard GPRS			No
Radio standard GSM			No
Radio standard UMTS			No
10 link master			No
Redundancy			No
Type of data transmission			Serial
Transmission rate	ı	kBit/s	375
With potential separation			Yes
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	1	mm	30
Height		mm	105
Depth		mm	95

Approvals

Approvato	
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

Degree of Protection

IEC: IP20, UL/CSA Type: -

Dimensions

