DATASHEET - XC-104-C10-000

Modular PLC XC104, Micro PLC, programmable CODESYS 3, USB, Ethernet, XN300 IO expandable

Part no.	XC-104-C10-000
	199971

General specifications

Product name		Eaton XC100 modular PLC
Part no.		XC-104-C10-000
EAN		4015081997602
Product Length/Depth		104.2 millimetre
Product height		29.3 millimetre
Product width		80.3 millimetre
Product weight		0.11 kilogram
Certifications		CE cULus Listed EN 61131 UL listed UL File No.: E205091 EAC
Product Tradename		XC100
Product Type		Modular PLC
Product Sub Type		None
Public Consumption		Yes
Product Family Description		ES-PMCC-ICP-Eaton XC100 modular programmable logic controllers
Globally Marketable		Yes

Features & Functions

Fitted with:		XSOFT-CODESYS 3
Functions		Additional program memory possible

General information

Connection type		Push-in spring-cage terminal, Connection design in TOP direction
Degree of protection		IP20
Model		Modular
Mounting method		Rail mounting possible
Overvoltage category		II
Pollution degree		2
Voltage type		DC

Ambient conditions, mechanical

Mounting position		Vertical (on horizontal top-hat rail)
Shock resistance		15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 Impacts
Vibration resistance		5 - 8.4 / 8.4 -150 Hz, 3,5 mm / 1 g

Climatic environmental conditions

Air pressure		795 - 1080 hPa (operation)
Ambient operating temperature - min		-20 °C
Ambient operating temperature - max		60 °C
Ambient storage temperature - min		-25 °C
Ambient storage temperature - max		70 °C
Relative humidity		< 95 % (non-condensing)

Electro magnetic compatibility

Emitted interference		40 dB (at 30 - 230 MHz, Class A, radiated, high frequency) 47 dB (at 230 - 1000 MHz, Class A, radiated, high frequency)

Terminal capacities

Terminal capacity (AWG)		24 - 16
Terminal capacity (flexible with ferrule)		0.25 - 1.5 mm², with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)

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Terminal capacity (flexible)			0.2 - 1.5 mm², H 07V-K
Terminal capacity (solid)			0.2 - 1.5 mm², H07V-U

Power supply

Supply voltage at AC, 50 Hz - min			0 V AC
Supply voltage at AC, 50 Hz - max			0 V AC
Supply voltage at DC - min			19.2 V DC
Voltage dips			20 ms 10 ms
Supply voltage at DC - max			30 V DC

Communication

Interfaces			ETH XN300
Protocol			EtherNet/IP MODBUS Other bus systems TCP/IP

Input/Output

Number of channels			0
Number of inputs (analog)			0
Number of inputs (digital)			0
Number of outputs (analog)			0
Number of outputs (digital)			0
Number of relay outputs			0
Rated operational current (Ie)			1 A (supply input)

Safety

Explosion safety category for gas			None
Explosion safety category for dust			None

System

Memory capacity			256,000 kByte

Design verification

Static heat dissipation, non-current-dependent Pvs			6.3 W
Heat dissipation details			The max. heat dissipation is specified as the maximum power produced inside the device's housing.
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 8.0

Programmable logic controllers PLC (EG000024) / PLC CPU-module (EC000236)

Electric engineering, automation, process control engineering / Control / Programmable logic control (SPS) / SPS - basic device (ecl@ss10.0.1-27-24-22-07 [AKE530014])

Supply voltage AC 50 Hz		V	0 - 0
Supply voltage AC 60 Hz		V	0 - 0
Supply voltage DC		V	19.2 - 30
Voltage type of supply voltage			DC
Number of relay outputs			0
Max. number of time switches			1000
Model			Modular
Processing time (1K, binary operation)		ms	0.00125
Number of HW-interfaces industrial Ethernet			1
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			0
Number of HW-interfaces USB			1
Number of HW-interfaces parallel			0
Number of HW-interfaces Wireless			0
Number of HW-interfaces other			1
Number of analogue outputs			0
Number of analogue inputs			0
Number of digital inputs			0
Number of digital outputs			0
With optical interface			No
Supporting protocol for TCP/IP			Yes
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			No
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			Yes
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
Supporting protocol for DNP3			No
Supporting protocol for IEC 60870			No
Supporting protocol for IEC 61850 Ethernet			No
Radio standard Bluetooth			No
Radio standard Wi-Fi 802.11			No
Radio standard GPRS			No
Radio standard GSM			No
Radio standard UMTS			No

Long-Term Evolution (LTE)		No
IO link master		No
System accessory		Yes
Redundancy		No
With display		No
Type of memory		RAM
Memory size	kByte	256000
Additional program memory 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
Width	mm	80.3
Height	mm	29.3
Depth	mm	104.2