

# Specifications

## Eaton 199971

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



### General specifications

<b>PRODUCT NAME</b>	Eaton XC100 modular PLC
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<b>CATALOG NUMBER</b>	199971
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<b>MODEL CODE</b>	XC-104-C10-000
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<b>EAN</b>	4015081997602
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<b>PRODUCT LENGTH/DEPTH</b>	104.2 mm
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<b>PRODUCT HEIGHT</b>	29.3 mm
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<b>PRODUCT WIDTH</b>	80.3 mm
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<b>PRODUCT WEIGHT</b>	0.11 kg
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<b>CERTIFICATIONS</b>	UL listed EN 61131 EAC UL File No.: E205091 CE cULus Listed
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## Features & Benefits:

<b>FITTED WITH:</b>	XSOFT-CODESYS 3
<b>FUNCTIONS</b>	Additional program memory possible

## Ambient conditions, mechanical

<b>MOUNTING POSITION</b>	Vertical (on horizontal top-hat rail)
<b>SHOCK RESISTANCE</b>	15 g, Mechanical, according to IEC/EN 60068-2-27, Half-sinusoidal shock 11 ms, 9 Impacts
<b>VIBRATION RESISTANCE</b>	5 - 8.4 / 8.4 -150 Hz, 3,5 mm / 1 g

## Terminal capacities

<b>TERMINAL CAPACITY (AWG)</b>	24 - 16
<b>TERMINAL CAPACITY (FLEXIBLE WITH FERRULE)</b>	0.25 - 1.5 mm <sup>2</sup> , with ferrules without plastic collar according to DIN 46228-1 (ferrules crimped gas-tight) 0.25 - 1.5 mm <sup>2</sup> , with ferrules with plastic collar according to DIN 46228-1 (ferrules crimped gas-tight)
<b>TERMINAL CAPACITY (FLEXIBLE)</b>	0.2 - 1.5 mm <sup>2</sup> , H 07V-K
<b>TERMINAL CAPACITY (SOLID)</b>	0.2 - 1.5 mm <sup>2</sup> , H07V-U

## Communication

## General

<b>EMITTED INTERFERENCE</b>	40 dB (at 30 - 230 MHz, Class A, radiated, high frequency) 47 dB (at 230 - 1000 MHz, Class A, radiated, high frequency)
<b>CONNECTION TYPE</b>	Push-in spring-cage terminal, Connection design in TOP direction
<b>DEGREE OF PROTECTION</b>	IP20
<b>MEMORY CAPACITY</b>	256,000 kByte
<b>MODEL</b>	Modular
<b>MOUNTING METHOD</b>	Rail mounting possible
<b>OVERVOLTAGE CATEGORY</b>	II
<b>POLLUTION DEGREE</b>	2
<b>VOLTAGE TYPE</b>	DC

## Climatic environmental conditions

<b>AIR PRESSURE</b>	795 - 1080 hPa (operation)
<b>AMBIENT OPERATING TEMPERATURE - MIN</b>	-20 °C
<b>AMBIENT OPERATING TEMPERATURE - MAX</b>	60 °C
<b>AMBIENT STORAGE TEMPERATURE - MIN</b>	-25 °C
<b>AMBIENT STORAGE TEMPERATURE - MAX</b>	70 °C
<b>RELATIVE HUMIDITY</b>	< 95 % (non-condensing)

## Power supply

<b>SUPPLY VOLTAGE AT DC - MIN</b>	19.2 VDC
<b>VOLTAGE DIPS</b>	20 ms 10 ms
<b>SUPPLY VOLTAGE AT DC - MAX</b>	30 VDC

## Input/Output

<b>CONNECTION TYPE</b>	Push-in spring-cage terminal, Connection design in TOP direction
<b>INTERFACES</b>	ETH XN300
<b>PROTOCOL</b>	EtherNet/IP MODBUS Other bus systems TCP/IP

<b>NUMBER OF CHANNELS</b>	0
<b>NUMBER OF INPUTS (ANALOG)</b>	0
<b>NUMBER OF INPUTS (DIGITAL)</b>	0
<b>NUMBER OF OUTPUTS (ANALOG)</b>	0
<b>NUMBER OF OUTPUTS (DIGITAL)</b>	0
<b>NUMBER OF RELAY OUTPUTS</b>	0
<b>RATED OPERATIONAL CURRENT (IE)</b>	1 A (supply input)

## Safety

**EXPLOSION SAFETY CATEGORY FOR DUST** None

**EXPLOSION SAFETY CATEGORY FOR GAS** None

## Design verification

**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** Is the panel builder's responsibility.

AND CONNECTIONS	
<b>10.8 CONNECTIONS FOR EXTERNAL CONDUCTORS</b>	Is the panel builder's responsibility.
<b>10.9.2 POWER-FREQUENCY ELECTRIC STRENGTH</b>	Is the panel builder's responsibility.
<b>10.9.3 IMPULSE WITHSTAND VOLTAGE</b>	Is the panel builder's responsibility.
<b>10.9.4 TESTING OF ENCLOSURES MADE OF INSULATING MATERIAL</b>	Is the panel builder's responsibility.
<b>10.10 TEMPERATURE RISE</b>	The panel builder is responsible for the temperature rise calculation. Eaton will provide heat dissipation data for the devices.
<b>10.11 SHORT-CIRCUIT RATING</b>	Is the panel builder's responsibility.
<b>10.12 ELECTROMAGNETIC COMPATIBILITY</b>	Is the panel builder's responsibility.
<b>10.13 MECHANICAL FUNCTION</b>	The device meets the requirements, provided the information in the instruction leaflet (IL) is observed.

## Resources

<b>BROCHURES</b>	<a href="#">eaton-powerxl-variable-frequency-drives-material-handling-brochure-br040017en-en-us.pdf</a>  <a href="#">eaton-xc300-modular-plc-brochure-br050008en-en-us.pdf</a>  <a href="#">eaton-xn300-modular-io-system-brochure-br050004en-en-us.pdf</a>  <a href="#">br050008-en</a>
<b>CATALOGUES</b>	<a href="#">eaton-product-overview-for-machinery-catalogue-ca08103003zen-en-us.pdf</a>
<b>DECLARATIONS OF CONFORMITY</b>	<a href="#">DA-DC-00004713.pdf</a> <a href="#">DA-DC-00004712.pdf</a>
<b>INSTALLATION INSTRUCTIONS</b>	<a href="#">IL050031ZU</a>
<b>INSTALLATION VIDEOS</b>	<a href="#">XC100, XC200, XC300 – Eaton's modular PLC ranges</a>
<b>MANUALS AND USER GUIDES</b>	<a href="#">MN050005_EN</a>
<b>MCAD MODEL</b>	<a href="#">eaton-cadenas-path-xcontrol-xc_104_c10_000.3db</a>  <a href="#">eaton-xc-104-c10-000-drawing.dwg</a>

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[eaton-cadenas-front\\_view-xc\\_104\\_c10\\_000\\_front.pra](#)

[eaton-cadenas-side\\_view-xc\\_104\\_c10\\_000\\_side.pra](#)

[eaton-cadenas-top\\_view-xc\\_104\\_c10\\_000\\_top.pra](#)

[eaton-xc-104-c10-000-3d-model.stp](#)

**PRODUCT NOTIFICATIONS**

[eaton-xc-104-xc-204-end-user-license-agreement-mz050020-en-us.pdf](#)

[eaton-product-cybersecurity-guideline-xc104-xc204-hardening-documentation-mz050018-en-us.pdf](#)

[eaton-unlock-usb-xcontrol-supplement-mz050017zu.pdf](#)

[MZ050018EN.pdf](#)

**SALES NOTES**

[eaton-starset-xc104-modular-plc-flyer-fl050015en-en-us.pdf](#)

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**PROJECT NAME:**

**PROJECT NUMBER:**

**PREPARED BY:**

**DATE:**

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