

### Modular PLC, 24 V DC, 8DI, 6DO, RS232, CAN, 64kB

Powering Business Worldwide\*

Part no. XC-CPU101-C64K-8DI-6DO
Article no. 262152
Catalog No. XC-CPU101-C64K

## **Delivery programme**

Digital input count		Digital: 8; of which usable as interrupt: 4
Quantity of outputs		Transistor: 6
Built-in interfaces		CANopen® RS232
Instructions		expandable with $\rightarrow$ expansions XI/OC Only on connection with $\rightarrow$ XI/OC rack
User memory		64 Kbyte
Cycle time for 1 k of instructions (Bit, Byte)	ms	0.5
Memory		
Application/marker/retain data	KByte	64 KB/4 KB/4 KB
Integrated Web server		no
Information about equipment supplied		The following accessory equipment is required: terminal clamps, module rack, battery

# **Technical data**

#### General

General				
Standards			IEC/EN 61131-2 EN 50178	
Ambient temperature		°C	0 - +55	
Storage	9	°C	-25 - +70	
Mounting position			Horizontal	
Relative humidity, non-condensing (IEC/EN 60068-2-30)		%	10 - 95	
Air pressure (operation)		hPa	795 - 1080	
Vibration resistance			10 - 57 Hz ±0.075 mm 57 - 150 Hz ±1.0 g	
Mechanical shock resistance		g	15 Shock duration 11 ms	
Overvoltage category/pollution degree			11/2	
Degree of Protection			IP20	
Rated insulation voltage	Ui	V	500	
Emitted interference			EN 50081-2, Class A	
Interference immunity			EN 50081-2	
Battery (service life)			normally 5 years	
Weight		kg	0.23	
Terminations			Plug-in terminal block	
Terminal capacities		$\text{mm}^2$		
Screw terminals				
Flexible with ferrule		mm <sup>2</sup>	0.5 - 1.5	
Solid		mm <sup>2</sup>	0.5 - 2.5	
Spring-loaded terminals				
flexible		$mm^2$	0.34 - 1.0	
Solid		mm <sup>2</sup>	0.14 - 1.0	
Power supply				
Duration of mains dip		ms	10	
Ponotition rate			1	

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Duration of mains dip	ms	S	10
Repetition rate	s		1
Input voltage	VI	DC	24
Admissible range	VI	DC	20.4 - 28.8
Input rating	W	1	max. 26
Residual ripple	%		≦ <sub>5</sub>

Maximum power loss (without local I/O)	$P_{v}$	W	6
	' V	VV	
Note on heat dissipation			Without local I/O
Overvoltage protection			Yes
Protection against polarity reversal			Yes
Mains filter (external)			Yes
Inrush current		x I <sub>n</sub>	No limitation (limited only by upstream 24 V DC power supply unit)
Signal module output voltage			
Rated value		V DC	5
Output current		Α	3.2
Short-circuit rating			Yes
Electrically isolated from the supply voltage			No
CPU			
Processor			Infineon C164
Memory			
Program code and program data		kByte	64/64
Marker/retentive data			4/4
Cycle time for 1 k of instructions (Bit, Byte)  Interfaces		ms	< 0.5
Serial interface (RS232) without handshake lines			
Data transfer rate		kbit/s	max. 57.6
Connection technique		Jiy J	RJ45
Potential isolation			No No
CANopen®			NO.
Maximum data transfer rate		Bits/s	500000
Potential isolation		DIIS/S	
			Yes
Device profile PD0 type			To DS 301 V4
			Asyn., cyc., acyc.
Connection			Plug-in terminal block
Bus terminating resistors		N	External
Stations		Number	max. 126
Watchdog			Yes
RTC (real-time clock)  Power supply of local inputs/outputs (24 V <sub>0</sub> /0 V <sub>0</sub> )			Yes
Input voltage		V DC	24
Voltage range		V DC	19.2 - 30, note polarity
Potential isolation		V DC	13.2 - 30, note polarity
			Yes
Power supply against CPU voltage  Overvoltage protection			Yes
Protection against polarity reversal  Digital inputs			Yes
Input current per channel at nominal voltage		mA	Normally 3.5
Power loss per channel			Normally 85 mW
Voltage level to IEC/EN 61131-2			
Limit value type 1			Low < 5 V DC, high > 15 V DC
Input delay			
Off → On		ms	Normally 0.1
On → Off		ms	Normally 0.1
Inputs			8 (4 of which are interrupt inputs)
Channels with the same reference potential		Qty.	8
Status indication		City.	LED
Digital outputs			
Channels		Number	6
Power loss per channel		W	0.08
QX0.0 to QX0.3		A	0.5
Output delay			
Off → On			Normally 0.1 ms
			,

On → Off		Normally 0.1 ms
Channels with the same reference potential	Qty.	6
Status indication		LED
Switching capacity		IEC/EN 60947-5-1, utilization category DC-13
duty factor	% DF	100
Utilization factor	g	1

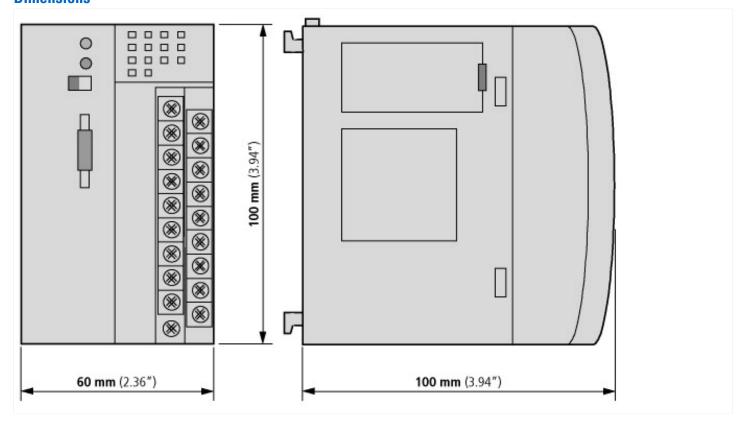
# Design verification as per IEC/EN 61439

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Technical data for design verification			
Rated operational current for specified heat dissipation	In	Α	0
Heat dissipation per pole, current-dependent	P <sub>vid</sub>	W	0
Equipment heat dissipation, current-dependent	P <sub>vid</sub>	W	0
Static heat dissipation, non-current-dependent	$P_{vs}$	W	6
Heat dissipation capacity	P <sub>diss</sub>	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			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.

### Approvals

- Pp	
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**



### **Additional product information (links)**

raditional product information (initio)					
MN05003004Z Manual modular PLC XC-CPU101(-XV)					
	MN05003004Z Handbuch Modular PLC XC-CPU101(-XV) - Deutsch	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05003004Z_DE.pdf			
	MN05003004Z Manual modular PLC XC-CPU101(-XV) - English	ftp://ftp.moeller.net/DOCUMENTATION/AWB_MANUALS/MN05003004Z_EN.pdf			