

UC20-M4000

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With u-control M3000, automation solutions can be perfectly integrated into the IoT. The powerful controller also works as an edge device for providing local information in the network and can be expanded by connecting function modules – ideal for automation and IIoT applications. u-control M4000 offers two additional CPU cores, two additional Ethernet interfaces and more RAM, NV RAM, and flash memory for complex edge computing in automation.

General ordering data

Version	Control CODESYS-based, u-OS, IP20, PUSH IN, 24 V DC +20 %/ -15 %, USB-C (3.1), MicroSD CARD, -40 °C...70 °C
Order No.	2839160000
Type	UC20-M4000
GTIN (EAN)	4064675446125
Qty.	1 items

Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate no. (cULusEX)	E223527

Dimensions and weights

Depth	101 mm	Depth (inches)	3.9764 inch
Height	120 mm	Height (inches)	4.7244 inch
Width	80 mm	Width (inches)	3.1496 inch
Mounting dimension - height	120 mm	Net weight	604 g

Temperatures

Storage temperature	-40 °C ... +85 °C	Operating temperature	-40 °C...70 °C
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Probability of failure

SIL in compliance with IEC 61508	None	
MTBF	28 a	
MTBF	According to Standard	MIL-HDBK-217-FN2
	Operating time (hours), min.	250188 h
	Ambient temperature	50 °C

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	6aI, 6c, 7a, 7cI
REACH SVHC	1, 2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) 110-71-4, 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol 119-47-1, Lead titanium trioxide 12060-00-3, Diboron trioxide 1303-86-2, Lead monoxide 1317-36-8, Lead 7439-92-1, Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide 75980-60-8

Connection data

Wire cross-section, finely stranded, max. (AWG)	AWG 26	Wire cross-section, finely stranded, min. (AWG)	AWG 16
Wire cross-section, solid, max. (AWG)	AWG 26	Wire cross-section, solid, min. (AWG)	AWG 16
Type of connection	PUSH IN	Wire cross-section, solid, max.	1.5 mm ²
Wire cross-section, solid, min.	0.14 mm ²	Wire connection cross section, finely stranded, max.	1.5 mm ²
Wire connection cross section, finely stranded, min.	0.14 mm ²		

General data

UL 94 flammability rating	V-0	
Mounting rail	TS 35	
Air pressure (operation)	≥ 795 hPa as per IEC 61131-2	
Operating temperature installation dependent	Mounting position	horizontal
	Operating altitude, max	2000 m
	Operating temperature	min.
max.		70 °C

Technical data

Mounting position	vertical
Operating altitude, max	2000 m
Operating temperature	min. -40 °C
	max. 50 °C
Mounting position	horizontal
Operating altitude, max	3000 m
Operating temperature	min. -40 °C
	max. 60 °C
Mounting position	vertical
Operating altitude, max	3000 m
Operating temperature	min. -40 °C
	max. 50 °C
Air humidity (transport)	10% to 95%, non-condensing as per IEC 61131-2
Air pressure (transport)	≥ 700 hPa as per IEC 61131-2
Air pressure (storage)	≥ 700 hPa as per IEC 61131-2
Air humidity (operation)	10% to 95%, non-condensing as per IEC 61131-2
Air humidity (storage)	10% to 95%, non-condensing as per IEC 61131-2

Power supply

Feed current for IIN (input current path), 10 A max.	Current consumption from I _{sys} , typ.	116 mA
Supply voltage for outputs	24 V DC +20 %/ -15 %	Supply voltage system and inputs
Feed current for IOU _T (output current path), max.	10 A	24 V DC +20 %/ -15 %

System data

Module type	Controller	Interface	2x Host (USB-A 2.0), 4x 1 Gbps (RJ45)
max. number of modules	64	Configuration interface	USB-C (3.1), MicroSD CARD
Program data memory expansion possible	Yes	Program data memory size	4 GB
Processor	Quad Core ARM Cortex A53, 1200 MHz	User data memory size	16 GB
Connection type	PUSH IN	Engineering tool	u-OS
Programming environment	CODESYS	Type of program data memory	DDR4
Memory (Flash)	16 GB	Real-time clock	Battery buffered
Type of user data memory	eMMC	Field bus protocol	EtherNet/IP, PROFINET

Guarantee

Time interval	1 year
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Important note

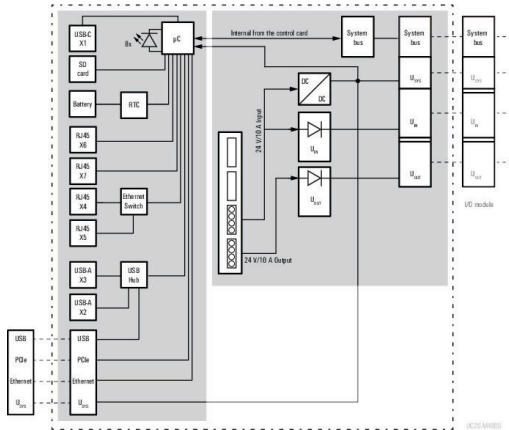
Product information	The matching end brackets are included with the control.
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Classifications

ETIM 8.0	EC000236	ETIM 9.0	EC000236
ETIM 10.0	EC000236	ECLASS 14.0	27-24-22-07
ECLASS 15.0	27-24-22-07		

Drawings

Block diagram



Connection diagram

