

**UC20-M3000****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



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	Controller, IP20, AutomationController
Order No.	<a href="#">2839 150000</a>
Type	UC20-M3000
GTIN (EAN)	4064675446101
Qty.	1 pc(s).

Creation date March 14, 2024 11:39:22 AM CET

Catalogue status 09.03.2024 / We reserve the right to make technical changes.

## UC20-M3000

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## Technical data

## Dimensions and weights

Depth	100 mm	Depth (inches)	3.937 inch
Height	119 mm	Height (inches)	4.685 inch
Width	79 mm	Width (inches)	3.11 inch
Net weight	250 g		

## Probability of failure

MTBF	According to Standard	MIL-HDBK-217-FN2
	Ambient temperature	50 °C

## Connection data

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

## General data

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			
Air humidity (transport)	10% to 95%, non-condensing as per IEC 61131-2			
Air pressure (operation)	≥ 795 hPa as per IEC 61131-2			
Air pressure (storage)	≥ 700 hPa as per IEC 61131-2			
Air pressure (transport)	≥ 700 hPa as per IEC 61131-2			
Operating temperature installation dependent	Mounting position	horizontal		
	Operating altitude, max	2,000 m		
	Operating temperature	min.	-40 °C	
		max.	70 °C	
	Mounting position	vertical		
	Operating altitude, max	2,000 m		
	Operating temperature	min.	-40 °C	
		max.	50 °C	
	Mounting position	horizontal		
	Operating altitude, max	3,000 m		
	Operating temperature	min.	-40 °C	
		max.	60 °C	
	Mounting position	vertical		
	Operating altitude, max	3,000 m		
	Operating temperature	min.	-40 °C	
		max.	50 °C	
Rail	TS 35			
UL 94 flammability rating	V-0			

## Power supply

Current consumption from I <sub>sys</sub> , typ.	116 mA		
Feed current for I <sub>IN</sub> (input current path)	nominal	10 A	
	min.	0 A	
	max.	10 A	

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## Technical data

Feed current for  $I_{IN}$  (input current path) , 10 A  
max.

Feed current for $I_{OUT}$ (output current path)	max.	10 A
	nominal	10 A
	min.	0 A

Feed current for  $I_{OUT}$  (output current path) , max. 10 A

Supply voltage for outputs 24 V DC +20 %/ -15 %

Supply voltage system and inputs 24 V DC +20 %/ -15 %

## System data

Configuration interface	USB-C (3.1), MicroSD CARD	Engineering tool	u-OS
Interface	2x Host (USB-A 2.0), 2x 1 Gbps (RJ45)	Memory (Flash)	16 GB
Processor	Dual Core ARM Cortex A53, 1200 MHz	Program data memory expansion possible	No
Program data memory size	2 GB	Programming environment	CODESYS
Type of program data memory	DDR4	Type of user data memory	eMMC
User data memory size	16 GB	max. number of modules	64

## Classifications

ETIM 6.0	EC000236	ETIM 7.0	EC000236
ETIM 8.0	EC000236	ETIM 9.0	EC000236
ECLASS 9.0	27-24-22-07	ECLASS 9.1	27-24-22-07
ECLASS 10.0	27-24-22-07	ECLASS 11.0	27-24-22-07
ECLASS 12.0	27-24-22-07	ECLASS 13.0	27-24-22-07

## Approvals

Approvals



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

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## Technical data

### Downloads

Approval/Certificate/Document of Conformity	<a href="#">Declaration of Conformity</a>
Engineering Data	<a href="#">Quick start guide – Modbus - Understanding Coils and Register</a> <a href="#">Quick start guide – Function blocks for UR20-3EM-230V-AC</a> <a href="#">CAD data – STEP</a>
Product Change Notification	<a href="#">Compatibility information – Release Notes u-OS App CODESYS Control SL Runtime</a>
Software	<a href="#">Runtime Software – CODESYS Development System 3.5 SP18.40</a> <a href="#">Runtime Software – CODESYS Development System 3.5 SP19.0</a> <a href="#">Runtime Software – Archived CODESYS Control SL for Weidmueller u-OS Package</a> <a href="#">Compatibility information – Archived u-OS App CODESYS Control SL Runtime</a> <a href="#">Runtime Software – u-OS App CODESYS Control SL Runtime</a> <a href="#">Runtime Software – CODESYS Control SL for Weidmueller u-OS Package</a>
User Documentation	<a href="#">20210504 Security Advisory - Accidentally open network port in u-controls and IoT-Gateways</a> <a href="#">20221214 Security Advisory - Multiple IoT and control products affected by JavaScript injection vulnerability</a> <a href="#">u-control MX0000 Manual (English)</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>

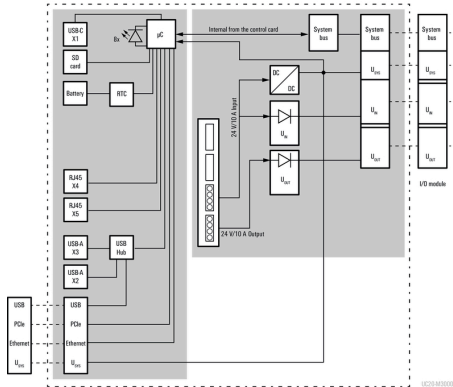
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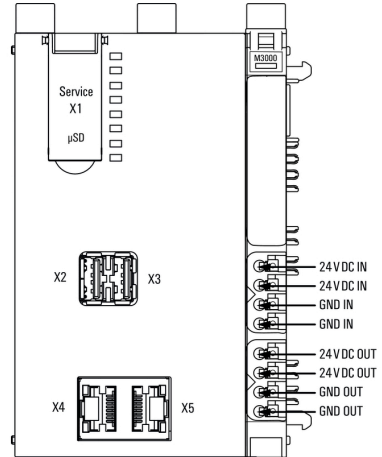
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**Drawings**

**Block diagram**



**Connection diagram**



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**Accessories**

**Custom printing**



The Dekafix (DEK) marker is the universal marker for all conductor and plug-in connectors as well as for electronic sub-assemblies. The system is ideal for short number sequences and covers a wide range of ready-printed markers.

Strips for fast installation in only one work step. The printing is easy to read, rich in contrast and available in various widths.

- Large range of ready-to-use markers
- Strips for fast installation
- Terminal markers, suitable for all Weidmüller cable connectors
- Available as blank MultiCard or with standard printing

**For custom printing:** Please send us a file of our labeling software M-Print PRO or M-Print PRO Online (without installation) for your labeling specifications.

**General ordering data**

Type	DEK 5/8-11.5 MC SDR	Version
Order No.	<a href="#">1341610000</a>	Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118146059	Weidmueller, To customer specification
Qty.	100 pc(s).	

**Accessories**



**System accessory**

Discover a wide range of accessories for your u-remote system - the ideal addition to make your applications even more efficient and flexible.

**General ordering data**

Type	UR20-SM-ACC	Version
Order No.	<a href="#">1339920000</a>	Cover, ,
GTIN (EAN)	4050118144727	
Qty.	20 pc(s).	
Type	UR20-EBK-ACC	Version
Order No.	<a href="#">1346610000</a>	End bracket, ,
GTIN (EAN)	4050118151596	
Qty.	5 pc(s).	

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**Accessories**

**Blank**



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**General ordering data**

Type	DEK 5/8-11.5 MC NE WS	Version	
Order No.	<a href="#">1341630000</a>		Dekafix, Terminal marker, 5 x 8 mm, Pitch in mm (P): 8.00
GTIN (EAN)	4050118145946		Weidmueller, white
Qty.	500 pc(s).		

**Blank**



**General ordering data**

Type	PM 2.7/2.6 MC NE WS	Version	
Order No.	<a href="#">1323710000</a>		OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126778		mm (P): 3.50 Weidmueller, white
Qty.	960 pc(s).		

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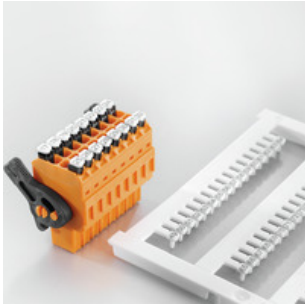
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**Accessories****USB cable - USB A - USB C**

Assembled IE cables

**General ordering data**

Type	IE-USB-A-C-2.0M	Version
Order No.	<a href="#">2838380020</a>	USB cable, USB A, USB C, PVC, 2 m
GTIN (EAN)	4064675444329	
Qty.	1 pc(s).	

**Custom printing****General ordering data**

Type	PM 2.7/2.6 MC SDR	Version
Order No.	<a href="#">1323700000</a>	OMNIMATE Signal - series PM, Pusher markers, 2.7 x 2.6 mm, Pitch in
GTIN (EAN)	4050118126761	mm (P): 3.50 Weidmueller, To customer specification
Qty.	192 pc(s).	