

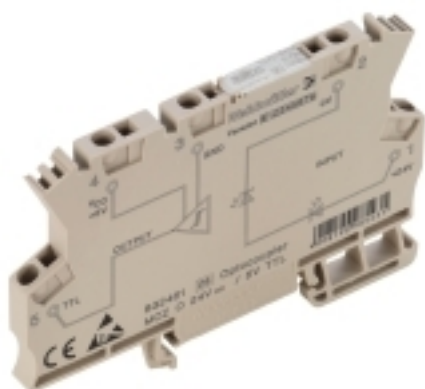
**MCZ O 120VUC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



Similar to illustration

High reliability in a terminal block format

MCZ SERIES relay modules are among the smallest on the market. Thanks to the small width of just 6.1 mm, a lot of space can be saved in the panel. All products in the series have three cross-connection terminals and are distinguished by simple wiring with plug-in cross-connections. The tension clamp connection system, proven a million times over, and the integrated reverse polarity protection ensure a high level of safety during installation and operation. Precisely fitting accessories from cross-connectors to markers and end plates make the MCZ SERIES versatile and convenient to use.

- Tension clamp connection
- Integrated cross-connection in input/output.
- Clampable conductor cross-section is 0.5 to 1.5 mm<sup>2</sup>
- Variants of the MCZ TRAK type are particularly suitable for the transport sector and tested according to DIN EN 50155

**General ordering data**

Version	MCZ SERIES, Solid-state relay, Rated control voltage: 120 V UC +5 / -15 % , Rated switching voltage: 5...48 V DC, Continuous current: 50 mA, Tension-clamp connection
Order No.	<a href="#">8421060000</a>
Type	MCZ O 120VUC
GTIN (EAN)	4032248006045
Qty.	10 pc(s).

## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Dimensions and weights

Depth	63.2 mm	Depth (inches)	2.488 inch
Height	91 mm	Height (inches)	3.583 inch
Width	6.1 mm	Width (inches)	0.24 inch
Net weight	22.5 g		

## Temperatures

Storage temperature	-40 °C...60 °C	Operating temperature	-25 °C...40 °C
Humidity	40 °C / 93 % rel. humidity, no condensation		

## Probability of failure

MTTF	2,415 Jahre
------	-------------

## Rated data UL

Certificate No. (cURus)	E141197
-------------------------	---------

## Control side

Rated control voltage	120 V UC +5 / -15 %	Nominal control current	3 mA DC (±10 %), 3 mA AC (±10 %)
Power rating	350 mW / 400 mVA	Status indicator	Green LED
Protective circuit	Rectifier	Input frequency	AC: 5 Hz / DC: 20 Hz

## Load side

Rated switching voltage	5...48 V DC	Continuous current	0.05 A
Max. switching voltage, AC	250 V	Pulse load, max. current	<150 mA / 10 ms
Switch-on delay	≤ 30 ms	Switch-off delay	≤ 40 ms
Voltage drop at max. load	1.6 V	Leakage current	≤ 1 mA
Short-circuit-proof	No	Protective circuit, load side	Free-wheeling diode
Contact type	1 NO contact (Transistor)	max. switching frequency (AC control voltage)	5 Hz
max. switching frequency (DC control voltage)	20 Hz		

## General data

Rail	TS 35	
Test button available	No	
Colour	beige	
UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0

## Insulation coordination

Rated voltage	300 V	Pollution severity	2
Surge voltage category	III	Clearance and creepage distances for control side - load side	≥ 5.5 mm
Dielectric strength for control side - load side	1 kV <sub>eff</sub> / 1 s	Dielectric strength to mounting rail	4 kV <sub>eff</sub> / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

## MCZ O 120VUC

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 26  
 D-32758 Detmold  
 Germany

www.weidmueller.com

## Technical data

## Further details of approvals / standards

Certificate No. (CSA)	154685-1198742	Certificate No. (cURus)	E141197
-----------------------	----------------	-------------------------	---------

## Connection data

Wire connection method	Tension-clamp connection	Stripping length, rated connection	8 mm
Clamping range, rated connection	1.5 mm <sup>2</sup>	Clamping range, min.	0.5 mm <sup>2</sup>
Clamping range, max.	1.5 mm <sup>2</sup>	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 16	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	1.5 mm <sup>2</sup>	Wire cross-section, solid, min. (AWG)	AWG 26
Wire cross-section, solid, max. (AWG)	AWG 16	Wire connection cross section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire connection cross section, finely stranded, max.	1.5 mm <sup>2</sup>	Wire cross-section, finely stranded, min. (AWG)	AWG 26
Wire cross-section, finely stranded, max. (AWG)	AWG 16	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm <sup>2</sup>	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm <sup>2</sup>
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm <sup>2</sup>	Blade size	0.6 x 3.5 mm

## Classifications

ETIM 6.0	EC001504	ETIM 7.0	EC001504
ETIM 8.0	EC001504	ETIM 9.0	EC001504
ECLASS 9.0	27-37-16-04	ECLASS 9.1	27-37-16-04
ECLASS 10.0	27-37-16-04	ECLASS 11.0	27-37-16-04
ECLASS 12.0	27-37-16-04	ECLASS 13.0	27-37-16-04

## Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
SCIP	35d83707-6a3b-45b5-b9f8-6ba8184c863e

## Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E141197

## Downloads

Approval/Certificate/Document of Conformity	<a href="#">EU Konformitätserklärung / EU Declaration of Conformity</a>
Engineering Data	<a href="#">CAD data – STEP</a>
User Documentation	<a href="#">Device description – Beipackzettel / Package Insert – multilingual</a>
Catalogues	<a href="#">Catalogues in PDF-format</a>
Brochures	

Creation date June 5, 2024 10:00:42 PM CEST

Catalogue status 01.06.2024 / We reserve the right to make technical changes.

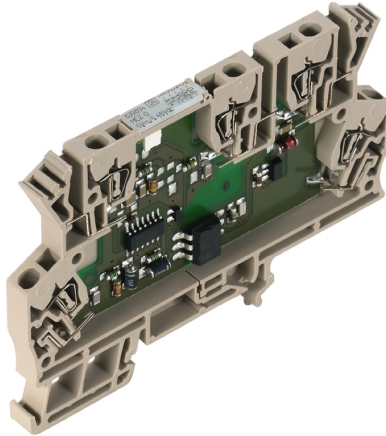
## MCZ O 120VUC

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany

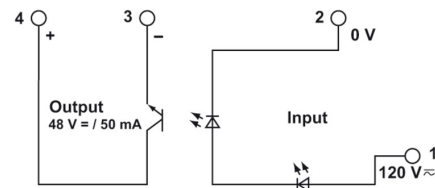
[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

## Wiring diagram

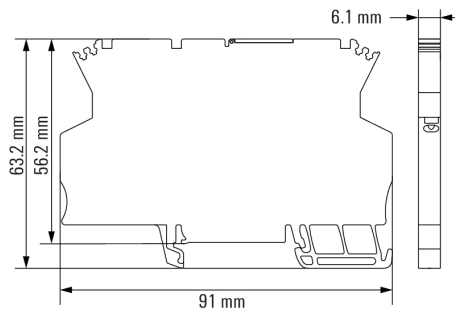


Similar to illustration



Schaltsymbol

## Dimensional drawing



## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

4 mm<sup>2</sup>

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

## General ordering data

Type	ZQV 4N/10	Version
Order No.	<a href="#">1528090000</a>	Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm
GTIN (EAN)	4050118332896	(P): 6.10, Insulated: Yes, 32 A, orange
Qty.	20 pc(s).	
Type	ZQV 4N/4 RD	Version
Order No.	<a href="#">2460800000</a>	Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm
GTIN (EAN)	4050118476224	(P): 6.10, Insulated: Yes, 32 A, red
Qty.	60 pc(s).	
Type	ZQV 4N/3	Version
Order No.	<a href="#">1527940000</a>	Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm
GTIN (EAN)	4050118332865	(P): 6.10, Insulated: Yes, 32 A, orange
Qty.	60 pc(s).	
Type	ZQV 4N/2	Version
Order No.	<a href="#">1527930000</a>	Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm
GTIN (EAN)	4050118332766	(P): 6.10, Insulated: Yes, 32 A, orange
Qty.	60 pc(s).	
Type	ZQV 4N/3 BL	Version
Order No.	<a href="#">1528080000</a>	Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm
GTIN (EAN)	4050118333008	(P): 6.10, Insulated: Yes, 32 A, blue
Qty.	60 pc(s).	
Type	ZQV 4N/2 BL	Version
Order No.	<a href="#">1528040000</a>	Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm
GTIN (EAN)	4050118332773	(P): 6.10, Insulated: Yes, 32 A, blue
Qty.	60 pc(s).	
Type	ZQV 4N/4	Version
Order No.	<a href="#">1527970000</a>	Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm
GTIN (EAN)	4050118332889	(P): 6.10, Insulated: Yes, 32 A, orange
Qty.	60 pc(s).	
Type	ZQV 4N/4 BL	Version
Order No.	<a href="#">1528120000</a>	Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm
GTIN (EAN)	4050118332872	(P): 6.10, Insulated: Yes, 32 A, blue
Qty.	60 pc(s).	
Type	ZQV 4N/2 RD	Version
Order No.	<a href="#">2460450000</a>	Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm
GTIN (EAN)	4050118476149	(P): 6.10, 32 A, red
Qty.	60 pc(s).	
Type	ZQV 4N/10 BL	Version
Order No.	<a href="#">1528230000</a>	Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm
GTIN (EAN)	4050118333138	(P): 6.10, Insulated: Yes, 32 A, blue
Qty.	20 pc(s).	

## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

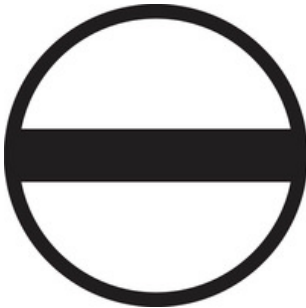
www.weidmueller.com

## Accessories

Type	ZQV 4N/10 RD	Version
Order No.	<a href="#">2460740000</a>	Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm
GTIN (EAN)	4050118476163	(P): 6.10, 32 A, red
Qty.	20 pc(s).	

Type	ZQV 4N/3 RD	Version
Order No.	<a href="#">2460810000</a>	Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm
GTIN (EAN)	4050118476231	(P): 6.10, 32 A, red
Qty.	60 pc(s).	

## Slotted screwdriver



VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

## General ordering data

Type	SDIS 0.6X3.5X100	Version
Order No.	<a href="#">2749810000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897012	thickness (A): 0.6 mm
Qty.	1 pc(s).	

2.5 mm<sup>2</sup>

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

## General ordering data

Type	ZQV 2.5N/20 SW	Version
Order No.	<a href="#">1909130000</a>	W-Series, Cross-connector, For the terminals, Number of poles: 20
GTIN (EAN)	4032248535910	
Qty.	20 pc(s).	

## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

4 mm<sup>2</sup>

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

## General ordering data

Type	ZQV 4N/20 BL	Version
Order No.	<a href="#">1909100000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535774	
Qty.	20 pc(s).	
Type	ZQV 4N/20 GE	Version
Order No.	<a href="#">1909020000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535644	
Qty.	20 pc(s).	
Type	ZQV 4N/20 RT	Version
Order No.	<a href="#">1909150000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535934	
Qty.	20 pc(s).	
Type	ZQV 4N/3 SW	Version
Order No.	<a href="#">1794000000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233793	
Qty.	60 pc(s).	
Type	ZQV 4N/2 SW	Version
Order No.	<a href="#">1793970000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233762	
Qty.	60 pc(s).	
Type	ZQV 4N/4 SW	Version
Order No.	<a href="#">1794030000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233915	
Qty.	60 pc(s).	
Type	ZQV 4N/10 SW	Version
Order No.	<a href="#">1794060000</a>	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248234059	
Qty.	20 pc(s).	

## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

## Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

## General ordering data

Type	SDS 0.6X3.5X100	Version
Order No.	<a href="#">2749340000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118895568	thickness (A): 0.6 mm
Qty.	1 pc(s).	

## AP MCZ 1.5 - End plate



Open miniature housing in modular terminal format with five tension clamp connections. A transparent hinged top plate can be used for labelling and provides access to potentiometer and status displays. Plug-in cross-connectors can be used to interconnect the three top connections. A cover plate for closing off the housing is also available.

## General ordering data

Type	AP MCZ1.5 1674	Version
Order No.	<a href="#">8389030000</a>	Small housing, OMNIMATE Housing - TERMINALBOX grey-beige, End
GTIN (EAN)	4008190386849	plate, Width: 1.5 mm
Qty.	50 pc(s).	



## MCZ O 120VUC

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Accessories

## Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

## General ordering data

Type	SDIS SLIM 0.6X3.5X100	Version
Order No.	<a href="#">2749610000</a>	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118896350	thickness (A): 0.6 mm
Qty.	1 pc(s).	

## Blank



WS markers are the perfect match for the W-series connectors. Thanks to their system compatibility, the WS tags can also be used with the I-series and the Z-series. The large marking surfaces do not only permit long character strings but also multi-line text. WS markers are ideal for labels with long, customised character strings. Thanks to the proven MultiCard format, printing with PrintJet CONNECT oder/or Plotter is possible.

- Can be fitted in strips or individually
- Markers in proven MultiCard format

**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	WS 10/6 MC NE WS	Version
Order No.	<a href="#">1828450000</a>	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,
GTIN (EAN)	4032248350513	Allen-Bradley, white
Qty.	600 pc(s).	