

MCZ O 120VUC

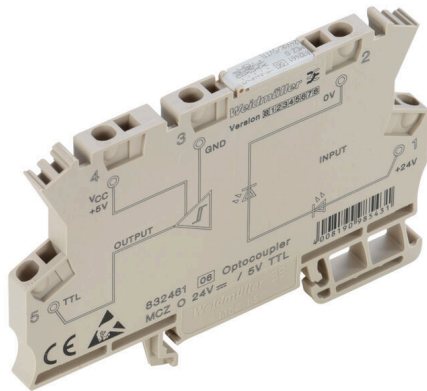
Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmuller.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 mm²
- 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.	8421060000
Type	MCZ O 120VUC
GTIN (EAN)	4032248006045
Qty.	10 items

MCZ O 120VUC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E141197

Dimensions and weights

Depth	63.2 mm	Depth (inches)	2.4882 inch
Height	91 mm	Height (inches)	3.5827 inch
Width	6.1 mm	Width (inches)	0.2402 inch
Net weight	22.5 g		

Temperatures

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

Probability of failure

MTTF 2415 a

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cl
REACH SVHC	Lead 7439-92-1, 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol 119-47-1
SCIP	35d83707-6a3b-45b5-b9f8-6ba8184c863e

Rated data UL

Certificate No. (cURus) E141197

Control side

Rated control voltage	120 V UC +5 / -15 %	Rated control voltage (control input)	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		

MCZ O 120VUC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

General data

Mounting 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 kVeff / 1 s	Dielectric strength to mounting rail	4 kVeff / 1 Min.
Impulse withstand voltage	6 kV (1.2/50 µs)	Protection degree	IP20

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

Classifications

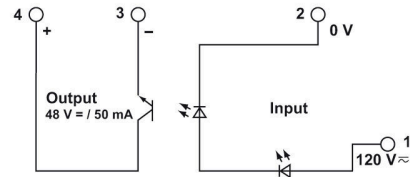
ETIM 8.0	EC001504	ETIM 9.0	EC001504
ETIM 10.0	EC001504	ECLASS 14.0	27-37-16-04
ECLASS 15.0	27-37-16-04		

Drawings

Wiring diagram



Similar to illustration



Schaltsymbol

Dimensional drawing



Cross-connections



The distribution or multiplication of a potential to adjoining terminal blocks is realized via a cross-connection. Additional wiring effort can be easily avoided. Even if the poles are broken out, contact reliability in the terminal blocks is still ensured. Our portfolio offers pluggable and screwable cross-connection systems for modular terminal blocks.

General ordering data

Type	ZQV 4N/20 GE	Version
Order No.	1909020000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535644	
Qty.	20 ST	
Type	ZQV 4N/20 RT	Version
Order No.	1909150000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535934	
Qty.	20 ST	
Type	ZQV 4N/20 BL	Version
Order No.	1909100000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535774	
Qty.	20 ST	
Type	ZQV 4N/2 SW	Version
Order No.	1793970000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233762	
Qty.	60 ST	
Type	ZQV 4N/3 SW	Version
Order No.	1794000000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233793	
Qty.	60 ST	
Type	ZQV 4N/4 SW	Version
Order No.	1794030000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233915	
Qty.	60 ST	
Type	ZQV 4N/10 SW	Version
Order No.	1794060000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248234059	
Qty.	20 ST	
Type	ZQV 2.5N/20 SW	Version
Order No.	1909130000	W-Series, Cross-connector, For the terminals, Number of poles: 20
GTIN (EAN)	4032248535910	
Qty.	20 ST	

MCZ O 120VUC

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Accessories

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.	8389030000	End plate, OMNIMATE Housing - TERMINALBOX grey-beige, End	
GTIN (EAN)	4008190386849	plate, Width: 1.5 mm	
Qty.	50 ST		

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.	1828450000	WS, Terminal marker, 10 x 6 mm, Pitch in mm (P): 6.00 Weidmueller,	
GTIN (EAN)	4032248350513	Allen-Bradley, white	
Qty.	600 ST		

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.

MCZ O 120VUC

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

www.weidmueller.com

Accessories

General ordering data

Type	SDIS SLIM 0.6X3.5X100	Version
Order No.	2749610000	Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118896350	
Qty.	1 ST	
Type	SDIS 0.6X3.5X100	Version
Order No.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118897012	
Qty.	1 ST	
Type	SDS 0.6X3.5X100	Version
Order No.	2749340000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm
GTIN (EAN)	4050118895568	
Qty.	1 ST	

Cross-connections



The distribution or multiplication of a potential to adjoining terminal blocks is realized via a cross-connection. Additional wiring effort can be easily avoided. Even if the poles are broken out, contact reliability in the terminal blocks is still ensured. Our portfolio offers pluggable and screwable cross-connection systems for modular terminal blocks.

General ordering data

Type	ZQV 4N/2	Version
Order No.	1527930000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles: 2, Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm
GTIN (EAN)	4050118332766	
Qty.	60 ST	
Type	ZQV 4N/3	Version
Order No.	1527940000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles: 3, Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm
GTIN (EAN)	4050118332865	
Qty.	60 ST	
Type	ZQV 4N/4	Version
Order No.	1527970000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles: 4, Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm
GTIN (EAN)	4050118332889	
Qty.	60 ST	
Type	ZQV 4N/10	Version
Order No.	1528090000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles: 10, Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
GTIN (EAN)	4050118332896	
Qty.	20 ST	
Type	ZQV 4N/2 RD	Version
Order No.	2460450000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 2, Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm
GTIN (EAN)	4050118476149	
Qty.	60 ST	
Type	ZQV 4N/3 RD	Version
Order No.	2460810000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 3, Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm
GTIN (EAN)	4050118476231	
Qty.	60 ST	

MCZ O 120VUC

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

www.weidmueller.com

Accessories

Type	ZQV 4N/4 RD	Version
Order No.	2460800000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 4,
GTIN (EAN)	4050118476224	Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm
Qty.	60 ST	
Type	ZQV 4N/10 RD	Version
Order No.	2460740000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 10,
GTIN (EAN)	4050118476163	Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 ST	
Type	ZQV 4N/2 BL	Version
Order No.	1528040000	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 2,
GTIN (EAN)	4050118332773	Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm
Qty.	60 ST	
Type	ZQV 4N/3 BL	Version
Order No.	1528080000	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 3,
GTIN (EAN)	4050118333008	Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm
Qty.	60 ST	
Type	ZQV 4N/4 BL	Version
Order No.	1528120000	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 4,
GTIN (EAN)	4050118332872	Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 mm
Qty.	60 ST	
Type	ZQV 4N/10 BL	Version
Order No.	1528230000	Cross-connector (terminal), Plugged, blue, 32 A, Number of poles: 10,
GTIN (EAN)	4050118333138	Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 ST	