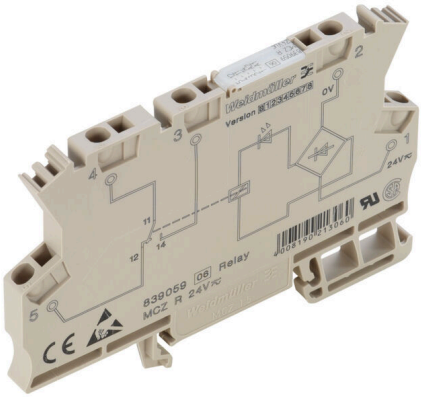
Data sheet

MCZ R 120VAC

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

www.weidmueller.com

Product image



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, Relay module, Number of contacts: 1, CO contact AgSnO, Rated control voltage: 120 V AC -15 % / +10 %, Continuous current: 6 A, Tension-clamp connection, Test button available: No
Order No.	8420880000
Type	MCZ R 120VAC
GTIN (EAN)	4008190227036
Qty.	10 items
Delivery status	This article will no longer be available in the future.
Last order date	2025-11-28T00:00:00+01:00
Alternative product	TRPL 120VAC 1CO

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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	24.8 g		

Temperatures

Storage temperature	-40 °C...60 °C	Ambient temperature	-25 °C...50 °C
Operating temperature		Humidity	5 - 93% rel. humidity, Tu = 40°C, no condensation

Environmental Product Compliance

RoHS Compliance Status	Compliant with exemption
RoHS Exemption (if applicable/known)	7a, 7cI
REACH SVHC	Lead 7439-92-1
SCIP	35d83707-6a3b-45b5-b9f8-6ba8184c863e

Rated data UL

Certificate No. (cURus)	E141197

Control side

Rated control voltage	120 V AC -15 % / +10 %	Rated current AC	7 mA
Power rating	0.85 VA	Status indicator	Green LED
Protective circuit	RC element, Rectifier		

Load side

Rated switching voltage	250 V AC	Continuous current	6 A
Max. switching frequency at rated load	0.1 Hz	Max. switching voltage, AC	250 V
Max. switching voltage, DC	250 V	Inrush current	6 A
AC switching capacity (resistive), max.	1500 VA	DC switching capacity (resistive), max.	144 W @ 24 V
Switch-on delay	<17 ms	Switch-off delay	<35 ms
Contact type	1 CO contact (AgSnO)	Mechanical service life	10 x 106 switching cycles
Min. switching power	1 mA @ 24 V, 10 mA @ 10 V, 100 mA @ 5 V		

General data

Mounting rail	TS 35
Test button available	No
Mechanical switch position indicator	No
Open sides	right

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Colour	beige	
UL94 flammability rating component	Component	Housing
	UL94 flammability rating	V-0

Insulation coordination

Insulation coordination	Rated voltage	300 V
	Surge voltage category	III
	Pollution severity	2
	Impulse withstand voltage (1,2/50µs)	6 kV
	Insulation between	Control side - load side
	Clearance and creepage distances, min.	5.5 mm
	Dielectric strenght (5 seconds)	1.2 kV
	Insulation between	Device - mounting rail
	Dielectric strenght (60 seconds)	4 kV
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 mm²	Clamping range, min.	0.5 mm²
Clamping range, max.	1.5 mm²	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 16	Wire cross-section, solid, min.	0.5 mm²
Wire cross-section, solid, max.	1.5 mm²	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 mm²
Wire connection cross section, finely stranded, max.	1.5 mm²	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 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	1.5 mm²	Conductor cross-section, flexible, AEH (DIN 46228-1), min.	0.5 mm²
Conductor cross-section, flexible, AEH (DIN 46228-1), max.	1.5 mm²	Blade size	0.6 x 3.5 mm

Important note

Product information	The cable lengths must not exceed 30 m.

Classifications

ETIM 8.0	EC001437	ETIM 9.0	EC001437
ETIM 10.0	EC001437	ECLASS 14.0	27-37-16-01
ECLASS 15.0	27-37-16-01		

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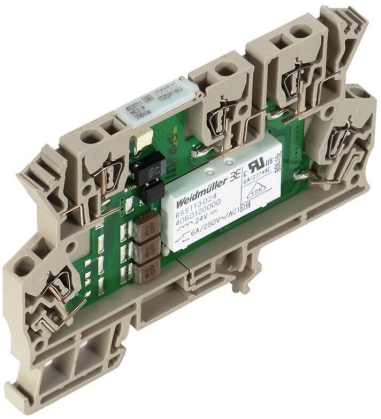
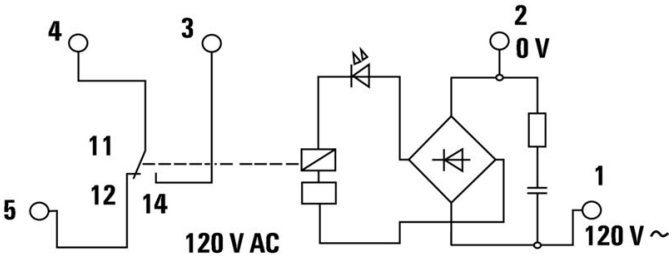
Drawings

Product image

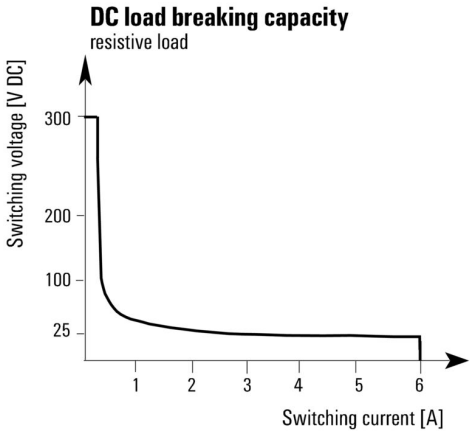


Similar to illustration

Wiring diagram

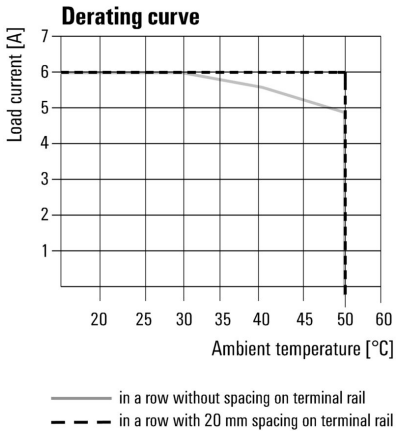


Graph



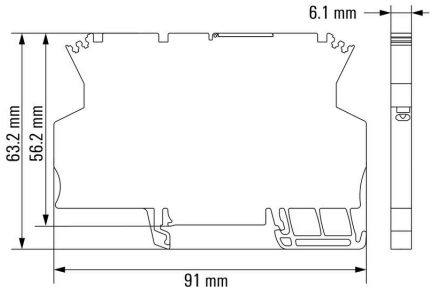
DC load limit curve

Graph



Derating curve

Dimensional drawing



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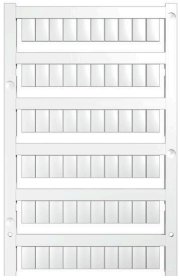
Accessories

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	

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	

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.

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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
GTIN (EAN)	4050118896350	thickness (A): 0.6 mm
Qty.	1 ST	
Type	SDIS 0.6X3.5X100	Version
Order No.	2749810000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118897012	thickness (A): 0.6 mm
Qty.	1 ST	
Type	SDS 0.6X3.5X100	Version
Order No.	2749340000	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade
GTIN (EAN)	4050118895568	thickness (A): 0.6 mm
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:
GTIN (EAN)	4050118332766	2, Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm
Qty.	60 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/2 RD	Version
Order No.	2460450000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 2,
GTIN (EAN)	4050118476149	Pitch in mm (P): 6.10, Insulated: Yes, Width: 9.9 mm
Qty.	60 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	Version
Order No.	1527940000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332865	3, Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 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	

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Accessories

Type	ZQV 4N/3 RD	Version
Order No.	2460810000	Cross-connector (terminal), Plugged, red, 32 A, Number of poles: 3,
GTIN (EAN)	4050118476231	Pitch in mm (P): 6.10, Insulated: Yes, Width: 16 mm
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	Version
Order No.	1527970000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332889	4, Pitch in mm (P): 6.10, Insulated: Yes, Width: 22.1 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/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/4 SW	Version
Order No.	1794030000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248233915	
Qty.	60 ST	
Type	ZQV 4N/10	Version
Order No.	1528090000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4050118332896	10, Pitch in mm (P): 6.10, Insulated: Yes, Width: 58.7 mm
Qty.	20 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	
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/10 SW	Version
Order No.	1794060000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248234059	
Qty.	20 ST	
Type	ZQV 4N/20	Version
Order No.	2883800000	Cross-connector (terminal), Plugged, orange, 32 A, Number of poles:
GTIN (EAN)	4064675848769	20, Pitch in mm (P): 6.10, Insulated: Yes, Width: 27.95 mm
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/20 RT	Version
Order No.	1909150000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535934	
Qty.	20 ST	

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Accessories

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	
Type	ZQV 4N/20 GE	Version
Order No.	1909020000	W-Series, Cross-connector, 32 A
GTIN (EAN)	4032248535644	
Qty.	20 ST	