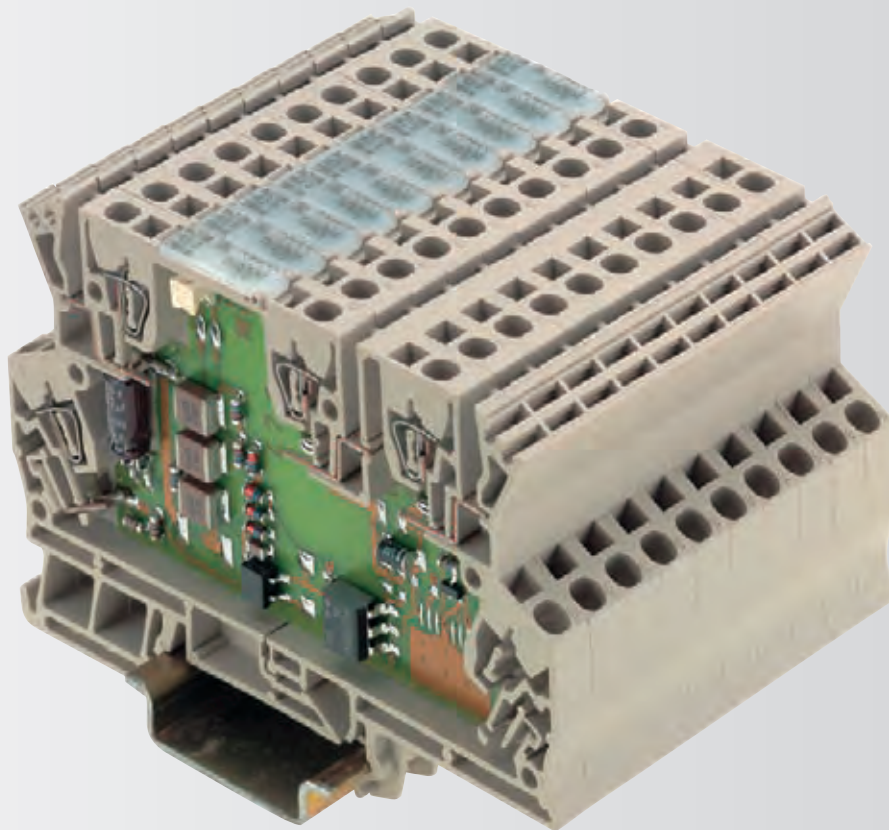


Low profile with tension clamp connection – perfect for decentralized applications like those in the rail industry

A

A special feature of the MCZ SERIES is its low profile shape. With a width of only 6 mm, it is particularly well suited for decentralized usage in sub-distribution boards and terminal boxes. You can reduce the installation time by 50 % compared to conventional methods when you use the tension clamp connection and the ZQV 4N pluggable cross-connection on three voltage potential points. The MCZ TRAK components, which have been developed for the rail industry to comply with the requirements of EN 50155 and EN 61373, are a special highlight. All components have been specially designed to function reliably in temperatures ranging from -40 to +70 °C (and +85 °C for ten minutes). The MCZ TRAK components feature a painted switching element that protects it from condensation

which occurs from temperature fluctuations. The component input circuitry is designed to tolerate on-board voltage fluctuation of -30 to +25 % and ± 40 % for 0.1 s (typical for rail applications) without malfunctioning. The MCZ TRAK components also withstand voltage interruptions of over 10 ms without triggering an outage (in compliance with Class S2). In addition, the vibration requirements according to EN 61373/ requirements category 1/class B are fulfilled without malfunction or contact interruption. With all of these properties combined, the MCZ TRAK components are a very sturdy and reliable solution for decentralized applications. And not only in the rail industry – they should be used in other industries where conditions are too extreme for conventional components.



Weidmüller 



Time-saving

Pluggable cross-connections in input and output on three connection levels.



Proven

The Wemid material in the housing contains no halogens and has a flammability class of V0 according to UL94.



Reliable

The tension clamp connection can clamp up to 1.5 mm² and is the rail industry standard.



Sturdy

The MCZ TRAK are designed specifically for rail industry requirements.

The MCZ SERIES product line



MCZ R
with 1 CO contact



MCZ R TRAK
with 1 CO contact,
Rail components



MCZ O
with 1 opto output



MCZ O TRAK
with 1 opto output,
Rail components

MCZ-SERIES - Relay modules

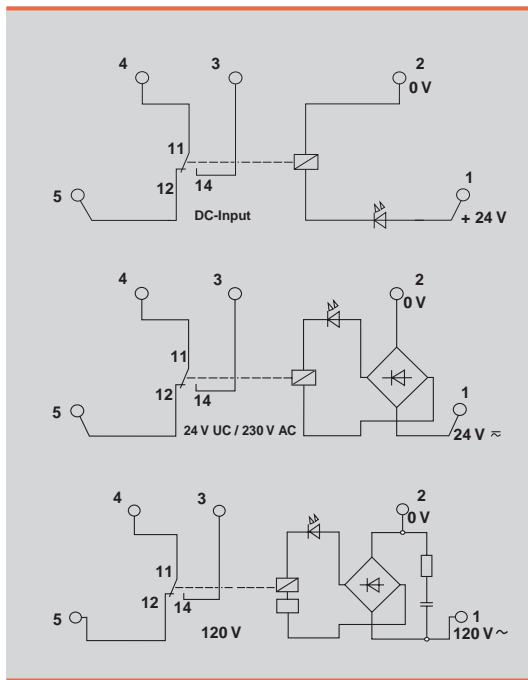
Mini-conditioner MCZ R

1 CO contact

AC/ DC/ UC coil

Module can be used as an universal interface between the controller and the actuator to switch small and medium-sized loads.

- Reduced installation and commissioning costs, thanks to the use of the proven tension-spring connection system.
- Pluggable cross-connection at input and output minimizes the wiring workload.
- 6 mm width
- For mounting on TS 35



Output	
Switching voltage AC, max. / Continuous current	250 V / 6 A
min. switching capacity	12 V / 100 mA
Contact material	AgSnO ₂
Mechanical service life	20*10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz

Rated data	
Status indicator / Free-wheel diode	Green LED / Yes
Reverse polarity protection	Available
Ambient temperature (operational)	-25 °C...+55 °C
Storage temperature	-40 °C...+60 °C
Humidity	40 °C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GL; GOSTME25; CE

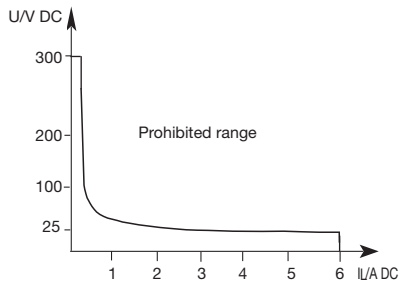
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2
Protective separation acc. to VDE 0106 part 101	Yes

Dimensions	Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²	1.5 / 0.5 / 2.5
Length x width x height	mm	91 / 6 / 63.2

Note End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories

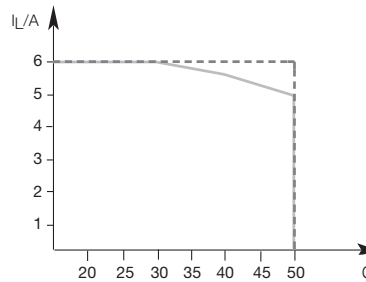
Applications

Limit curve



Derating curve

— in a row without spacing on terminal rail
 - - - in a row with 20 mm spacing on terminal rail



Mini-conditioner MCZ R
1 CO contact
AC/ DC/ UC coil

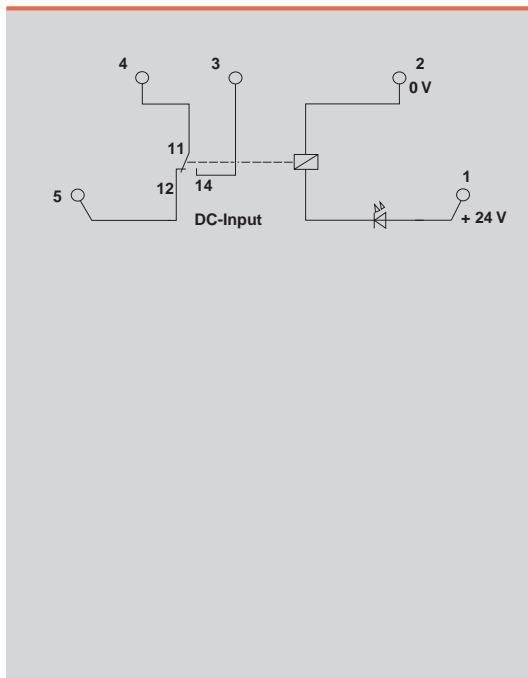
Ordering data	24 V DC 1 CO	24 V DC 1 CO Au	24 V UC 1 CO	60 V DC 1 CO
Input				
Rated control voltage	24 V DC ±20 %	24 V DC ±20 %	24 V UC ±10 %	60 V DC ±20 %
Rated current AC			10.8 mA	
Rated current DC	6.3 mA	6.3 mA	6.1 mA	3 mA
Power rating	156 mW	156 mW	160 mVA / 150 mW	180 mW
AC Response/dropout Volt			approx. 17 V / approx. 7 V	
DC Response/dropout Volt	12 V...19 V/4 V...5.5 V	12 V...19 V/4 V...5.5 V	approx. 19 V / approx. 4 V	approx. 38 V / approx. 14 V
AC pickup/dropout current				
DC pickup/dropout current	5.7 mA	5.7 mA	9 mA / 5 mA	2.7 mA
Switch-on delay / Switch-off delay	< 5 ms / ≤11ms	< 5 ms / ≤ 10 ms	6 ms / ≤ 12 ms	4.5 ms / ≤ 10 ms
Ordering data				
Complete module				
CO contact Type	MCZ R 24VDC	MCZ R 24VDC 5uAu	MCZ R 24VUC	MCZ R 60VDC
Order No.	8365980000	8442960000	8390590000	8470380000
Type				
Order No.				
Ordering data				
Note		Can safe switch a load of: 1...60 V AC/DC, 1...300 mA. If higher loads are switched this can damage the gold plating.		
Ordering data				
Input				
Rated control voltage	110 V DC ±10 %	120 V AC -15 % / +10 %	230 V AC ±10 %	
Rated current AC		7 mA	9.5 mA	
Rated current DC	2.85 mA			
Power rating	340 mW	0.85 VA	2.1 VA	
AC Response/dropout Volt		approx. 70 V / approx. 22 V	approx. 115 V / approx. 60 V	
DC Response/dropout Volt	approx. 68 V / approx. 19 V			
AC pickup/dropout current		4 mA // 1.3mA	5 mA / 2.5mA	
DC pickup/dropout current	1,6 mA / 0,4 mA			
Switch-on delay / Switch-off delay	4.5 ms / ≤ 10 ms	15 ms / 43 ms	17 ms / 34 ms	
Ordering data				
Complete module				
CO contact Type	MCZ R 110VDC	MCZ R 120VAC	MCZ R 230VAC	
Order No.	8467470000	8420880000	8237710000	
Type				
Order No.				
Ordering data				
Note				

MCZ-SERIES - Relay modules

MCZ R TRAK

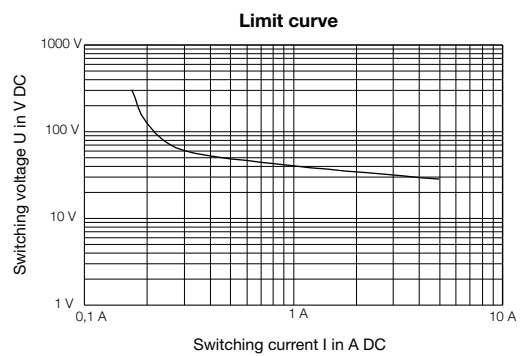
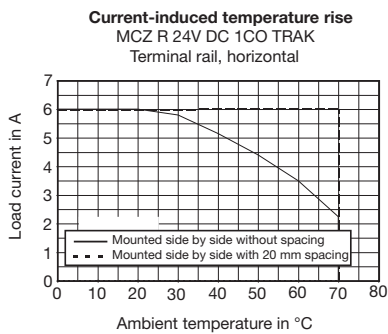
**1 CO contact or 1 NO contact
DC coil**

- 1 CO contact
- Module for rail industry applications
- Vibration requirements according to EN 61373, requirements category 1 class B
- Voltage fluctuations -30 %/+25 % and ±40 % for 0.1 sec
- Voltage interruptions at input up to 10 ms
- Condensation permissible



Output	
Switching voltage AC, max. / Continuous current	250 V / 6 A
min. switching capacity	12 V / 100 mA
Contact material	AgSnO
Mechanical service life	20*10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Status indicator / Free-wheel diode	Green LED / Yes
Reverse polarity protection	Available
Ambient temperature (operational)	-40 °C...+70 °C / +85 °C for 10 minutes
Storage temperature	-40 °C...+85 °C
Humidity	95% for 30 days, minimal condensation to EN 50155
Approvals	CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Impulse withstand voltage	4 kV (1.2/50 µs)
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overvoltage category	III
Pollution severity	2
Protective separation acc. to VDE 0106 part 101	Yes
Dimensions	
Clamping range (nominal / min. / max.)	mm ² 1.5 / 0.5 / 2.5
Length x width x height	mm 91 / 6 / 63.2
Note	
End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories	

Applications



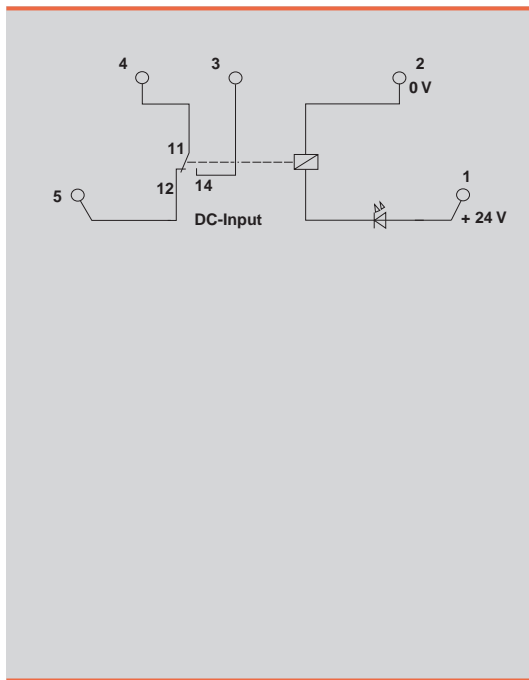
MCZ R TRAK
1 CO contact or 1 NO contact
DC coil

Ordering data	24 V DC TRAK	36 V DC TRAK	48...110 V DC TRAK
Input			
Rated control voltage	24 V DC	36 V DC	48...110 V DC
Rated current AC			
Rated current DC	11.5...16.5 mA	8...12 mA	< 3 mA
Power rating	195...500 mW	200...540 mW	< 300 mW
AC Response/dropout Volt			
DC Response/dropout Volt	7...14 V / 3...5 V	4.5...15 V	< 25 V / < 6 V
AC pickup/dropout current			
DC pickup/dropout current			
Switch-on delay / Switch-off delay	typically 6.5 ms / typical. 38 ms	typically 4.7 ms / typical. 44 ms	< 4 ms / 50 ms
Ordering data			
Complete module			
CO contact	MCZ R 24Vdc 1CO TRAK	MCZ R 36Vdc 1CO TRAK	MCZ R 48...110Vdc 1CO TRAK
Order No.	8713890000	8713900000	8713910000
NO contact	MCZ R 24Vdc 1NO TRAK	MCZ R 36Vdc 1NO TRAK	MCZ R 48...110Vdc 1NO TRAK
Order No.	8499550000	8582130000	8574070000
Ordering data			
Note			

MCZ-SERIES - Relay modules

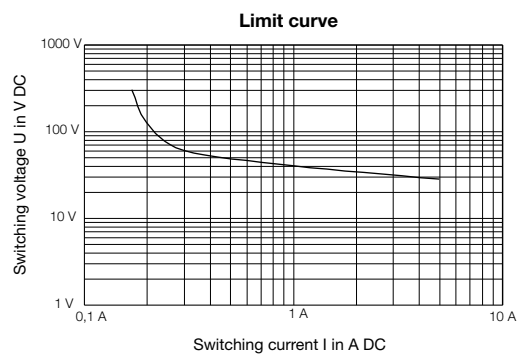
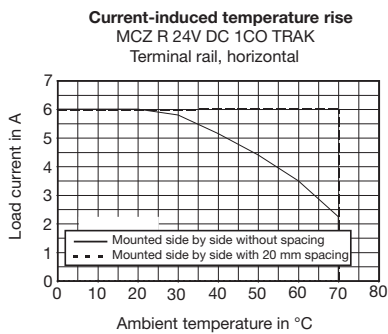
MCZ R TRAK Au
1 CO contact or 1 NO contact
DC coil

- 1 CO with hard gold-plated contacts
- Module for rail industry applications
- Vibration requirements according to EN 61373, requirements category 1 class B
- Voltage fluctuations -30 %/+25 % and ±40 % for 0.1 sec
- Voltage interruptions at input up to 10 ms
- Condensation permissible



Output	
Switching voltage AC, max. / Continuous current	250 V / 6 A
min. switching capacity	1 V / 1 mA
Contact material	AgSnO 5µm Au
Mechanical service life	20*10 ⁶ switching cycles
Max. switching frequency at rated load	0.1 Hz
Rated data	
Status indicator / Free-wheel diode	Green LED / Yes
Reverse polarity protection	Available
Ambient temperature (operational)	-40 °C...+70 °C / +85 °C for 10 minutes
Storage temperature	-40 °C...+85 °C
Humidity	95% for 30 days, minimal condensation to EN 50155
Approvals	CE
Insulation coordination (EN 50 178)	
Standards	
Rated voltage	300 V
Impulse withstand voltage	4 kV (1.2/50 µs)
Clearance and creepage distances for control/load side	≥ 5.5 mm
Overtoltage category	III
Pollution severity	2
Protective separation acc. to VDE 0106 part 101	Yes
Dimensions	
Clamping range (nominal / min. / max.)	mm ² 1.5 / 0.5 / 2.5
Length x width x height	mm 91 / 6 / 63.2
Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ² 1.5 / 0.5 / 2.5
Length x width x height	mm 91 / 6 / 63.2
Note	
End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories	

Applications



MCZ R TRAK Au
1 CO contact or 1 NO contact
DC coil

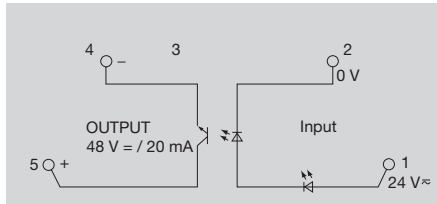
Ordering data	24 V DC TRAK Au	36 V DC TRAK Au	48...110 V DC TRAK Au
Input			
Rated control voltage	24 V DC	36 V DC	48...110 V DC
Rated current AC			
Rated current DC	11.5...16.5 mA	8...12 mA	< 3 mA
Power rating	195...500 mW	200...540 mW	< 300 mW
AC Response/dropout Volt			
DC Response/dropout Volt	3...5 V / 7...14 V	4.5...15 V	< 25 V / < 6 V
AC pickup/dropout current			
DC pickup/dropout current			
Switch-on delay / Switch-off delay	typically 6.5 ms / typical. 38 ms	typically 4.7 ms / typical. 44 ms	< 4 ms / 50 ms
Ordering data			
Complete module			
CO contact Type	MCZ R 24VDC 1CO AU TRAK	MCZ R 36VDC 1CO AU TRAK	MCZ R 48...110VDC 1CO AU
Order No.	8790520000	8790510000	8790500000
Type			
Order No.			
Ordering data			
Note	Can safe switch a load of: 1...60 V AC/DC, 1...300 mA. If higher loads are switched this can damage the gold plating.	Can safe switch a load of: 1...60 V AC/DC, 1...300 mA. If higher loads are switched this can damage the gold plating.	Can safe switch a load of: 1...60 V AC/DC, 1...300 mA. If higher loads are switched this can damage the gold plating.

MCZ-SERIES - Opto modules

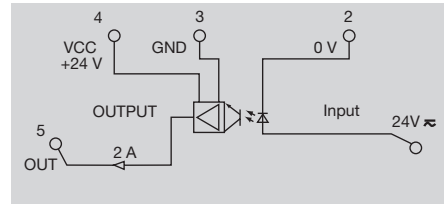
MiniConditioner MCZ O

- Universal interface between control and sensor/ actuator
- Tension-clamp connection system
- Plug-in cross-connection
- Width 6 mm

24 V UC



24 V UC / 24 V 2 A



Technical data

Control side	
Rated control voltage	24 V UC ±20 %
Power rating	230 mW / 280 mVA
Input frequency	AC: 5 Hz / DC: 10 Hz
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5...48 V DC
Rated switching current	20 mA
Voltage drop at max. load	≤ 1 V
Switch-on delay / Switch-off delay	AC: 10 ms / DC: 20 ms / AC: 45 ms / DC: 40 ms
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
General data	
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+85 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Rated control voltage	24 V UC ±20 %
Power rating	230 mW / 280 mVA
Input frequency	AC: 5 Hz / DC: 10 Hz
Rated auxiliary voltage	No
Status indicator	Green LED
Rated switching voltage	5...48 V DC
Rated switching current	20 mA
Voltage drop at max. load	≤ 1 V
Switch-on delay / Switch-off delay	AC: 10 ms / DC: 20 ms / AC: 45 ms / DC: 40 ms
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+85 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Rated control voltage	24 V UC ±20 %
Power rating	195 mW / 220 mVA
Input frequency	AC: 10 Hz / DC: 30 Hz
Rated auxiliary voltage	No
Status indicator	LED
Rated switching voltage	24 V DC ±20%
Rated switching current	2 A
Short-circuit-proof / Protective circuit	Yes / Varistor
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Ordering data

Connection system
Tension clamp connection

Type	Qty.	Order No.
MCZ O 24VUC	10	8365940000

Type	Qty.	Order No.
MCZ O 24VUC	10	8287730000

Note

Note

Note

Accessories

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End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories

End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories



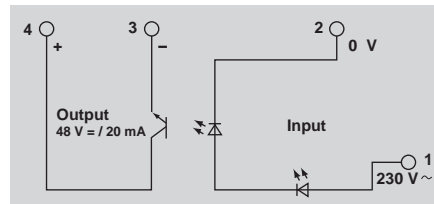
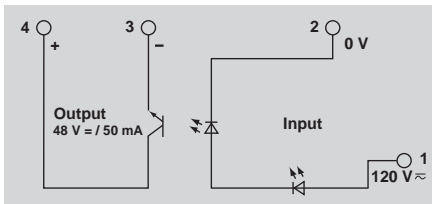
MiniConditioner MCZ O

- Universal interface between control and sensor/ actuator
- Tension-clamp connection system
- Plug-in cross-connection
- Width 6 mm

120 V UC



230 V AC



Technical data

Control side	
Rated control voltage	120 V UC +5 / -15 %
Power rating	350 mW / 400 mVA
Input frequency	AC: 5 Hz duty factor 1:2, DC: 20 Hz duty factor 1:2
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5...48 V DC
Rated switching current	50 mA
Voltage drop at max. load	1.6 V
Switch-on delay / Switch-off delay	≤ 30 ms / ≤ 40 ms
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
General data	
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Control side	
Rated control voltage	120 V UC +5 / -15 %
Power rating	350 mW / 400 mVA
Input frequency	AC: 5 Hz duty factor 1:2, DC: 20 Hz duty factor 1:2
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5...48 V DC
Rated switching current	50 mA
Voltage drop at max. load	1.6 V
Switch-on delay / Switch-off delay	≤ 30 ms / ≤ 40 ms
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
General data	
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Control side	
Rated control voltage	230 V AC +5 % / -15 %
Power rating	2.3 VA
Input frequency	AC: 5 Hz duty factor 1:2
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5...48 V DC
Rated switching current	20 mA
Voltage drop at max. load	1.6 V
Switch-on delay / Switch-off delay	≤ 30 ms / ≤ 40 ms
Short-circuit-proof / Protective circuit	No / Integrated free-wheel diode
General data	
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+85 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Ordering data

Connection system	Tension clamp connection
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Type	Qty.	Order No.
MCZ O 120VUC	10	8421060000

Type	Qty.	Order No.
MCZ O 230VAC	10	8421380000

Note	
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Note	
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Note	
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Accessories

Accessories	
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End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories
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End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories
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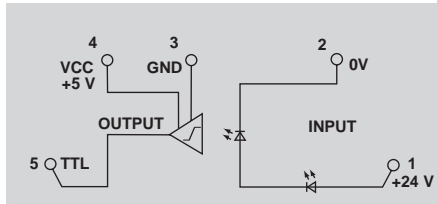


MCZ-SERIES - Opto modules

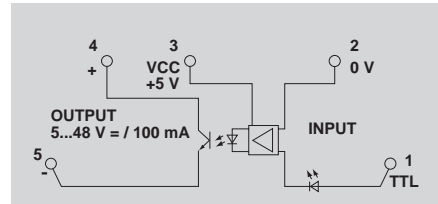
MiniConditioner MCZ O

- Universal interface between control and sensor/ actuator
- Tension-clamp connection system
- Plug-in cross-connection
- Width 6 mm

24 V DC / 5 V TTL



5 V TTL / 5...48 V DC



Technical data

Control side	
Rated control voltage	24 V DC ± 16 %
Power rating	112 mW
Input frequency	100 kHz duty factor 1:2, 50 kHz duty factor 1:10
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5 V TTL(4.75...5.25 V)
Rated switching current	8 mA, fan out = 20 LS-TTL
Voltage drop at max. load	
Switch-on delay / Switch-off delay	1 µs (at 20 V DC) / 2.5 µs (at 28 V DC)
Short-circuit-proof / Protective circuit	No / Diode
General data	
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Rated control voltage	24 V DC ± 16 %
Power rating	112 mW
Input frequency	100 kHz duty factor 1:2, 50 kHz duty factor 1:10
Rated auxiliary voltage	No
Status indicator	Green LED
Rated switching voltage	5 V TTL(4.75...5.25 V)
Rated switching current	8 mA, fan out = 20 LS-TTL
Voltage drop at max. load	
Switch-on delay / Switch-off delay	1 µs (at 20 V DC) / 2.5 µs (at 28 V DC)
Short-circuit-proof / Protective circuit	No / Diode
Ambient temperature (operational)	-25 °C...+40 °C
Storage temperature	-40 °C...+60 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Rated control voltage	5 V TTL
Power rating	10 mW
Input frequency	2.4 kHz
Rated auxiliary voltage	5 V
Status indicator	Green LED
Rated switching voltage	5...48 V DC
Rated switching current	100 mA
Voltage drop at max. load	≤ 1.8 V
Switch-on delay / Switch-off delay	
Short-circuit-proof / Protective circuit	No / Diode
Ambient temperature (operational)	-25 °C...+50 °C
Storage temperature	-40 °C...+85 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CSA; cURus; GOSTME25; CE
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Ordering data

Connection system	
Tension clamp connection	
Note	

Type	Qty.	Order No.
MCZ O 24VDC	10	8324610000
Note		

Type	Qty.	Order No.
MCZ O 5VTTL	10	8398940000
Note		

Accessories

End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories
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End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories
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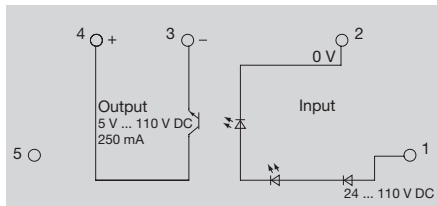
End plate AP MCZ 1.5: 8389030000 for cross-connectors and markers - refer to MCZ Series accessories
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MCZ O TRAK

- Module for rail industry applications
- Fulfils requirements acc. to EN 50155
- Voltage fluctuations -30 %/+25 %
- Operating temperature -25...+70 °C (85 °C / 10 min.) acc. to EN 50155
- Condensation permissible

24 V DC TRAK



Technical data

Control side	
Rated control voltage	24...110 V DC -30 / +25 %
Power rating	
Input frequency	max. 10 Hz
Rated auxiliary voltage	No
Status indicator	Green LED
Load side	
Rated switching voltage	5...137.5 V DC
Rated switching current	180 mA @ 70 °C, 250 mA @ 50 °C
Voltage drop at max. load	≤ 1.7 V
Switch-on delay / Switch-off delay	≤ 10 ms / 50 ms
Short-circuit-proof / Protective circuit	no / Varistor, integrated free-wheel diode
General data	
Ambient temperature (operational)	-25 °C...+70 °C
Storage temperature	-40 °C...+85 °C
Humidity	40°C / 93% rel. humidity, no condensation
Approvals	CE
Insulation coordination (EN 50 178)	
Standards	EN 50178
Rated voltage	300 V
Rated impulse withstand voltage	6 kV
Clearance and creepage distances for control/load side	≥ 5,5 mm
Overvoltage category	III
Pollution severity	2

Dimensions	
Clamping range (nominal / min. / max.)	mm ²
Length x width x height	mm
Note	

Tension clamp connection	
	1.5 / 0.5 / 1.5
	91 / 6 / 64
Note	

Ordering data

Connection system	Tension clamp connection
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Type	Qty.	Order No.
MCZ O TRAK 24.110VDC	10	8820710000

Note	
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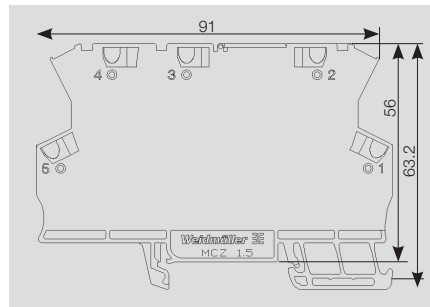
Accessories

End plate AP MCZ 1.5: 8389030000
for cross-connectors and markers - refer to MCZ Series accessories



MCZ-SERIES – Accessories

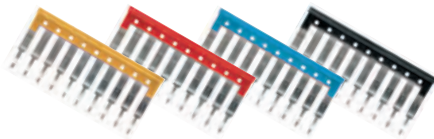
MCZ accessories



Ordering data

End plate

Type	Qty.	Order No.
AP MCZ 1.5	50	8389030000



Ordering data

	No. of poles
Plug-in cross-connection, yellow	2
Plug-in cross-connection, yellow	3
Plug-in cross-connection, yellow	4
Plug-in cross-connection, yellow	10
Plug-in cross-connection, yellow	20
red	
Plug-in cross-connection, red	2
Plug-in cross-connection, red	3
Plug-in cross-connection, red	4
Plug-in cross-connection, red	10
Plug-in cross-connection, red	20
blue	
Plug-in cross-connection, blue	2
Plug-in cross-connection, blue	3
Plug-in cross-connection, blue	4
Plug-in cross-connection, blue	10
Plug-in cross-connection, blue	20
black	
Plug-in cross-connection, black	2
Plug-in cross-connection, black	3
Plug-in cross-connection, black	4
Plug-in cross-connection, black	10
Plug-in cross-connection, black	20

Type	Qty.	Order No.
ZQV 4N / 2 GE	60	1758250000
ZQV 4N / 3 GE	60	1762630000
ZQV 4N / 4 GE	60	1762620000
ZQV 4N / 10 GE	20	1758260000
ZQV 4N / 20 GE	20	1909020000
red		
ZQV 4N / 2 RT	60	1793950000
ZQV 4N / 3 RT	60	1793980000
ZQV 4N / 4 RT	60	1794010000
ZQV 4N / 10 RT	20	1794040000
ZQV 4N / 20 RT	20	1909150000
blue		
ZQV 4N / 2 BL	60	1793960000
ZQV 4N / 3 BL	60	1793990000
ZQV 4N / 4 BL	60	1794020000
ZQV 4N / 10 BL	20	1794050000
ZQV 4N / 20 BL	20	1909100000
black		
ZQV 4N / 2 SW	60	1793970000
ZQV 4N / 3 SW	60	1794000000
ZQV 4N / 4 SW	60	1794030000
ZQV 4N / 10 SW	20	1794060000
ZQV 4N / 20 SW	20	1909120000



Ordering data

Marker
Screwdriver
End bracket

Type	Qty.	Order No.
WS10/6	200	1060960000
SD 0.6x3.5x100	1	9008330000
WEW 35/2	100	1061200000

