

Advantages of the MICROSERIES and MCZ-SERIES

Width

Just 6 mm wide (without cover plate), the MCZ-SERIES offers enough space for electronic circuits.

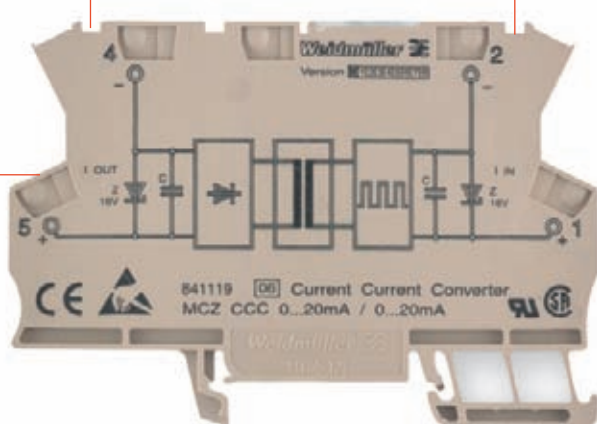
Connecting

Tension clamp connection



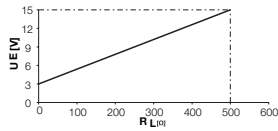
Cross-connection

The power supply and another potential can be cross-connected

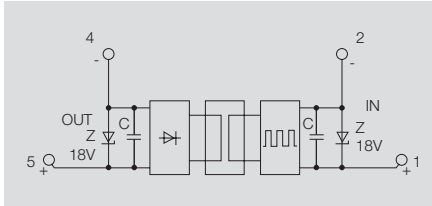


Input current loop feed

Passive isolator for electrical isolation of standard 0/4...20 mA signals. It takes its power from the measuring signal and does not need any auxiliary power supply. Special features of this component are its low power consumption and the operating current of $<100 \mu\text{A}$.



MCZ CCC



Technical data

Input

Input voltage/Input current
max. voltage/max. current
Pick-up current
Voltage drop

Output

- Output voltage/Output current
- Load impedance, voltage/Current
- Accuracy
- Temperature coefficient
- Influence of load impedance
- Residual ripple
- Chopper frequency

General data

Operating temperature
Storage temperature
Approvals

Insulation coordination

- Standards
- EMC standards
- Isolation voltage input, output

/O(4)...20 mA current loop
15 V / 50 mA
< 100 μ A
2.5...3 V at 20 mA

max. 10 V /0(4)...20 mA

$$/ \leq 500 \, \Omega$$

< 0.1% of final value

≤ 50ppm/K of measure. value at 0 Ω load resistance

0.05% of measurement value/100 Ω load resistance

$$\underline{< 10 \text{ mV}_{\text{eff}}}$$

approx. 200 kHz

-25 °C...+60 °C

-40 °C...+85 °C

CSA / UL/UR / CE

EN 60529, EN 61010-1

EN 61000-6

510 V_{eff}

Dimensions

Clamping range (rating- / min. / max.)	mm ²
Length x width x height	mm

Note

Tension clamp connection

$$\frac{1.5 / 0.5 / 1.5}{91 \times 6 \times 63.2}$$

Ordering data

Type of connection

Tension clamp connection

Type

MCZ CCC 0-20mA/0-20mA	10	8411190000
-----------------------	----	------------

Note

Accessories

Note

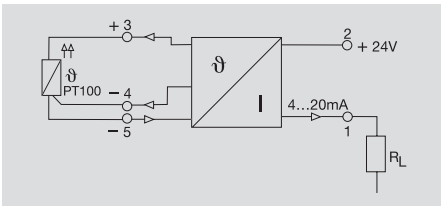
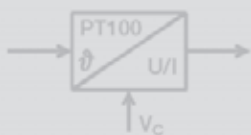
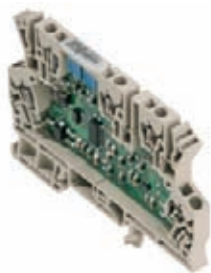
Cross-connectors for power supply and markers - see MCZ-SERIES accessories

MCZ-SERIES - PT100/RTD signal isolator

PT100, 2-/3-conductor converter

- For 2- or 3-conductor PT100 sensors
- Loop-fed output current
- High accuracy and linearity

MCZ PT100/3 CLP



Technical data

Input	
Sensor	
Supply current/Supply voltage	
Output	
Output current	
Load impedance, voltage/Current	
Accuracy/Influence of cable resistance	
Response time	
General data	
Operating temperature/Storage temperature	
Approvals	
Standards	
EMC standards	
Dimensions	
Clamping range (rating- / min. / max.)	mm²
Length x width x height	mm
Note	

PT100/2-/3-conductor (to IEC 751)
0.8 mA /9 - 30 V DC
4...20 mA (current loop)
/≤ 600 Ω
typical 0.2%, max. 0.5% of FSR /max. 0.006 K/Ω
10 ms
0 °C...+50 °C / -20 °C...+85 °C
CSA;UL/UR;CE;
EN 50178, EN 60751, IEC751
EMVG, EN 61000-6
Tension clamp connection
1.5 / 0.5 / 1.5
91 x 6 x 63.2
Tu=23°C, single module

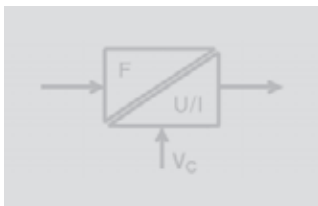
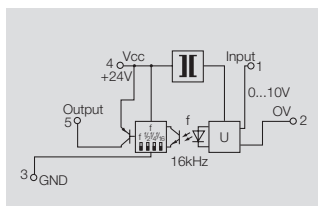
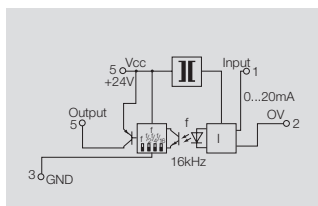
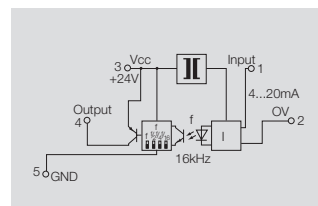
Ordering data

Temperature input range	Type of connection
0...100 °C	Tension clamp connection
0...120 °C	Tension clamp connection
0...150 °C	Tension clamp connection
0...200 °C	Tension clamp connection
0...300 °C	Tension clamp connection
-50...+150 °C	Tension clamp connection
-40...+100 °C	Tension clamp connection
Note	

Type	Qty.	Order No.
MCZ PT100/3 CLP 0...100C	10	8425720000
MCZ PT100/3 CLP 0...120C	10	8483680000
MCZ PT100/3 CLP 0...150C	10	8604420000
MCZ PT100/3 CLP 0...200C	10	8473010000
MCZ PT100/3 CLP 0...300C	10	8473020000
MCZ PT100/3 CLP -50C...+150C	10	8473000000
MCZ PT100/3 CLP -40C...100C	10	8604430000
Cross-connectors for power supply and markers - see MCZ-SERIES accessories		

DC/f converter

The conversion of analogue signals to frequencies means it is possible to import analogue signals from the field via the counter inputs of the controller.

**MCZ VFC****MCZ CFC****MCZ CFC****Technical data****Input**

Input voltage/Input current
max. voltage/max. current
Input resistance, voltage/Current
Voltage drop

Output

Output frequency
Output level
Output current
Accuracy
Temperature coefficient
Status indicator

General data

Supply voltage
Current consumption
Current-carrying capacity of cross-connect.
Operating temperature
Storage temperature
Approvals

Insulation coordination

Standards
EMC standards
Rated voltage
Impulse withstand voltage
Isolation voltage input, output
Surge category
Pollution severity
Clearance & creepage distance

0...10 V /
30 V /
100 k Ω /

0...1/ 4/ 8/ 16 kHz
PNP, Ub-0.7 V
max. 20 mA
0.2% of FSR
 ≤ 250 ppm/K
LED, pulsing

24 V DC ± 10 %
14 mA without load
 ≤ 20 A
0 °C...+50 °C
-20 °C...+85 °C
CE;

EN 50178
EN 55011, EN 61000-6
100 V
1.5 kV
1 kV DC
III
2
 $\geq 1,5$ mm

/0...20 mA
/50 mA
/50 Ω
1 V at 20 mA

0...1/ 4/ 8/ 16 kHz
PNP, Ub-0.7 V
max. 20 mA
0.2% of FSR
 ≤ 250 ppm/K
LED, pulsing

24 V DC ± 10 %
14 mA without load
 ≤ 20 A
0 °C...+50 °C
-20 °C...+85 °C
CE;

EN 50178
EN 55011, EN 61000-6
100 V
1.5 kV
1 kV DC
III
2
 $\geq 1,5$ mm

/4...20 mA (current loop)
/50 mA
/50 Ω
5.8...6.4 V at 20 mA

0...1/ 4/ 8/ 16 kHz
PNP, Ub-0.7 V
max. 20 mA
0.15 % of FSR
 ≤ 250 ppm/K
LED, pulsing

24 V DC ± 20 %
14 mA without load
 ≤ 20 A
0 °C...+50 °C
-20 °C...+85 °C
CE;

EN 50178
EN 55011, EN 61000-6
150 V
2.5 kV
1 kV DC
III
2
 ≥ 2 mm

Dimensions

Clamping range (rating- / min. / max.) mm²
Length x width x height mm

Note**Tension clamp connection**

1.5 / 0.5 / 1.5
91 x 6 x 63.2

Tension clamp connection

1.5 / 0.5 / 1.5
91 x 6 x 63.2

Tension clamp connection

1.5 / 0.5 / 1.5
91 x 6 x 63.2

without DC/DC converter input
current loop-fed

Ordering data**Type of connection**

Tension clamp connection

Type	(Qty.=1)	Order No.
MCZ VFC 0-10V		8461470000

Type	(Qty.=1)	Order No.
MCZ CFC 0-20mA		8461480000

Type	(Qty.=1)	Order No.
MCZ CFC 4-20mA		8461490000

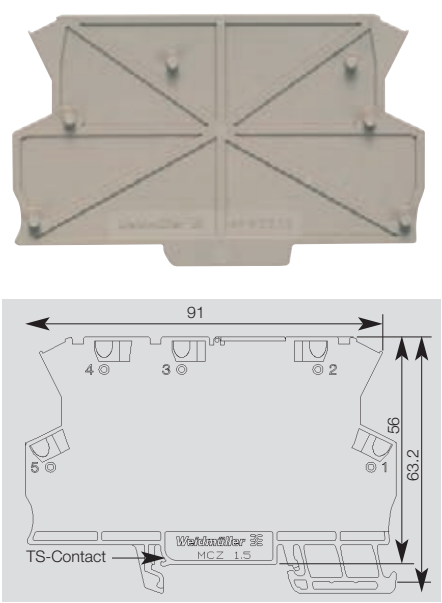
Note**Accessories****Note**

Cross-connectors for power supply and
markers - see MCZ-SERIES accessories

Cross-connectors for power supply and
markers - see MCZ-SERIES accessories

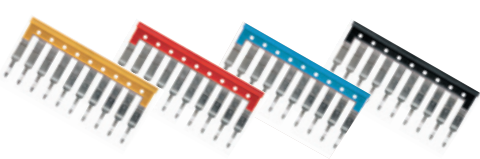
Cross-connectors for power supply and
markers - see MCZ-SERIES accessories

MCZ accessories



Ordering data

	Type	Qty	Order No.
End plate	AP MCZ 1.5	50	8389030000



Ordering data

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

Ordering data

	Type	Qty	Order No.
Marker	WS10/6	200	1060960000