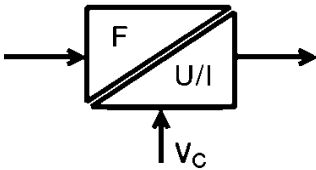


# Frequency Signal Conditioners

- Tension clamp connection
- LED-display
- Adjustable frequency output



The option of reading-in the analog signals from the field via counter inputs of the control is made possible by converting the analog signals into frequencies. It is recommended that twisted and shielded 2-wire cables are used.

## MCZ VFC

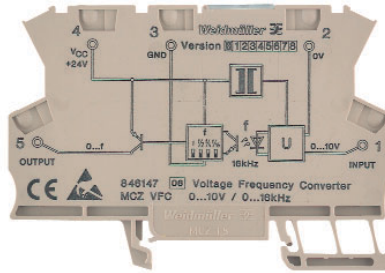
0...10 V

## MCZ CFC

0...20 mA

## MCZ CFC

4...20 mA CLP



### Block diagram/settings

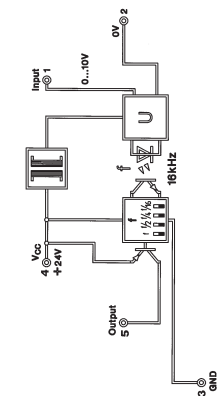
#### MCZ VFZ 0...10 V and MCZ CFC 0...20 mA

1	2	3	4	DIP switch
1	0	0	0	0...16 kHz
0	1	0	0	0...8 kHz
0	0	1	0	0...4 kHz
0	0	0	1	0...1 kHz

#### MCZ CFC 4...20 mA CLP

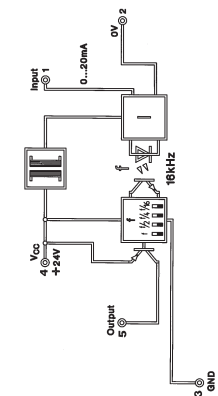
1	2	3	4	DIP switch
1	0	0	0	3.2...16 kHz
0	1	0	0	1.6...8 kHz
0	0	1	0	0.8...4 kHz
0	0	0	1	0.2...1 kHz

### Ordering data



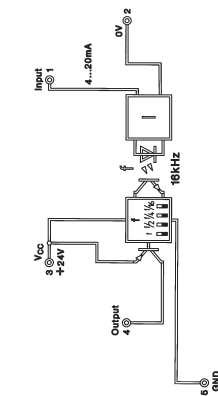
Type	Part No.
MCZ VFC	8461470000

### Ordering data



Type	Part No.
MCZ CFC	8461480000

### Ordering data



Type	Part No.
MCZ CFC	8461490000

### Technical data

Input ranges	0...10 V
Overload limits, input	30 V
Input resistance	100 kΩ
Voltage drop, input	
Output	
Output frequency, end value	1 kHz, 4 kHz, 8 kHz, 16 kHz
Frequency adjustment	DIP switch
Readjustment range	±10%, internal
Output level	PNP, Ub- 0.7 V
Output current	max. 20 mA
Display	LED, pulsing
Supply voltage	24 VDC ±10%
Power consumption	14 mA, w/o load
Making current limit	200 mA
Polarization protection	yes

Input ranges	0...10 V
Overload limits, input	30 V
Input resistance	100 kΩ
Voltage drop, input	
Output	
Output frequency, end value	1 kHz, 4 kHz, 8 kHz, 16 kHz
Frequency adjustment	DIP switch
Readjustment range	±10%, internal
Output level	PNP, Ub- 0.7 V
Output current	max. 20 mA
Display	LED, pulsing
Supply voltage	24 VDC ±10%
Power consumption	14 mA, w/o load
Making current limit	200 mA
Polarization protection	yes

Input ranges	0...20 mA
Overload limits, input	50 mA
Input resistance	50 Ω
Voltage drop, input	1 V at 20 mA
Output	
Output frequency, end value	1 kHz, 4 kHz, 8 kHz, 16 kHz
Frequency adjustment	DIP switch
Readjustment range	±10%, internal
Output level	PNP, Ub- 0.7 V
Output current	max. 20 mA
Display	LED, pulsing
Supply voltage	24 VDC ±10%
Power consumption	14 mA, w/o load
Making current limit	200 mA
Polarization protection	yes

Input ranges	4...20 mA LP*
Overload limits, input	50 mA
Input resistance	
Voltage drop, input	5.8...6.4 at 20 mA
Output	
Output frequency, end value	1 kHz, 4 kHz, 8 kHz, 16 kHz
Frequency adjustment	DIP switch
Readjustment range	±10%, internal
Output level	PNP, Ub- 0.7 V
Output current	max. 20 mA
Display	LED, pulsing
Supply voltage	24 VDC ±20%
Power consumption	14 mA, w/o load
Making current limit	
Polarization protection	yes

### Coordination of insulation according to EN 50178

Voltage strength input/output	1 kVDC
Rated voltage	100 V
Rated surge voltage	1.5 kV
Overvoltage category	III
Voltage strength I/O to mounting rail	4 kV <sub>eff</sub> /1 min
Operating temperature	0°C...+50°C
Storage temperature	-25°C...+85°C
Overall width	6 (.24) mm (in.)
Conductor cross-section	1.5 mm <sup>2</sup> (16 AWG)

Voltage strength input/output	1 kVDC
Rated voltage	100 V
Rated surge voltage	1.5 kV
Overvoltage category	III
Voltage strength I/O to mounting rail	4 kV <sub>eff</sub> /1 min
Operating temperature	0°C...+50°C
Storage temperature	-25°C...+85°C
Overall width	6 (.24) mm (in.)
Conductor cross-section	1.5 mm <sup>2</sup> (16 AWG)

Voltage strength input/output	1 kVDC
Rated voltage	100 V
Rated surge voltage	1.5 kV
Overvoltage category	III
Voltage strength I/O to mounting rail	4 kV <sub>eff</sub> /1 min
Operating temperature	0°C...+50°C
Storage temperature	-25°C...+85°C
Overall width	6 (.24) mm (in.)
Conductor cross-section	1.5 mm <sup>2</sup> (16 AWG)

Voltage strength input/output	1 kVDC
Rated voltage	150 V
Rated surge voltage	2.5 kV
Overvoltage category	III
Voltage strength I/O to mounting rail	4 kV <sub>eff</sub> /1 min
Operating temperature	0°C...+50°C
Storage temperature	-25°C...+85°C
Overall width	6 (.24) mm (in.)
Conductor cross-section	1.5 mm <sup>2</sup> (16 AWG)

Dimensions and accessories see

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\* without DC/DC converter input supply via current loop