

## WAVESERIES - DC/DC 3-way isolator

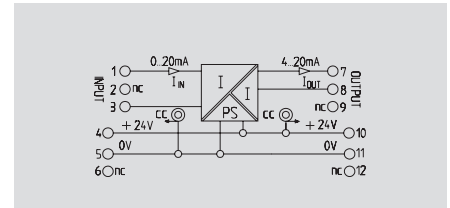
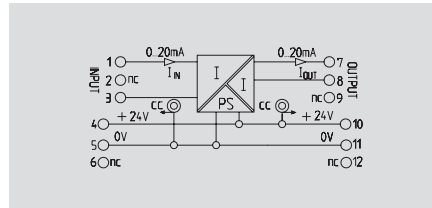
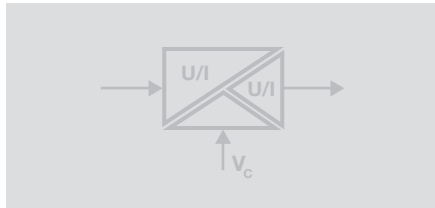
### 10 Hz limiting frequency

- Signal conversion
- Galvanic isolation between input / output signals and power supply
- Power supply can be cross-connected using plug-in jumpers.

### 0...(4) 20 mA / 0...(4) 20 mA



### 0...20 mA / 4...20 mA



### Technical data

<b>Input</b>	Input voltage / Input current
<b>Output</b>	Output voltage / Output current Load impedance, voltage/current Cut-off frequency (-3 dB)
<b>General data</b>	Supply voltage Power consumption Accuracy Temperature coefficient Step response time Ambient temperature Storage temperature Approvals
<b>Insulation coordination</b>	Standards EMC standards Rated voltage Impulse withstand voltage Insulation voltage Overvoltage category Pollution severity Clearance & creepage distances

Input	/ 0(4)...20 mA
Output	/ 0(4)...20 mA / ≤ 600 Ω
General data	10 Hz 24 V DC ± 25 % < 1.5 W @ I <sub>OUT</sub> = 20 mA 0.2 % ± 250 ppm/K ≤ 45 ms 0 °C...+55 °C -20 °C...+85 °C cULus; CE
Insulation coordination	EN 50178 EN 55011, EN 61000-6 300 V 4 kV 2 kV <sub>eff</sub> / 5 s III 2 ≥ 3 mm

Input	/ 0...20 mA
Output	/ 4...20 mA / ≤ 600 Ω
General data	10 Hz 24 V DC ± 25 % < 1.5 W @ I <sub>OUT</sub> = 20 mA 0.2 % ± 250 ppm/K ≤ 45 ms 0 °C...+55 °C -20 °C...+85 °C cULus; CE
Insulation coordination	EN 50178 EN 55011, EN 61000-6 300 V 4 kV 2 kV <sub>eff</sub> / 5 s III 2 ≥ 3 mm

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

<b>Screw connection</b>	<b>Tension clamp connection</b>
2.5 / 0.5 / 2.5 92.4 / 17.5 / 112.4	1.5 / 0.5 / 2.5 92.4 / 17.5 / 112.4
<b>Note</b>	

<b>Screw connection</b>	2.5 / 0.5 / 2.5 92.4 / 17.5 / 112.4
<b>Note</b>	

### Ordering data

	Screw connection
	Tension clamp connection
<b>Note</b>	

Type	Qty.	Order No.
WAS5 CCC 0-20/0-20mA	1	8540180000
WAZ5 CCC 0-20/0-20mA	1	8540190000
<b>Note</b>		

Type	Qty.	Order No.
WAS5 CCC 0-20/4-20mA	1	8540250000
<b>Note</b>		

### Accessories

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	Cross-connector for power supplies and markers – refer to Accessories
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## WAVESERIES - DC/DC 3-way isolator

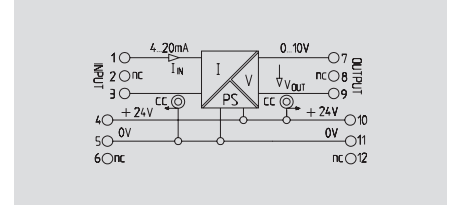
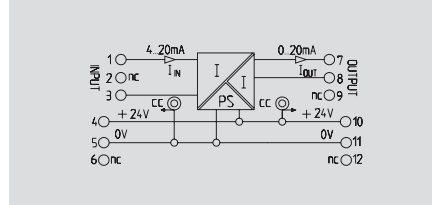
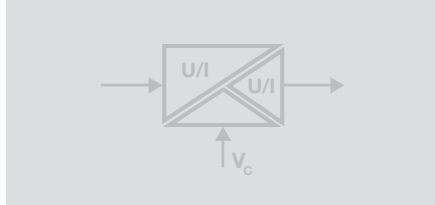
### 10 Hz limiting frequency

- Signal conversion
- Galvanic isolation between input / output signals and power supply
- Power supply can be cross-connected using plug-in jumpers.

### 4...20 mA / 0...20 mA



### 4...20 mA / 0...10 V



### Technical data

<b>Input</b>	Input voltage / Input current
<b>Output</b>	Output voltage / Output current Load impedance, voltage/current Cut-off frequency (-3 dB)
<b>General data</b>	Supply voltage Power consumption Current-carrying capacity of cross-connect. Accuracy Temperature coefficient Step response time Ambient temperature Storage temperature Approvals
<b>Insulation coordination</b>	Standards EMC standards Rated voltage Impulse withstand voltage Insulation voltage Overvoltage category Pollution severity Clearance & creepage distances

Input	/ 4...20 mA
Output	/ 0...20 mA / ≤ 600 Ω
General data	10 Hz
Supply voltage	24 V DC ± 25 %
Power consumption	< 1.5 W @ I <sub>OUT</sub> = 20 mA
Current-carrying capacity of cross-connect.	≤ 2 A
Accuracy	0.2 %
Temperature coefficient	± 250 ppm/K
Step response time	≤ 45 ms
Ambient temperature	0 °C...+55 °C
Storage temperature	-20 °C...+85 °C
Approvals	cULus; CE
Standards	EN 50178
EMC standards	EN 55011, EN 61000-6
Rated voltage	300 V
Impulse withstand voltage	4 kV
Insulation voltage	2 kV <sub>eff</sub> / 5 s
Overvoltage category	III
Pollution severity	2
Clearance & creepage distances	≥ 3 mm

Input	/ 4...20 mA
Output	0...10 V / ≥ 1 kΩ /
General data	10 Hz
Supply voltage	24 V DC ± 25 %
Power consumption	< 1.3 W @ I <sub>OUT</sub> = 5 mA
Current-carrying capacity of cross-connect.	≤ 2 A
Accuracy	0.2 %
Temperature coefficient	± 250 ppm/K
Step response time	≤ 45 ms
Ambient temperature	0 °C...+55 °C
Storage temperature	-20 °C...+85 °C
Approvals	cULus; CE
Standards	EN 50178
EMC standards	EN 55011, EN 61000-6
Rated voltage	300 V
Impulse withstand voltage	4 kV
Insulation voltage	2 kV <sub>eff</sub> / 5 s
Overvoltage category	III
Pollution severity	2
Clearance & creepage distances	≥ 3 mm

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

<b>Screw connection</b>	
2.5 / 0.5 / 2.5	
92.4 / 17.5 / 112.4	

<b>Screw connection</b>	
2.5 / 0.5 / 2.5	
92.4 / 17.5 / 112.4	

### Ordering data

	Screw connection
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Type	Qty.	Order No.
WAS5 CCC 4-20/0-20MA	1	8540200000

Type	Qty.	Order No.
WAS5 CVC 4-20mA/0-10V	1	8540230000

<b>Note</b>	
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### Accessories

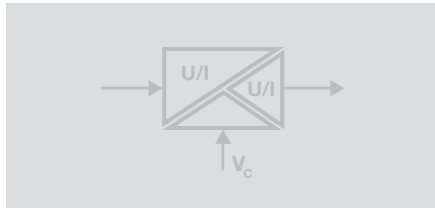
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Cross-connector for power supplies and markers – refer to Accessories	
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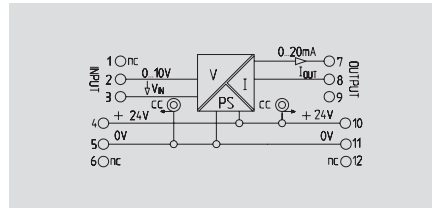
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10 Hz limiting frequency

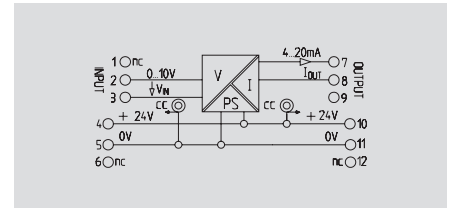
- Signal conversion
- Galvanic isolation between input / output signals and power supply
- Power supply can be cross-connected using plug-in jumpers.



0...10 V / 0...20 mA



0...10 V / 4...20 mA



Technical data

<b>Input</b>	Input voltage / Input current
<b>Output</b>	Output voltage / Output current Load impedance, voltage/current Cut-off frequency (-3 dB)
<b>General data</b>	Supply voltage Power consumption Accuracy Temperature coefficient Step response time Ambient temperature Storage temperature Approvals
<b>Insulation coordination</b>	Standards EMC standards Rated voltage Impulse withstand voltage Insulation voltage Overvoltage category Pollution severity Clearance & creepage distances

0...10 V /
/ 0...20 mA / ≤ 600 Ω
10 Hz
24 V DC ± 25 % < 1.5 W @ I <sub>OUT</sub> = 20 mA
0.2 % ± 250 ppm/K ≤ 45 ms 0 °C...+55 °C -20 °C...+85 °C cULus; CE
EN 50178 EN 55011, EN 61000-6 300 V 4 kV 2 kV <sub>eff</sub> / 5 s III 2 ≥ 3 mm

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EN 50178 EN 55011, EN 61000-6 300 V 4 kV 2 kV <sub>eff</sub> / 5 s III 2 ≥ 3 mm

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

<b>Screw connection</b>	<b>Tension clamp connection</b>
2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
92.4 / 17.5 / 112.4	92.4 / 17.5 / 112.4

<b>Screw connection</b>	<b>Tension clamp connection</b>
2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
92.4 / 17.5 / 112.4	92.4 / 17.5 / 112.4

Ordering data

	Screw connection
	Tension clamp connection

<b>Type</b>	<b>Qty.</b>	<b>Order No.</b>
WAS5 VCC 0-10V/0-20MA	1	8540310000
WAZ5 VCC 0-10V/0-20MA	1	8540320000

<b>Type</b>	<b>Qty.</b>	<b>Order No.</b>
WAS5 VCC 0-10V/4-20MA	1	8540290000
WAZ5 VCC 0-10V/4-20MA	1	8540300000

<b>Note</b>	
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Accessories

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Cross-connector for power supplies and markers – refer to Accessories
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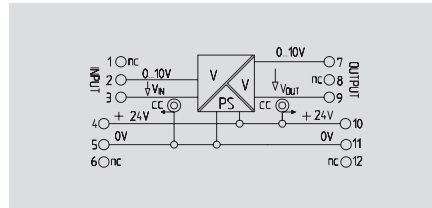
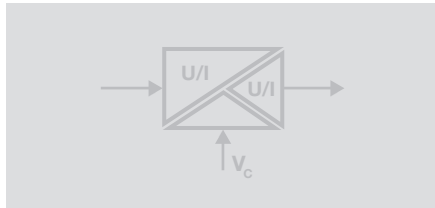
Cross-connector for power supplies and markers – refer to Accessories
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## WAVESERIES - DC/DC 3-way isolator

### 10 Hz limiting frequency

- Signal conversion
- Galvanic isolation between input / output signals and power supply
- Power supply can be cross-connected using plug-in jumpers.

### 0...10 V / 0...10 V



### Technical data

<b>Input</b>	
Input voltage / Input current	0...10 V /
<b>Output</b>	
Output voltage / Output current	0...10 V /
Load impedance, voltage/current	≥ 1 kΩ /
Cut-off frequency (-3 dB)	10 Hz
<b>General data</b>	
Supply voltage	24 V DC ± 25 %
Power consumption	< 1.3 W @ I <sub>OUT</sub> = 5 mA
Current-carrying capacity of cross-connect.	≤ 2 A
Accuracy	0.2 %
Temperature coefficient	± 250 ppm/K
Step response time	≤ 45 ms
Ambient temperature	0 °C...+55 °C
Storage temperature	-20 °C...+85 °C
Approvals	cULus; CE
<b>Insulation coordination</b>	
Standards	EN 50178
EMC standards	EN 55011, EN 61000-6
Rated voltage	300 V
Impulse withstand voltage	4 kV
Insulation voltage input or output/supply	2 kV <sub>eff</sub> / 5 s
Overvoltage category	III
Pollution severity	2
Clearance & creepage distances	≥ 3 mm

	0...10 V /
	0...10 V /
	≥ 1 kΩ /
	10 Hz
	24 V DC ± 25 %
	< 1.3 W @ I <sub>OUT</sub> = 5 mA
	≤ 2 A
	0.2 %
	± 250 ppm/K
	≤ 45 ms
	0 °C...+55 °C
	-20 °C...+85 °C
	cULus; CE
	EN 50178
	EN 55011, EN 61000-6
	300 V
	4 kV
	2 kV <sub>eff</sub> / 5 s
	III
	2
	≥ 3 mm

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

<b>Screw connection</b>	<b>Tension clamp connection</b>
2.5 / 0.5 / 2.5	1.5 / 0.5 / 2.5
92.4 / 17.5 / 112.4	92.4 / 17.5 / 112.4

### Ordering data

	Screw connection
	Tension clamp connection

Type	Qty.	Order No.
WAS5 VVC 0-10V/0-10V	1	8540330000
WAZ5 VVC 0-10V/0-10V	1	8540340000

<b>Note</b>	
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### Accessories

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Cross-connector for power supplies and markers – refer to Accessories
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