

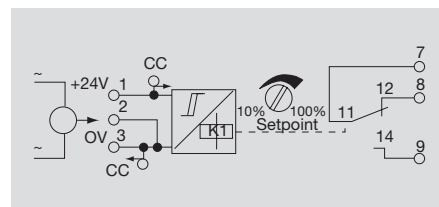
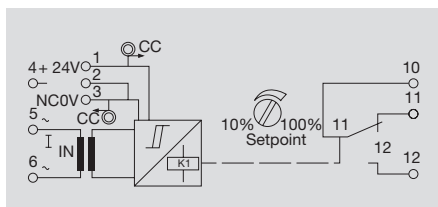
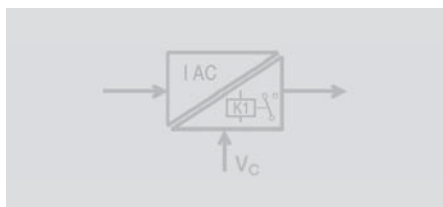
Current monitoring

Relay output

- Current range adjustable via DIP-switch
- Switchable hysteresis
- Operating current or closed current principle

1/5/10A ac

20/40/60A ac



Technical data

Input	1/5/10A ac	20/40/60A ac
Input current	0...1 Aac/ 0...5 Aac/ 0...10 Aac	0...20 Aac/ 0...40 Aac/ 0...60 Aac
Input frequency	50...60 Hz	50...60 Hz
Max. current	100 A for 1s	dependent on conductor cross-section
Max. voltage	250 Vac	400 Vac, > 400V ac depends on wire insulation
Sensor	Transforming (internally)	hall sensor (internal)
Diameter of bushing		8 mm
Output		
Switching thresholds	10...100 % by front poten.	10...100 % by front poten.
Hysteresis	5 % or 10 % of threshold value	5 % or 10 % of threshold value
Switching voltage max./Switching voltage min.	60 Vdc/ 250 Vac/6 Vdc/ac	60 Vdc/ 250 Vac/6 Vdc/ac
Switching current max./Switching current min.	7 A/100 mA	7 A/100 mA
Step response time	typ. 700 ms	typ. 700 ms
Temperature coefficient	<= 800 ppm/K	<= 250 ppm/K
Status indicator	LED green	LED green
General data		
Supply voltage	24 Vdc +/- 10 %	24 Vdc +/- 10 %
Current consumption	8.3 mA (Relay not triggered)/ 24 mA (Relay triggered)	23 mA (Relay not triggered)/ 47 mA (Relay triggered)
Current-carrying cap. of cross-connect.	<= 2 A	<= 2 A
Operation temperature	0 °C...+50 °C	0 °C...+50 °C
Storage temperature	-20 °C...+70 °C	-20 °C...+70 °C
Default settings	0...5A / 10% Hysteresis / current principle	0...40A / 10% Hysteresis / current principle
Approvals	CE / ESD / cURus	CE / ESD / cURus
Contact arrangement	1 changeover contact	1 changeover contact
Insulation coordinates		
Rated voltage	300 V	300 V
Impulse withstand voltage	4 kV	4 kV
Pollution severity	2	2
Overtoltage category	III	III
Clearance & creepage path	>= 3 mm	>= 3 mm
Isolation voltage Input, output	4 kVeff / 5s	4 kVeff / 5s

Dimensions	Screw connection	Tension clamp c.	Screw connection	Tension clamp c.
Clamping range (rating- / min. / max.)	2.50 / 0.50 / 2.50	1.50 / 0.50 / 2.50	2.50 / 0.50 / 2.50	1.50 / 0.50 / 2.50
Length x width x height	92.4 x 22.5 x 112.4	92.4 x 22.5 x 112.4	92.4 x 22.5 x 112.4	92.4 x 22.5 x 112.4
Information	Tu=23°C, single module		Tu=23°C, single module	

Ordering data

Type of connection	Type	Qty.	Order No.	Type	Qty.	Order No.
Screw connection Tension clamp c.	WAS2 CMR 1/5/10A ac	1	8516560000	WAS2 CMR 20/40/60A ac	1	8513340000
	WAZ2 CMR 1/5/10A ac	1	8516570000	WAZ2 CMR 20/40/60A ac	1	8526600000
Information	Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection			Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection		

Accessories

Information

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.
Delivery times see page X.2

Current monitoring

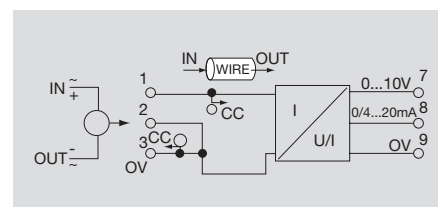
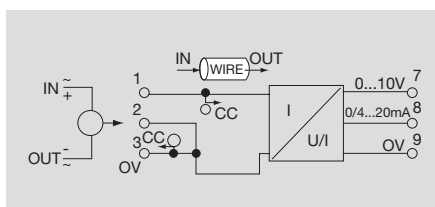
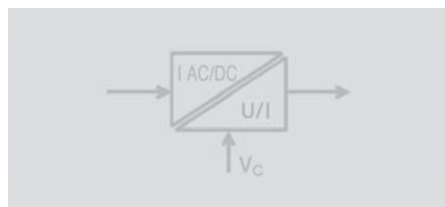
Analogue output

- Input and output adjustable via DIP-switch
- Calibration not necessary

5/10A ac/dc



20/25/30A ac/dc



Technical data

Input

Input current
Input frequency
Max. current
Voltage of measuring circuit
Sensor
Diameter of bushing

0...5 Aac/dc/ 0...10 Aac/dc
0...2 kHz (true RMS to DC converter)
dependent on conductor cross-section
400 Vac, >400V ac depends on conductor insulation
hall sensor (internal)
8 mm

0...20 Aac/dc/0...25 Aac/dc / 0...30 Aac/dc
0...2 kHz (true RMS to DC converter)
dependent on conductor cross-section
400 Vac, >400V ac depends on conductor insulation
hall sensor (internal)
8 mm

Output

Output current/Output voltage
Offset current
Output signal limit
Load resistance voltage/Current
Step response time
Accuracy
Temperature coefficient
Status indicator

0(4)...20 mA/0...10 V
max. 150 μ A
approx. 13 V resp. 24 mA
 $\geq 1 \text{ k}\Omega / < = 600 \Omega$
typ. 700 ms
0.5% FSR
 $\leq 650 \text{ ppm/K}$
LED ON: OK; FLASHING: signal out of range; OFF: Error

0(4)...20 mA/0...10 V
max. 150 μ A
approx. 13 V resp. 24 mA
 $\geq 1 \text{ k}\Omega / < = 600 \Omega$
typ. 700 ms
0.5% FSR
 $\leq 650 \text{ ppm/K}$
LED ON: OK; FLASHING: signal out of range; OFF: Error

General data

Supply voltage
Current consumption
Current-carrying cap. of cross-connect.
Operation temperature/Storage temperature
Default settings
Approvals

24 Vdc +/- 10 %
50 mA at Iout=20 mA
 $\leq 2 \text{ A}$
0 °C...+50 °C/-20 °C...+70 °C
0...5A, 4...20mA
CE / ESD / cURus

24 Vdc +/- 10 %
50 mA at Iout=20 mA
 $\leq 2 \text{ A}$
0 °C...+50 °C/-20 °C...+70 °C
0...25A, 4...20mA
CE / ESD / cURus

Insulation coordinates

Rated voltage
Impulse withstand voltage
Pollution severity
Overvoltage category
Clearance & creepage path
Isolation voltage Input, output

300 V
6 kV
2
III
 $\geq 5.5 \text{ mm}$
4 kVeff / 5s

300 V
6 kV
2
III
 $\geq 5.5 \text{ mm}$
4 kVeff / 5s

Dimensions

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

Screw connection

2.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Tension clamp c.

1.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Screw connection

2.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Tension clamp c.

1.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Information

Tu=23°C, single module

Tu=23°C, single module

Ordering data

Type of connection

Screw connection
Tension clamp c.

Type

WAS2 CMA 5/10A uc
WAZ2 CMA 5/10A uc

Qty.

1
1

Order No.

8526610000
8526620000

Type

WAS2 CMA 20/25/30A uc
WAZ2 CMA 20/25/30A uc

Qty.

1
1

Order No.

8545830000
8545840000

Information

Accessories

Information

Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection

Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection

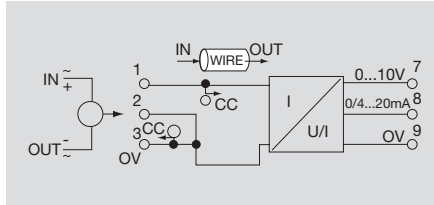
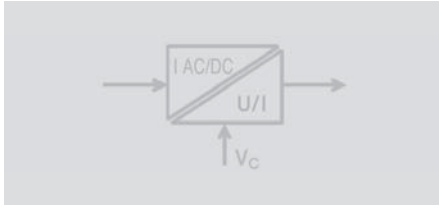
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Delivery times see page X.2

Current monitoring

Analogue output

- Input and output adjustable via DIP-switch
- Calibration not necessary

40/50/60A ac/dc



Technical data

Input

Input current
Input frequency
Max. current
Voltage of measuring circuit
Sensor
Diameter of bushing

0...40 Aac/dc/ 0...50 Aac/dc/ 0...60 Aac/dc
0...2 kHz (true RMS to DC converter)
dependent on conductor cross-section
400 Vac, >400V ac depends on conductor insulation
hall sensor (internal)
8 mm

Output

Output current/Output voltage
Offset current
Output signal limit
Load resistance voltage/Current
Step response time
Accuracy
Temperature coefficient
Status indicator

0(4)...20 mA/0...10 V
max. 150 μ A
approx. 13 V resp. 24 mA
 $\geq 1 \text{ k}\Omega / < 600 \Omega$
typ. 700 ms
0.5% FSR
 $\leq 650 \text{ ppm/K}$
LED ON: OK; FLASHING: signal out of range; OFF: Error

General data

Supply voltage
Current consumption
Current-carrying cap. of cross-connect.
Operation temperature/Storage temperature
Default settings
Approvals

24 Vdc +/- 10 %
50 mA at $I_{out}=20 \text{ mA}$
 $\leq 2 \text{ A}$
0 °C...+50 °C/-20 °C...+70 °C
0...50A, 4...20mA
CE / ESD / cURus

Insulation coordinates

Rated voltage
Impulse withstand voltage
Pollution severity
Overvoltage category
Clearance & creepage path
Isolation voltage Input, output

300 V
6 kV
2
III
 $\geq 5.5 \text{ mm}$
4 kVeff / 5s

Dimensions

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

Screw connection

2.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Tension clamp c.

1.50 / 0.50 / 2.50
92.4 x 22.5 x 112.4

Information

Tu=23°C, single module

Ordering data

Type of connection

Screw connection
Tension clamp c.

Type

WAS2 CMA 40/50/60A uc
WAZ2 CMA 40/50/60A uc

Qty.

1
1

Order No.

8513330000
8526590000

Information

Accessories

Information

Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection

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