# Data sheet | Item number: 857-552

Current signal conditioner; Input for Rogowski coils; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm²

www.wago.com/857-552

RC1+ (GND 1)	1	IN	OUT	5	OUT+
GND 1	2			6	GND 2
RC2+ (GND 1)	3			7	Us+
DO (GND 3)	4 DO		POWER	8	GND 3

94 mm/3.68 inch   97.8 mm/3.85 inch   6 mm/0.23 inch
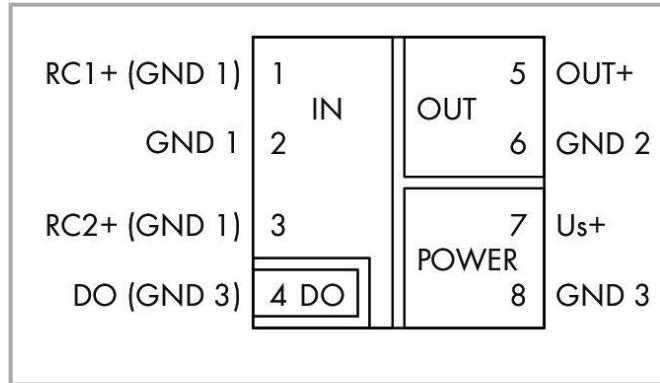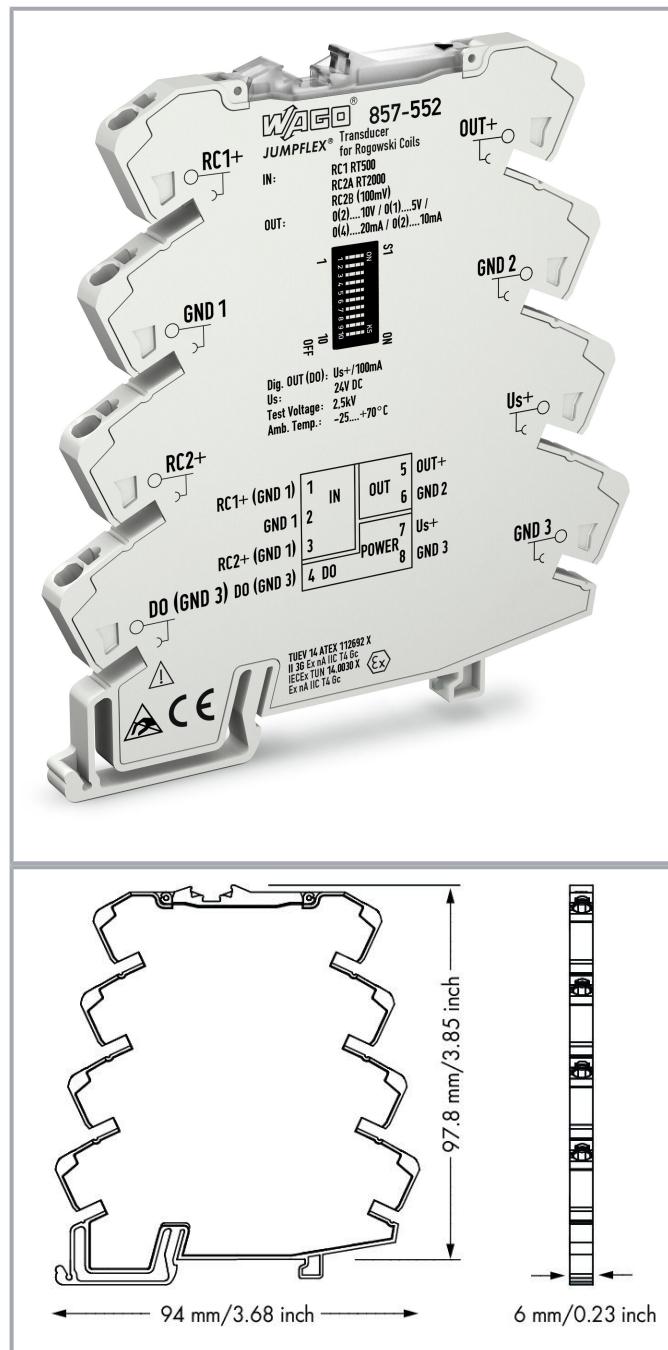
857-552
DIP Switch Adjustability   ● = ON   Default

DIP Switch S1

	Input Signal		RC Configuration Input		Filter		Output Signal		
1		2		3		4	5	6	
	RC1 = RT500 from LEM		RC2A = RT2000 from LEM		off				0 … 20 mA
●	RC2	●	RC2B = 22.5 mV/kA	●	active		●		4 … 20 mA
						●			0 … 10 V
						●	●		2 … 10 V
						●		●	0 … 10 mA
						●	●	●	2 … 10 mA
								●	0 … 5 V
							●	●	1 … 5 V

Filter:
The filter function allows a low-pass filter to be switched on in order to mask or "smooth out" oscillating measured values (e.g., during trailing edge flows).

DIP Switch S1

7	8	Measurement Range Underflow	Measurement Range Overflow	Overcurrent (Input Signal – End Value + 20%)	9	10	Digital Output DO Signaling
		Lower limit of measurement range +5 %*	Upper limit of measurement range +2.5 %*	Upper limit of measurement range +5 %*			DO not active
●		Lower limit of measurement range	Upper limit of measurement range +2.5 %	Upper limit of measurement range +5 %		●	DO Us+ switching
	●	Lower limit of measurement range	Upper limit of measurement range	Lower limit of measurement range	●	●	DO GND switching
●	●	Lower limit of measurement range	Upper limit of measurement range	Upper limit of measurement range			*acc. to NAMUR NE 43

Subject to changes. Please also observe the further product documentation!

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Item description

Short description:

WAGO's Rogowski signal conditioner records RMS values from alternating currents via Rogowski coil, converting the input signal into an standard analog signal on the output side.

Features:

- PC configuration interface
- Supports different Rogowski coil types
- Digital switching output (configurable switching thresholds)
- Configurable output signal
- Configuration via DIP switch
- 3-way electrical isolation with 2.5 kV test voltage
- No current bar interruption during installation
- Measurement range overflow indication

Data

Notes

Note	Additional setting options via WAGO Interface Configuration Software or WAGO Interface Configuration App

Technical data

Configuration

Configuration options	DIP switch
	WAGO Interface Configuration Software
	WAGO Interface Configuration App

Input

Input signal type	Voltage
Input signal (voltage)	50 Hz sinusoidal signals: AC 10.05 mV (RC1); AC 40.2 mV (RC2A); AC 90 mV (RC2B)
Sensitivity	RC2B: 22.5 mV/kA
Measurement range (current)	AC 500 A (RC1); AC 2000 A (RC2A); AC 4000 A (RC2B)
Frequency range	50 Hz (Sinusoidal signals)
Response threshold	≤ 1 % (of measurement range nominal value)
Resolution (current)	250 mA (RC1)
	1 A (RC2A)

Subject to changes. Please also observe the further product documentation!

1.5 A (RC2B)

Output (analog)

Output signal type	Current Voltage
Output signal (voltage)	0 … 5 V; 1 … 5 V; 0 … 10 V; 2 … 10 V
Output signal (current)	0 … 10 mA; 2 … 10 mA; 0 … 20 mA; 4 … 20 mA
Load impedance (voltage output)	≥ 1 kΩ
Load impedance (current output)	≤ 600 Ω

Output (digital)

Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)

Signal Processing

Limit frequency	2 kHz
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	60 ms

Measurement Error

Transmission error (max.)	≤ 1 % (of the full scale value)
Temperature coefficient	≤ 0.01 %/K

Supply

Power supply type	24 VDC
Nominal supply voltage U_S	DC 24 V
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I_{DO})

Safety and protection

Protection type	IP20

Test voltage

Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min

Subject to changes. Please also observe the further product documentation!

Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 … 2.5 mm² / 28 … 14 AWG
Fine-stranded conductor	0.34 … 2.5 mm² / 22 … 14 AWG
Strip length	9 … 10 mm / 0.35 … 0.39 inches

Physical data

Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	97.8 mm / 3.85 inches

Mechanical Data

Mounting type	DIN-35 rail

Material Data

Fire load	0.418 MJ
Weight	35.1 g

Environmental requirements

Ambient temperature (operation)	-25 … +70 °C
Ambient temperature (storage)	-40 … +85 °C
Relative humidity	5 … 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

Standards and specifications

Conformity marking	CE

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-21-01-23
eCl@ss 9.0	27-21-01-23
ETIM 8.0	EC002475
ETIM 7.0	EC002475
PU (SPU)	1 pcs

Subject to changes. Please also observe the further product documentation!

Packaging type	bag
Country of origin	DE
GTIN	4050821476917
Customs tariff number	85437090300

Environmental Product Compliance

CAS-No.	7439-92-1
	79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol
	Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c)
	7(a)
	7(c)-I
	7(c)-II
SCIP notification number (Austria)	1f195258-d879-4341-9432-55132a5988a4
SCIP notification number (Belgium)	7814c94f-657c-4f03-83f0-8d7593e6728c
SCIP notification number (Bulgaria)	018c696b-7940-4720-a5c3-00dd668a954d
SCIP notification number (Czech Republic)	004a50ca-f1d7-4851-9876-6e3e26a6990e
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SCIP notification number (Finland)	6287e118-0731-40fa-98e2-c8475af11b0f
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SCIP notification number (Romania)	26692719-0992-4210-bc52-9edf89ce1c3d
SCIP notification number (Sweden)	5a508da9-fb93-492b-aa4a-14900ec6a865

Approvals / Certificates

General approvals

Logo	Approval	Additional Approval Text	Certificate name
EAC	**EAC** Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name

Subject to changes. Please also observe the further product documentation!

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	ATEX	EN 60079-0	TÜV_14_ATEX_112692_X
	TUEV Nord Cert GmbH		(II 3 G Ex nA IIC T4 Gc)
	CCC	CNCA-C23-01	2020312310000210 (Ex
	CNEX		ec IIC T4 Gc)
	EAC	TP TC 012/2011	EAC RU C-DE.AM02.B.
	Brjansker Zertifizierungsstelle		00144/19 (2 Ex nA IIC T4 Gc X)
	IECEx	IEC 60079-0	IECEX_TUN_14.0030_X
	TUEV Nord Cert GmbH		
	UKEx	EN 60079-0	WAGO22UKEX004X
	WAGO GmbH & Co. KG		

Optional accessories

Screwless end stop

Mounting accessories

	Item no.: 249-116	
	Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-116

	Item no.: 249-117	
	Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-117

	Item no.: 249-197	
	Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-197

Communication

Bluetooth

	Item no.: 750-921	
	Bluetooth® Adapter	www.wago.com/750-921

Communication cable

Subject to changes. Please also observe the further product documentation!

www.wago.com/750-923

Item no.: 750-923
Configuration cable; USB connector; Length: 2.5 m

Marking accessories

Marking strip

Item no.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/2009-110

Marker

Item no.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115

Item no.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501

Item no.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-502

Item no.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-503

Item no.: 793-504
WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-504

Item no.: 793-505
WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-505

Item no.: 793-506
WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-506
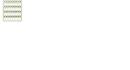
Item no.: 793-566
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-566

Item no.: 793-5501
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/793-5501

Tool

Operating tool

Item no.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

www.wago.com/210-720

Interface module

Interface adapters

Item no.: 857-980

www.wago.com/857-980

Subject to changes. Please also observe the further product documentation!

Interface adapter; 16-pole; analog

Relay module		
Relay module		
Item no.: 857-304		
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm; 2,50 mm²; gray		www.wago.com/857-304
Jumpers		
Jumper		
Item no.: 859-408		
Jumper; for jumper slot; 8-way; insulated; light gray		www.wago.com/859-408
Item no.: 281-482		
Jumper; 2-way; insulated; gray		www.wago.com/281-482
Item no.: 859-404/000-005		
Jumper; for jumper slot; 4-way; insulated; red		www.wago.com/859-404 /000-005
Item no.: 859-404/000-006		
Jumper; for jumper slot; 4-way; insulated; blue		www.wago.com/859-404 /000-006
Item no.: 859-405/000-005		
Jumper; for jumper slot; 5-way; insulated; red		www.wago.com/859-405 /000-005
Item no.: 859-405/000-029		
Jumper; for jumper slot; 5-way; insulated; yellow		www.wago.com/859-405 /000-029
Item no.: 859-405		
Jumper; for jumper slot; 5-way; insulated; light gray		www.wago.com/859-405
Item no.: 859-404/000-029		
Jumper; for jumper slot; 4-way; insulated; yellow		www.wago.com/859-404 /000-029
Item no.: 859-406		
Jumper; for jumper slot; 6-way; insulated; light gray		www.wago.com/859-406
Item no.: 859-405/000-006		
Jumper; for jumper slot; 5-way; insulated; blue		www.wago.com/859-405 /000-006
Item no.: 859-406/000-005		
Jumper; for jumper slot; 6-way; insulated; red		www.wago.com/859-406 /000-005

Subject to changes. Please also observe the further product documentation!

	Item no.: 859-409/000-029 Jumper; for jumper slot; 9-way; insulated; yellow	www.wago.com/859-409 /000-029
	Item no.: 859-410/000-005 Jumper; for jumper slot; 10-way; insulated; red	www.wago.com/859-410 /000-005
	Item no.: 859-410/000-029 Jumper; for jumper slot; 10-way; insulated; yellow	www.wago.com/859-410 /000-029
	Item no.: 859-410 Jumper; for jumper slot; 10-way; insulated; light gray	www.wago.com/859-410
	Item no.: 859-410/000-006 Jumper; for jumper slot; 10-way; insulated; blue	www.wago.com/859-410 /000-006
	Item no.: 859-403/000-005 Jumper; for jumper slot; 3-way; insulated; red	www.wago.com/859-403 /000-005
	Item no.: 859-402/000-029 Jumper; for jumper slot; 2-way; insulated; yellow	www.wago.com/859-402 /000-029
	Item no.: 859-403/000-029 Jumper; for jumper slot; 3-way; insulated; yellow	www.wago.com/859-403 /000-029
	Item no.: 859-403/000-006 Jumper; for jumper slot; 3-way; insulated; blue	www.wago.com/859-403 /000-006
	Item no.: 859-408/000-005 Jumper; for jumper slot; 8-way; insulated; red	www.wago.com/859-408 /000-005
	Item no.: 859-408/000-029 Jumper; for jumper slot; 8-way; insulated; yellow	www.wago.com/859-408 /000-029
	Item no.: 859-409 Jumper; for jumper slot; 9-way; insulated; light gray	www.wago.com/859-409
	Item no.: 859-408/000-006 Jumper; for jumper slot; 8-way; insulated; blue	www.wago.com/859-408 /000-006
	Item no.: 859-403 Jumper; for jumper slot; 3-way; insulated; light gray	www.wago.com/859-403

Subject to changes. Please also observe the further product documentation!

Item no.: 859-409/000-005
Jumper; for jumper slot; 9-way; insulated; red

www.wago.com/859-409
/000-005

Item no.: 859-404
Jumper; for jumper slot; 4-way; insulated; light gray

www.wago.com/859-404

Item no.: 859-409/000-006
Jumper; for jumper slot; 9-way; insulated; blue

www.wago.com/859-409
/000-006

Item no.: 859-402/000-006
Jumper; for jumper slot; 2-way; insulated; blue

www.wago.com/859-402
/000-006

Item no.: 859-402
Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/859-402

Item no.: 859-402/000-005
Jumper; for jumper slot; 2-way; insulated; red

www.wago.com/859-402
/000-005

Item no.: 859-406/000-006
Jumper; for jumper slot; 6-way; insulated; blue

www.wago.com/859-406
/000-006

Item no.: 859-406/000-029
Jumper; for jumper slot; 6-way; insulated; signal yellow

www.wago.com/859-406
/000-029

Item no.: 859-407/000-006
Jumper; for jumper slot; 7-way; insulated; blue

www.wago.com/859-407
/000-006

Item no.: 859-407/000-005
Jumper; for jumper slot; 7-way; insulated; red

www.wago.com/859-407
/000-005

Item no.: 859-407/000-029
Jumper; for jumper slot; 7-way; insulated; yellow

www.wago.com/859-407
/000-029

Item no.: 859-407
Jumper; for jumper slot; 7-way; insulated; light gray

www.wago.com/859-407

Power supplies

Power supply unit

Item no.: 787-2852
Switched-mode power supply; 1-phase; 24 VDC output voltage; 1 A output current

www.wago.com/787-2852

Cables and pluggable connectors

Subject to changes. Please also observe the further product documentation!

Communication cable

	Item no.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m	www.wago.com/750-923 /000-001

Current transformers

Rogowski coil

	Item no.: 855-9150/2000-1251 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 125 mm	www.wago.com/855-9150 /2000-1251
	Item no.: 855-9150/2000-1751 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 175 mm	www.wago.com/855-9150 /2000-1751
	Item no.: 855-9150/2000-701 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length: 1.5 m; Feedthrough for measurement conductor 70 mm	www.wago.com/855-9150 /2000-701
	Item no.: 855-9450/2000-1251 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 125 mm	www.wago.com/855-9450 /2000-1251
	Item no.: 855-9450/2000-1751 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 175 mm	www.wago.com/855-9450 /2000-1751
	Item no.: 855-9450/2000-701 Rogowski coil; Primary rated current 1000 A; Output signal 22.5 mV per kA; Cable length 4.5 m; Feedthrough for measurement conductor 70 mm	www.wago.com/855-9450 /2000-701
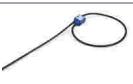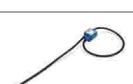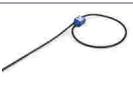
Terminal blocks

Supply module

	Item no.: 857-979 Supply and through module	www.wago.com/857-979

Downloads
Documentation

Bid Text

857-552 pdf - Datei	2019 Jul 15	pdf 78.5 kB	Download
857-552 X81 - Datei	2019 Jul 15	xml 7.5 kB	Download
857-552	2019 Jul 15	docx 20.6 kB	Download

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docx - Datei

Instruction Leaflet

CCC Ex (Additional information) 857-***	2023 Apr 26	pdf 144.4 kB	Download
Rogowski-Messumformer		pdf 2.4 MB	Download

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download

Engineering-Software

Configuration and Commissioning Software

WAGO Interface Configuration Software G2 FULL The full setup, in addition to the WAGO Interface Configuration Software G2, includes the installation for the Microsoft .NET Framework.	1.00.10.01 2022 Jan 20	exe 114.9 MB	Download
WAGO Interface Configuration Software G2 SMALL The full setup only includes the WAGO Interface Configuration Software G2.	1.00.10.01 2022 Jan 20	exe 31.0 MB	Download

CAD/CAE-Data

CAE data

EPLAN Data Portal 857-552	URL	Download
WSCAD Universe 857-552	URL	Download
ZUKEN Portal 857-552	URL	Download

CAD data

2D/3D Models 857-552	URL	Download

Environmental Product Compliance

Compliance Search

Subject to changes. Please also observe the further product documentation!

Environmental Product Compliance 857-552

Current signal conditioner; Input for Rogowski coils; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm²

Installation Notes

### Configuring
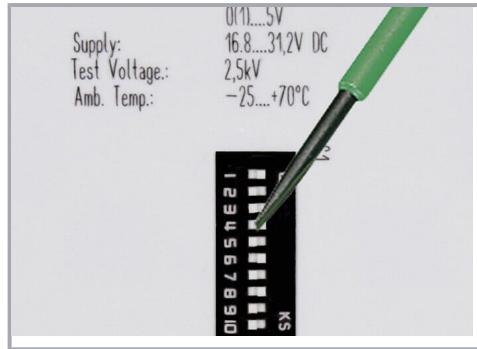
Configuration via DIP switch
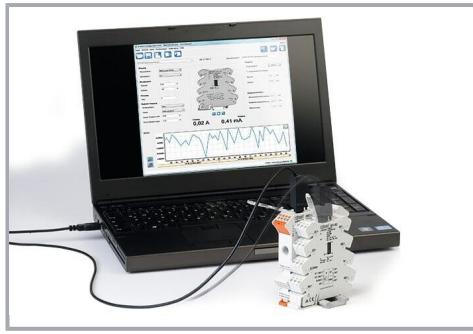
Configuration via WAGO Interface
Configuration Software
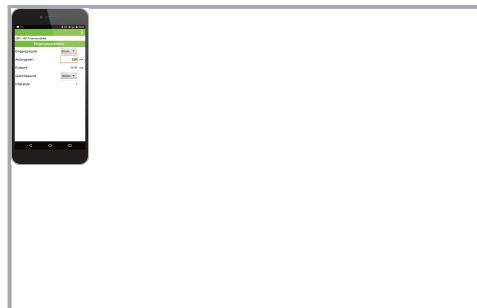
Configuration via WAGO Interface
Configuration App

Commoning

Subject to changes. Please also observe the further product documentation!

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32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
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Commoning, not discrete wiring – Same outline allows use of a single in-line, push-in jumper.

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