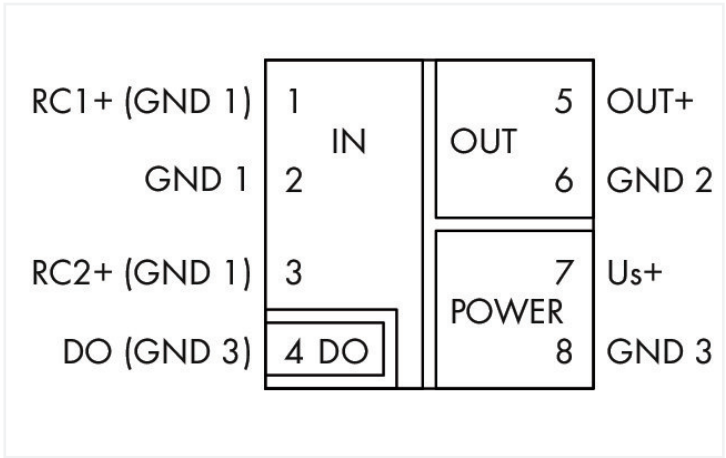


Data Sheet | Item Number: 857-552

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



<https://www.wago.com/857-552>



857-552

DIP Switch Adjustability

• = ON

Default

DIP Switch S1

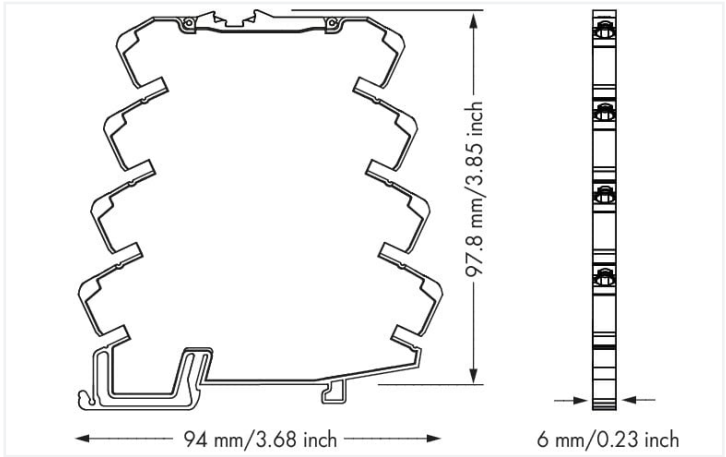
Input Signal		RC Configuration Input		Filter	Output Signal		
1		2		3	4	5	6
RC1 = RT500 from LEM		RC2A = RT2000 from LEM		off			0...20 mA
• RC2		• RC2B = 22.5 mV/A		• active		•	4...20 mA
					•		0...10 V
					•	•	2...10 V
							0...10 mA
						•	2...10 mA
					•	•	0...5 V
					•	•	1...5 V

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 +5.5%	Upper limit of measurement range +2.5.5%	Upper limit of measurement range +5.5%			DO not active
•		Lower limit of measurement range	Upper limit of measurement range +2.5 %	Upper limit of measurement range +5 %	•	•	DO U _i + 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



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

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) 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)

Signaling and communication	
Configuration options	WAGO Interface Configuration App WAGO Interface Configuration Software DIP switch
Input signal (voltage)	50 Hz sinusoidal signals: AC 10.05 mV (RC1); AC 40.2 mV (RC2A); AC 90 mV (RC2B)

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

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

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19

Approvals for hazardous areas



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



Downloads

Environmental Product Compliance

Compliance Search			
Environmental Product Compliance 857-552			↓

Documentation

Bid Text			
857-552	15.07.2019	xml 7.28 KB	↓
857-552	15.07.2019	docx 20.09 KB	↓
857-552	15.07.2019	pdf 76.68 KB	↓

Instruction Leaflet			
CCC Ex (Additional information)		pdf 140.99 KB	↓
Rogowski-Messumformer		pdf 2320.92 KB	↓

CAD/CAE-Data

CAD data	
2D/3D Models 857-552	
↓	

CAE data	
EPLAN Data Portal 857-552	
↓	
WSCAD Universe 857-552	
↓	
ZUKEN Portal 857-552	
↓	

Engineering-Software

Software for Interface-Products			
WAGO Interface Configuration Software G2 FULL	1.0.8.6 20.01.2022	exe 111289.67 KB	↓
WAGO Interface Configuration Software G2 SMALL	1.0.8.6 20.01.2022	exe 29307.84 KB	↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors



1.1.1.1 Communication cable



Item No.: [750-923/000-001](#)
Configuration cable; USB connector;
Length: 5 m

1.1.2 Communication

1.1.2.1 Bluetooth



Item No.: [750-921](#)
Bluetooth® Adapter

1.1.2.2 Communication cable



Item No.: [750-923](#)
Configuration cable; USB connector;
Length: 2.5 m

1.1.3 Current transformer

1.1.3.1 Rogowski coil



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



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



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



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



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



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

1.1.4 Interface module

1.1.4.1 Interface adapters



Item No.: [857-980](#)
Interface adapter; 16-pole; analog

1.1.5 Jumper



1.1.5.1 Jumper

 Item No.: 281-482 Jumper; 2-way; insulated; gray	 Item No.: 859-410/000-006 Jumper; for jumper slot; 10-way; insulated; blue	 Item No.: 859-410 Jumper; for jumper slot; 10-way; insulated; light gray	 Item No.: 859-410/000-005 Jumper; for jumper slot; 10-way; insulated; red
 Item No.: 859-410/000-029 Jumper; for jumper slot; 10-way; insulated; yellow	 Item No.: 859-402/000-006 Jumper; for jumper slot; 2-way; insulated; blue	 Item No.: 859-402 Jumper; for jumper slot; 2-way; insulated; light gray	 Item No.: 859-402/000-005 Jumper; for jumper slot; 2-way; insulated; red
 Item No.: 859-402/000-029 Jumper; for jumper slot; 2-way; insulated; yellow	 Item No.: 859-403/000-006 Jumper; for jumper slot; 3-way; insulated; blue	 Item No.: 859-403 Jumper; for jumper slot; 3-way; insulated; light gray	 Item No.: 859-403/000-005 Jumper; for jumper slot; 3-way; insulated; red
 Item No.: 859-403/000-029 Jumper; for jumper slot; 3-way; insulated; yellow	 Item No.: 859-404/000-006 Jumper; for jumper slot; 4-way; insulated; blue	 Item No.: 859-404 Jumper; for jumper slot; 4-way; insulated; light gray	 Item No.: 859-404/000-005 Jumper; for jumper slot; 4-way; insulated; red
 Item No.: 859-404/000-029 Jumper; for jumper slot; 4-way; insulated; yellow	 Item No.: 859-405/000-006 Jumper; for jumper slot; 5-way; insulated; blue	 Item No.: 859-405 Jumper; for jumper slot; 5-way; insulated; light gray	 Item No.: 859-405/000-005 Jumper; for jumper slot; 5-way; insulated; red
 Item No.: 859-405/000-029 Jumper; for jumper slot; 5-way; insulated; yellow	 Item No.: 859-406/000-006 Jumper; for jumper slot; 6-way; insulated; blue	 Item No.: 859-406 Jumper; for jumper slot; 6-way; insulated; light gray	 Item No.: 859-406/000-005 Jumper; for jumper slot; 6-way; insulated; red
 Item No.: 859-406/000-029 Jumper; for jumper slot; 6-way; insulated; signal yellow	 Item No.: 859-407/000-006 Jumper; for jumper slot; 7-way; insulated; blue	 Item No.: 859-407 Jumper; for jumper slot; 7-way; insulated; light gray	 Item No.: 859-407/000-005 Jumper; for jumper slot; 7-way; insulated; red
 Item No.: 859-407/000-029 Jumper; for jumper slot; 7-way; insulated; yellow	 Item No.: 859-408/000-006 Jumper; for jumper slot; 8-way; insulated; blue	 Item No.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray	 Item No.: 859-408/000-005 Jumper; for jumper slot; 8-way; insulated; red
 Item No.: 859-408/000-029 Jumper; for jumper slot; 8-way; insulated; yellow	 Item No.: 859-409/000-006 Jumper; for jumper slot; 9-way; insulated; blue	 Item No.: 859-409 Jumper; for jumper slot; 9-way; insulated; light gray	 Item No.: 859-409/000-005 Jumper; for jumper slot; 9-way; insulated; red
 Item No.: 859-409/000-029 Jumper; for jumper slot; 9-way; insulated; yellow			

1.1.6 Marking

1.1.6.1 Marker

 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	 Item No.: 793-502 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-566 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white	 Item No.: 793-503 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white
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1.1.6.1 Marker



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



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



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



Item No.: 793-501
WMB marking card; as card; not stretcha-
ble; plain; snap-on type; white



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

1.1.6.2 Marking strip



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

1.1.7 Power supply

1.1.7.1 Power supply unit



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

1.1.8 Relay module

1.1.8.1 Relay module



Item No.: 857-304
Relay module; Nominal input voltage: 24
VDC; 1 changeover contact; Limiting con-
tinuous current: 6 A; Yellow status indica-
tor; Module width: 6 mm; 2,50 mm²; gray

1.1.9 Screwless end stop

1.1.9.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-
rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-197
Screwless end stop; 14 mm wide; for DIN-
rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-
rail 35 x 15 and 35 x 7.5; gray

1.1.10 Terminal blocks

1.1.10.1 Supply module



Item No.: 857-979
Supply and through module

1.1.10.2 Through terminal block



Item No.: 857-979
Supply and through module

1.1.11 Tool

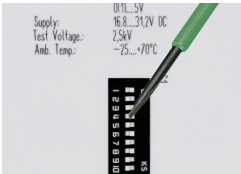
1.1.11.1 Operating tool



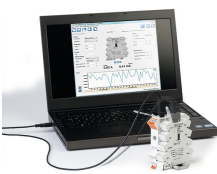
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

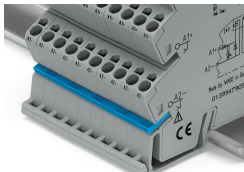


Configuration via WAGO Interface Configuration Software



Configuration via WAGO Interface Configuration App

Commoning



Commoning, not discrete wiring – Same outline allows use of a single in-line, push-in jumper.