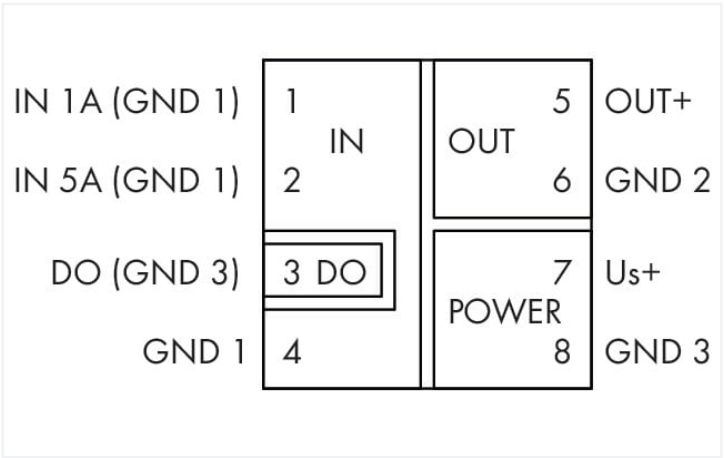
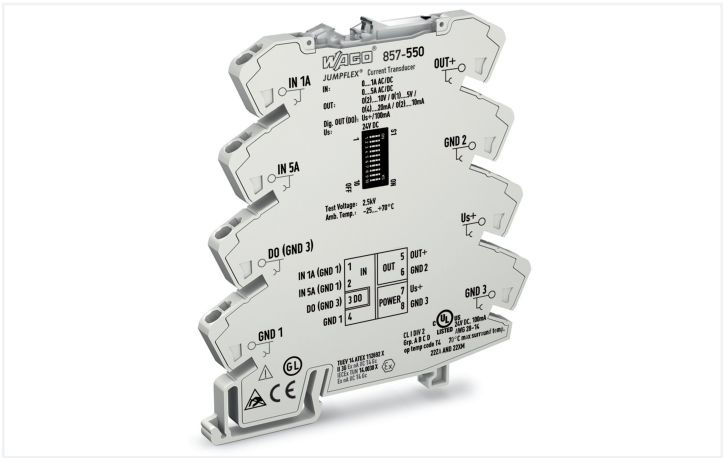


Data Sheet | Item Number: 857-550

Current signal conditioner; Current input signal; 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/857-550>



857-550
DIP Switch Adjustability

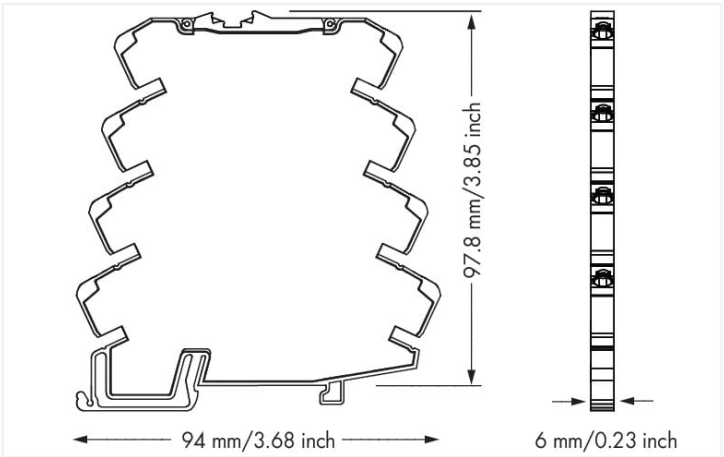
DIP Switch S1

Input Signal	Measurement Method	Filter	Output Signal
1	2	3	4 5 6
5 A	Mean square value	off	0 ... 20 mA
• 1 A	Arithmetic mean value	• 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

Measurement Range Underflow	Measurement Range Overflow	Overcurrent (Input Signal - End Value + 20%)	Digit Output DO Signalling
7 8			9 10
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	Upper limit of measurement range	• DO U+ 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



Dimensions in mm

Short description:

WAGO's current signal conditioner measures both 0–1 A and 0–5 A AC/DC currents, converting the input signal to an standard analog signal at the output.

Features:

- PC configuration interface
- True RMS measurement or arithmetic mean value
- Digital switching output (configurable switching thresholds)
- Switchable filter function
- Calibrated measurement range switching
- 3-way electrical isolation with 2.5 kV test voltage
- Extremely fast response times
- Measurement range overflow indication



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

Technical data

Configuration		Input	
Configuration options	DIP switch WAGO Interface Configuration Software WAGO Interface Configuration App	Input signal type	Current
		Input signal (current)	AC/DC 0 ... 1 A (IN 1); AC/DC 0 ... 5 A (IN 2)
		Frequency range	16 ... 400 Hz
		Input resistance (current input)	47 mΩ (IN 1); 10 mΩ (IN 2)
		Input current (max.)	10 A (IN 1; 5 s); 15 A (IN 2; 5 s)
		Response threshold	2 mA (IN 1); 4 mA (IN 2)

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)	≥ 2 kΩ (Temperature range restrictions may occur.)
Load impedance (current output)	≤ 600 Ω (Temperature range restrictions may occur.)

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	
Measurement method	True RMS measurement; Arithmetic mean value
Software filter (adjustable)	Moving average value (filter level: 30)
Step response (typ.)	60 ms

Measurement error	
Transmission error (typ.)	≤ 0.1 % of upper-range value
Transmission error (max.)	≤ 0.4 % of upper-range value
Temperature coefficient	≤ 0.01 %/K

Power 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 _{bo})

Safety and protection		Test voltage	
Protection type	IP20	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	
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.418 MJ
Weight	64 g

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

Standards and specifications	
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Standards/specifications	EN 50121-3-2 DNV

Commercial data	
Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-21-01-23
eCl@ss 9.0	27-21-01-23
ETIM 9.0	EC002475
ETIM 8.0	EC002475
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821226734
Customs tariff number	85437090300



Environmental Product Compliance	
CAS-No.	79-94-7 80-05-7 1303-86-2 1317-36-8 7439-92-1 75980-60-8
REACH Candidate List Substance	Lead monoxide Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)- 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4,4'-isopropylidenediphenol Diboron trioxide Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	50f64a02-d6d3-4adb-a7b9-f815da2344ad
SCIP notification number (Belgium)	0e04df68-4c33-4c78-ade6-82bf60716e8f
SCIP notification number (Bulgaria)	d1dc9f2a-4544-48c8-8c42-717ec18dc517
SCIP notification number (Czech Republic)	1a2ce406-9928-4d64-aeb5-27a0e58a61ff
SCIP notification number (Denmark)	4e1a4190-497b-4457-98c6-445a2a2407aa
SCIP notification number (Finland)	10e56fdb-95fd-4317-8b19-0eec048887fc
SCIP notification number (France)	0152e5b3-4bb3-407b-962c-95da92c8f591
SCIP notification number (Germany)	7d05eaec-2f49-4372-825c-639900cb0cfa
SCIP notification number (Hungary)	8a6d556b-a2a5-47d7-be2c-0f7f08b455aa
SCIP notification number (Italy)	80363ecc-0750-47b3-8adc-6d8d376cb109
SCIP notification number (Netherlands)	4c0930d7-0757-44b2-a2ac-a852f21c8101
SCIP notification number (Poland)	e163f598-e916-448a-8e77-616fb920165c
SCIP notification number (Romania)	c1c27efe-e372-4fb2-b5a4-5eac757ec01f
SCIP notification number (Sweden)	6a471be4-9d63-4d9d-9da5-8ddf090e997c

Approvals / Certificates

General approvals		Declarations of conformity and manufacturer's declarations
Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4
		Approval Standard Certificate Name EU-Declaration of Confor- - - mity WAGO GmbH & Co. KG

Approvals for marine applications		Approvals for hazardous areas
Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1
		Approval Standard Certificate Name ATEX EN 60079-0 TUEV14ATEX112692X (II TUEV Nord Cert GmbH 3G Ex ec IIC T4 Gc) CCC CNCA-C23-01 2020312310000210 (Ex CNEX ec IIC T4 Gc) IECEX - IECEX TUN14.0030X TUEV Nord Cert GmbH UKEX EN 60079-0 WAGO22UKEX004X WAGO GmbH & Co. KG



Approvals for hazardous areas

UL	ANSI/ISA 12.12.01	E198726
Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)		

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 857-550

Documentation

Manual
WAGO Current and Vol- tage Signal Conditi- oners and Power Measu- rement Modules

Bid Text			
857-550	15.07.2019	xml 7.34 KB	
857-550	15.07.2019	docx 18.83 KB	
857-550	15.07.2019	pdf 77.51 KB	

Instruction Leaflet			
CCC Ex (Additional in- formation)	26.04.2023	pdf 140.99 KB	
Messumformer und Trennverstärker	V 2.0.0 14.06.2023	pdf 2204.91 KB	

CAD/CAE-Data

CAD data
2D/3D Models 857-550

CAE data	
EPLAN Data Portal 857-550	
WSCAD Universe 857-550	
ZUKEN Portal 857-550	



Engineering-Software

Configuration and Commissioning Software

WAGO Interface Configuration Software G2 FULL	1.00.10.01 20.01.2022	exe 112213.07 KB	
WAGO Interface Configuration Software G2 SMALL	1.00.10.01 20.01.2022	exe 30238.22 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 Plug-in current transformer



[Item No.: 855-305/300-501](#)
Plug-in current transformer; Primary rated current 300 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1



[Item No.: 855-405/750-501](#)
Plug-in current transformer; Primary rated current 750 A; Secondary rated current: 5 A; Rated power: 5 VA; Accuracy class: 1



[Item No.: 855-301/100-201](#)
Plug-in current transformer; Primary rated current: 100 A; Secondary rated current: 1 A; Rated power: 2.5 VA; Accuracy class: 1



[Item No.: 855-305/100-201](#)
Plug-in current transformer; Primary rated current: 100 A; Secondary rated current: 5 A; Rated power: 2.5 VA; Accuracy class: 1



[Item No.: 855-501/1000-1001](#)
Plug-in current transformer; Primary rated current: 1000 A; Secondary rated current: 1 A; Rated power: 10 VA; Accuracy class: 1



[Item No.: 855-801/1000-1001](#)
Plug-in current transformer; Primary rated current: 1000 A; Secondary rated current: 1 A; Rated power: 10 VA; Accuracy class: 1



[Item No.: 855-505/1000-1001](#)
Plug-in current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 10 VA; Accuracy class: 1



[Item No.: 855-301/150-501](#)
Plug-in current transformer; Primary rated current: 150 A; Secondary rated current: 1 A; Rated power: 5 VA; Accuracy class: 1



1.1.3.2 Split-core current transformer

 Item No.: 855-4001/100-001 Split-core current transformer; Primary rated current: 100 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-3001/100-003 Split-core current transformer; Primary rated current: 100 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 3; Cable length: 3 m	 Item No.: 855-5001/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 1 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 5 m	 Item No.: 855-5101/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 1 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 5 m
 Item No.: 855-5005/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m	 Item No.: 855-5105/1000-000 Split-core current transformer; Primary rated current: 1000 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m	 Item No.: 855-4001/150-001 Split-core current transformer; Primary rated current: 150 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-4005/150-101 Split-core current transformer; Primary rated current: 150 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m
 Item No.: 855-4001/200-001 Split-core current transformer; Primary rated current: 200 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 0.5; Cable length: 3 m	 Item No.: 855-3001/200-001 Split-core current transformer; Primary rated current: 200 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-4101/200-001 Split-core current transformer; Primary rated current: 200 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-3001/250-001 Split-core current transformer; Primary rated current: 250 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m
 Item No.: 855-4101/250-001 Split-core current transformer; Primary rated current: 250 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-5001/250-001 Split-core current transformer; Primary rated current: 250 A; Secondary rated current: 1 A; Rated power: 0.5 VA; Accuracy class: 1; Cable length: 5 m	 Item No.: 855-4105/250-101 Split-core current transformer; Primary rated current: 250 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m	 Item No.: 855-4101/400-001 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 1; Cable length: 3 m
 Item No.: 855-5001/400-000 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 1 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 5 m	 Item No.: 855-5005/400-001 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 1; Cable length: 3 m	 Item No.: 855-4105/400-101 Split-core current transformer; Primary rated current: 400 A; Secondary rated current: 5 A; Rated power: 1 VA; Accuracy class: 1; Cable length: 0.5 m	 Item No.: 855-3001/060-003 Split-core current transformer; Primary rated current: 60 A; Secondary rated current: 1 A; Rated power: 0.2 VA; Accuracy class: 3; Cable length: 3 m
 Item No.: 855-5001/600-000 Split-core current transformer; Primary rated current: 600 A; Secondary rated current: 1 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 5 m	 Item No.: 855-5005/600-000 Split-core current transformer; Primary rated current: 600 A; Secondary rated current: 5 A; Rated power: 0.5 VA; Accuracy class: 0.5; Cable length: 3 m		

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



1.1.5.1 Jumper

 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
 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 stretchable; 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 Potential distribution

1.1.7.1 Current and voltage tap



Item No.: 855-1851/350-000
Current and voltage tap up to 185 mm²;
Primary rated current: 350 A; Secondary
rated current: 1 A; Rated power: 0.2 VA;
Accuracy class: 0.5; fused



Item No.: 855-501/150-000
Current and voltage tap up to 50 mm²;
Primary rated current: 150 A; Secondary
rated current: 1 A; Rated power: 0.2 VA;
Accuracy class: 0.5; fused



Item No.: 855-951/250-000
Current and voltage tap up to 95 mm²; Pri-
mary rated current: 250 A; Secondary ra-
ted current: 1 A; Rated power: 0.2 VA; Ac-
curacy class: 0.5; fused

1.1.8 Power supply

1.1.8.1 Power supply



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

1.1.9 Relay module

1.1.9.1 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; gray

1.1.10 Screwless end stop

1.1.10.1 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

1.1.11 Terminal blocks

1.1.11.1 Supply module



Item No.: 857-979
Supply and through module

1.1.11.2 Through terminal block



Item No.: 857-979
Supply and through module

1.1.12 Tool

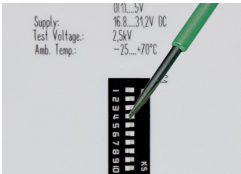
1.1.12.1 Operating tool



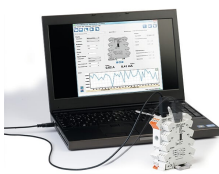
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

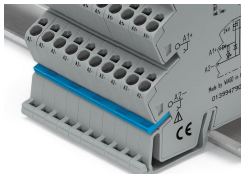


Configuration via WAGO Interface Configuration Software



Configuration via WAGO Interface Configuration App

Commoning



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