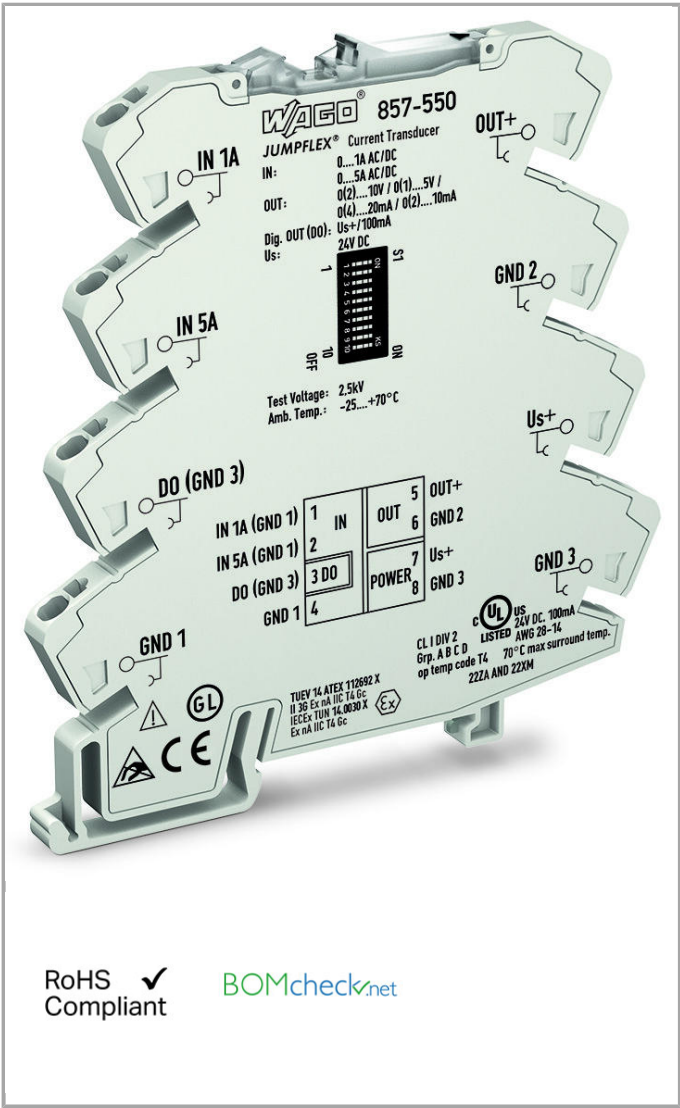


Data sheet | Item number: 857-550

Current signal conditioner; Current input signal; Current and voltage output signal; Digital output; Configuration via software; Supply voltage: 24 VDC; 6 mm module width

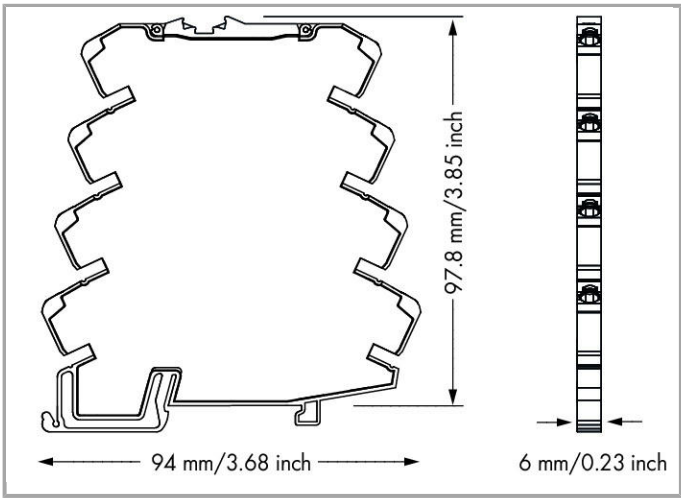
www.wago.com/857-550



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

RoHS
Compliant

BOMcheck.net



857-550
DIP Switch Adjustability

• = ON **Default**

DIP Switch S1

1	Input Signal	2	Measurement Method	3	Filter	4	5	6	Output Signal
•	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

7	8	Measurement Range Underflow	Measurement Range Overflow	Overcurrent (Input Signal - End Value + 20%)	9	10	Digit 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 U ₁ + 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

Item description

Short description:

The Current Signal Conditioner detects alternating and direct currents, (0 ... 1 A AC/DC and 0 ... 5 A AC/DC) and converts the input signal into a standard analog signal at the output side.

Features:

- PC configuration interface
- True RMS measurement or arithmetic mean value
- Digital switching output (configurable switching thresholds)
- Switchable filter function
- Calibrated measurement range switching
- Safe 3-way isolation with 2.5 kV test voltage per EN 61140
- Extremely fast response times
- Measuring range overflow indication

Note:

Additional setting options via interface configuration software or interface configuration app

Data Technical Data

Configuration

Configuration options

DIP switches
Interface configuration software
Interface configuration app



Input

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 (input/current)	47 mΩ (IN 1); 10 mΩ (IN 2)
Max. input current	10 A (IN 1; 5 s); 15 A (IN 2; 5 s)
Response threshold	2 mA (IN 1); 4 mA (IN 2)

Output

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 (output/voltage)	≥ 2 kΩ (temperature range restrictions may occur)
Load impedance (output/current)	≤ 600 Ω (temperature range restrictions may occur)

Output – Digital

Max. switching voltage (DO)	Supply voltage applied
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)

Signal processing

Measuring procedure	True RMS measurement (TRMS); Arithmetic mean value *
Software filter; adjustable	moving mean value (filtering 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

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



Safety and protection:

Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min
Protection class	IP20

Connection data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

Geometrical Data

Width	6 mm / 0.236 inch
Height from upper-edge of DIN-35 rail	97.8 mm / 3.85 inch
Depth	94 mm / 3.701 inch

Mechanical data

Type of mounting	DIN-35 rail
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Material Data

Color	light gray
Fire load	0 MJ
Weight	64 g

Environmental Requirements

Surrounding air (operating) temperature	-25 ... 70 °C (at nominal current)
Surrounding air (storage) temperature	-40 ... 85 °C

Standards and specifications

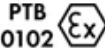
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4

Commercial data

Product Group	6 (Interface Electronics)
Country of origin	DE
GTIN	4050821226734

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0030_X
	IECEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	BV Bureau Veritas S.A.	-	40179_A0
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1
	PRS Polski Rejestr Statków	-	TE/2186 /880590/18

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Subject to changes.