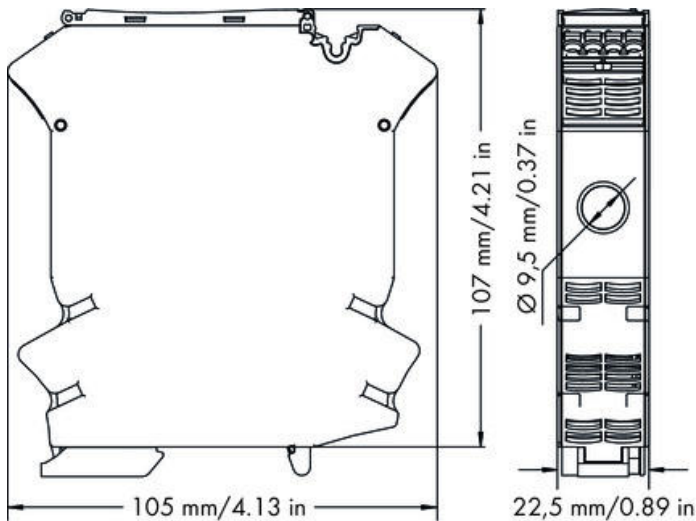
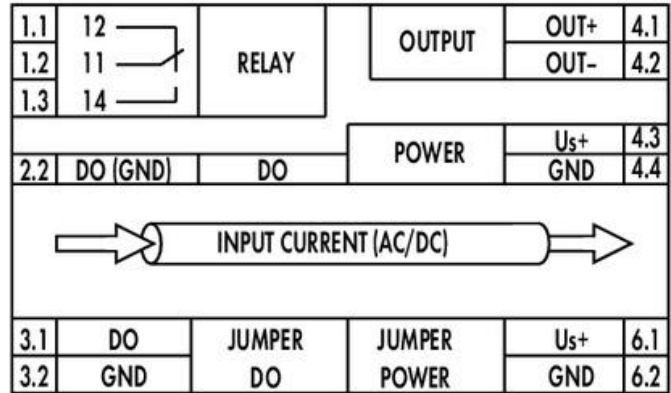


Data sheet | Item number: 2857-550



Current signal conditioner; Current input signal; Current and voltage output signal; Digital and relay output; Configuration via software; Supply voltage: 24 VDC; 22.5 mm module width

[www.wago.com/2857-550](http://www.wago.com/2857-550)



**Item description**

**Short description:** The 2857-550 Current Signal Conditioner measures AC/DC currents up to 100 A, while converting the measured current into an analog standard signal at the output.

**Features:**

- Both digital signal output and relay with changeover contact react to configured measuring range limits (switching ON/OFF delay and threshold value switch function configurable with up to two



threshold values).</li><li>Clipping capability provides analog signal limitation to output end values.</li><li>Adjustable software filter</li><li>Input /Output response simulation via configuration display</li><li>Safe 3-way isolation with 4 kV test voltage acc. to EN 61140</li></ul><br/><b>Note:</b><br/><p>(\*Additional setting options via interface configuration software or interface configuration app)</p>

## Data

### Technical Data

### Configuration

Configuration options	DIP switches Interface configuration software Interface configuration app Configuration display
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### Input

Input signal type	Current
Input signal, current	0.5 ... 100AAC; -100 ... 100ADC
Frequency range	15 ... 1000 Hz
Max. input current	AC/DC 100 A
Response threshold	500 mA (AC); 250 mA (DC)
Resolution	10 mA

### Output

Output signal type	Current Voltage
Output signal voltage	± 5 V; 0 ... 5 V; 1 ... 5 V; ± 10 V; 0 ... 10 V; 2 ... 10 V
Output signal current	± 10 mA; 0 ... 10 mA; 2 ... 10 mA; ± 20 mA; 0 ... 20 mA; 4 ... 20 mA
Software filter, adjustable	moving mean value (filtering level: 30)
Load impedance (output/voltage)	≥ 1 kΩ
Load impedance (output/current)	≤ 600 Ω

### Output – Digital

Max. switching voltage (DO)	Supply voltage applied: -0.3 V
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 or 2 (adjustable)
Configurable rise/fall delay time (DO)	0 ... 60 s (via software)

## Output – Relay

Number of changeover/switchover contacts	1
Relay contact material	AgNi (gold-plated)
Switching voltage (max.) AC	250 V
Max. switching voltage	250 VAC
Limiting continuous current (relay; terminal block assembly)	6A ( $\leq 60\text{ °C}$ ); 3A (60 ... 70 °C)
Dielectric strength open contact (AC, 1 min)	1 kV <sub>rms</sub>
Pull-in time (typ.)	8 ms
Drop-out time (typ.)	4 ms
Bounce time (typ.)	8 ms
Number of switching thresholds (relay)	1 or 2 (adjustable)
Configurable rise/fall delay time (relay)	0 ... 60 s (via software)

## Signal processing

Measuring procedure	True RMS measurement (TRMS); Arithmetic mean value *
Max. operating frequency	3.3 kHz
Software filter, adjustable	moving mean value (filtering level: 30)
Step response	60 ms (DC; at software filter 3/default setting); 250 ms (AC)

## Measurement error

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

## Power supply

Type of power supply	24 VDC
Nominal supply voltage $U_S$	24 VDC
Supply voltage range	$\pm 30\%$
Current consumption at supply voltage	$\leq 50\text{ mA}$ (+ $I_{DO}$ )

## Safety and protection:

Test voltage (input/output/supply)	2.5 kV AC; 50 Hz; 1 min
Voltage for isolation test	4 kV AC; 50 Hz; 1 min
Degree of protection	IP20



## Connection data

Connection technology	Push-in CAGE CLAMP®
WAGO terminal	picoMAX® 5.0
Solid conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm <sup>2</sup> / 24 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 Inch
Feedthrough for measurement conductor	Ø 9.5 mm

## Geometrical Data

Width	22.5 mm / 0.886 Inch
Height from upper-edge of DIN-35 rail	107 mm / 4.213 Inch
Depth	105 mm / 4.134 Inch

## Mechanical data

Type of mounting	DIN-35 rail
Degree of protection	IP20

## Material Data

Fire load	1.918 MJ
Weight	102.939 g

## Environmental Requirements

Surrounding air (operating) temperature	-40 ... 70 °C
Surrounding air (storage) temperature	-40 ... 85 °C

## Standards and specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61326-2-3; EN 50121-3-2
EMC emission of interference	EN 61000-6-4; EN 61326-2-3; EN 50121-3-2
Standards/specifications	EN 61010-1

## Commercial data

Country of origin	DE
GTIN	4050821676997
Customs Tariff No.	85437090300
Product Group	6 (Interface Electronics)



## Product family

### JUMPFLEX Signal Conditioners

The modules offer numerous technical highlights and feature a common profile, allowing the same flexible push-in jumpers to be used across the entire JUMPFLEX® line. With its new JUMPFLEX<sup>®</sup> Signal Conditioners, WAGO is continuing to expand its existing JUMPFLEX® portfolio, offering its customers the best solutions from a single source.

[Show all products from the family.](#)

Subject to changes.

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