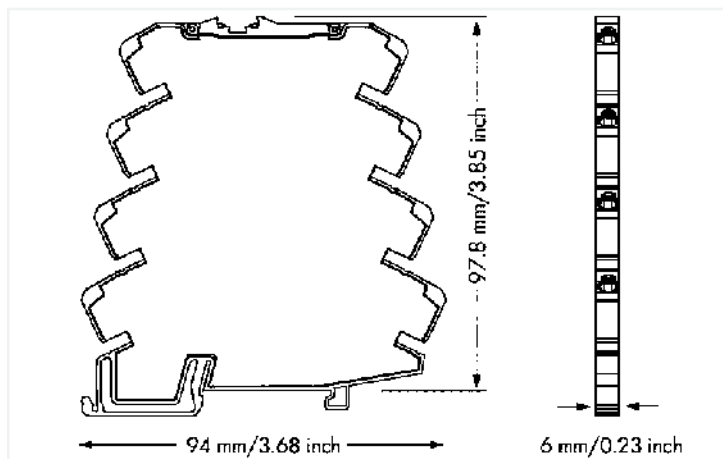
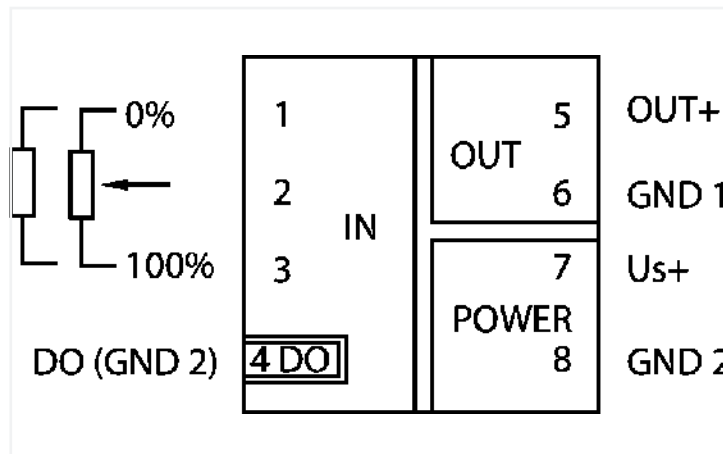
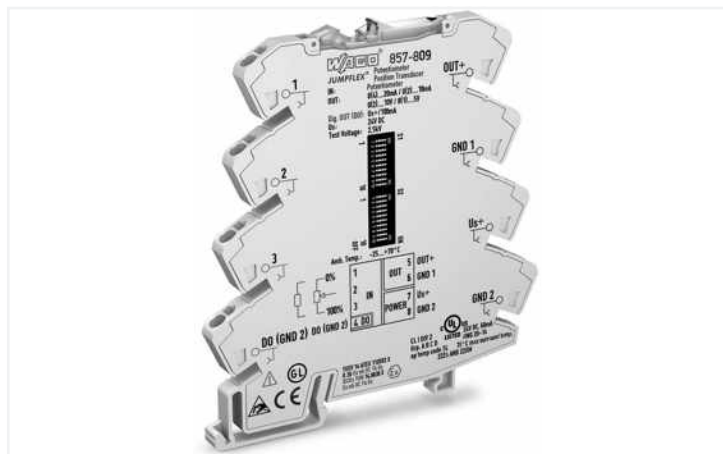


Data Sheet | Item Number: 857-809

Potentiometer signal conditioner; 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/857-809>



Dimensions in mm

Short description:

WAGO's potentiometer signal conditioner records resistance signals (e.g., from potentiometers) and converts them into a standard analog signal. The device is supplied with 24 VDC (nominal voltage). It is set via DIP switch or push/slide switch.

Features:

- PC configuration interface
- Calibrated measurement range switching
- Automatic potentiometer identification
- 3-way electrical isolation with 2.5 kV test voltage

Notes

Note

Use shielded signal lines!

Only use shielded signal lines for analog input and output signals. Only then can you ensure that the accuracy and interference immunity specified for the device can be achieved, even in the presence of interference acting on the signal cable.

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 Push/slide switch
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Input

Input signal type	Potentiometer Resistance
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Input – resistors

Input range (resistor)	10 Ω ... 100 k Ω
Input range (potentiometer)	100 Ω ... 100 k Ω
Potentiometer supply voltage (max.)	2.5 V
Measurement range (min.)	100 Ω

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)	\geq 2 k Ω
Load impedance (current output)	\leq 600 Ω

Output – digital

Switching voltage (DO) max.	Supply voltage applied
Number of switching thresholds (DO)	1 (adjustable)

Signaling and Communication

Configuration options	Push/slide switch WAGO Interface Configuration App WAGO Interface Configuration Software DIP switch
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Signal Processing

Step response (typ.)	32 ms
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Measurement Error

Transmission error (typ.)	\leq 0.1 % of upper-range value
Temperature coefficient	\leq 0.01 %/K

Supply

Power supply type	24 VDC
Nominal supply voltage U_s	DC 24 V
Supply voltage range	\pm 30 %
Current consumption at nominal supply voltage	\leq 40 mA (+ I_{DO})

Safety and protection

Rated voltage	300 V
Overvoltage category	II
Pollution degree	2
Protection type	IP20

Test voltage

Test voltage (input/output/supply)	AC 2 kV; 50 Hz; 1 min
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Insulation parameters

Insulation type (input/analog output/supply)	Functional insulation
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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 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
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Material Data

Fire load	0.405 MJ
Weight	36.6 g

Environmental requirements

Ambient temperature (operation at U _N)	-25 ... +70 °C
Surrounding air 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	DNV

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-21-01-20
eCl@ss 9.0	27-21-01-20
ETIM 8.0	EC002653
ETIM 7.0	EC002653
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821480761
Customs tariff number	85437090300