



Temperature signal conditioner for RTD sensors; Current and voltage output signal; Configuration via DIP switch; Supply voltage: 24 VDC; 6 mm module width

Item No.: 857-800



Temperature signal conditioner for RTD sensors; Current and voltage output signal; Configuration via DIP switch;
Supply voltage: 24 VDC; 6 mm module width

Marking

RoHS ✓
Compliant

Business data

Supplier	WAGO
Item no.	857-800
GTIN / EAN	4045454470128
Content	1

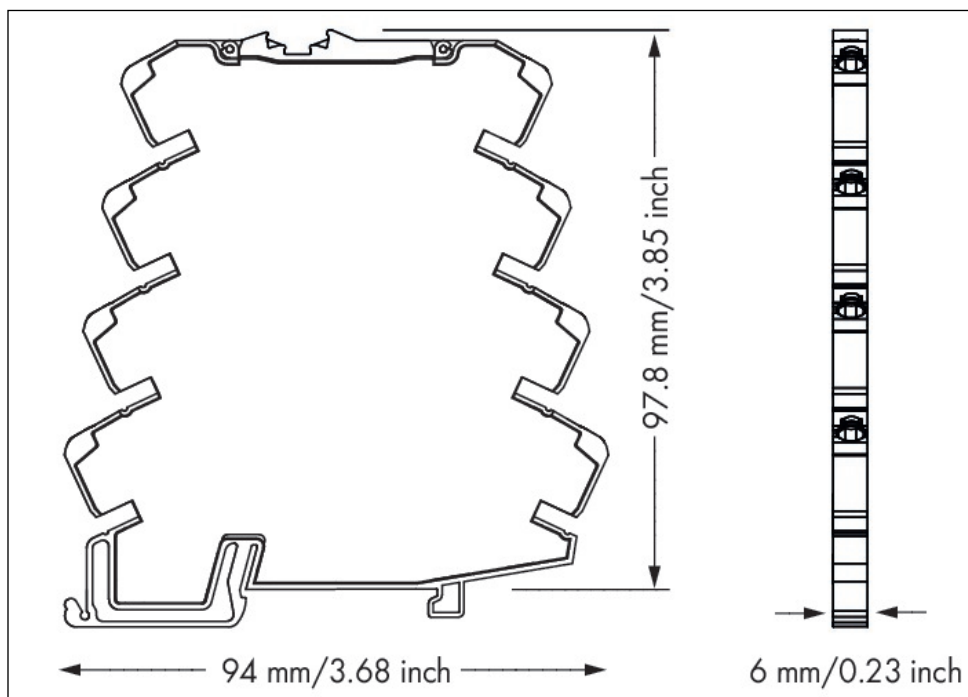
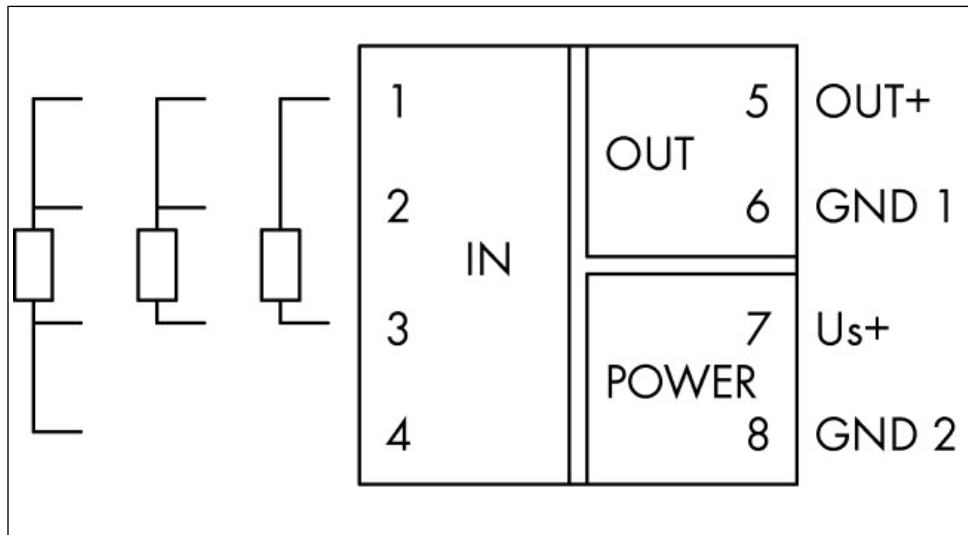
Notes

Item description: Short description: This temperature signal conditioner records Pt100, Pt200, Pt500, and Pt1000 Sensors, as well as resistors up to 4.5 kOhm, converting the temperature signal into a standard analog signal on the output side. Features: For Pt100, Pt200, Pt500 and Pt1000 sensors, as well as resistors up to 4.5 kOhm 2-, 3-, and 4-wire connection technology. Switching between measurement ranges is calibrated. Detect wire break/sensor short circuit. Detect measurement range underflow/measurement range overflow. Integrate a switchable clipping function to limit the standard analog signal to the upper range values. Safe 3-way isolation with 2.5 kV test voltage per EN 61140. 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

Technical data	
Miscellaneous	
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 Inch
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
Type of mounting	DIN-35 rail
Color	light gray
Fire load [MJ]	0.596 [MJ]
Weight [g]	35.3 [g]
Ambient temperature (operation)	-25 ... 70 °C
Ambient temperature (storage)	-40 ... 85 °C
Conformity marking	CE
EMC immunity to interference	EN 61000-6-2
EMC emission of interference	EN 61000-6-4
Product Family	JUMPFLEX Signal Conditioners
Main product function	Temperature signal conditioners
Product type	Signal conditioners
Type of power supply	24 VDC
Configuration options	DIP switches
Measured variable	Temperature

Images & drawings





857-800

DIP Switch Adjustability

• = ON

DIP Switch S1

Wire connection		Sensor type			Output signal			Measuring range underflow		Measuring range overflow		Wire break	Short circuit
1	2	3	4	5	6	7	8	9	10				
•	2-wire			Pt100			0 ... 20 mA			Lower limit of output range -5 % *	Upper limit of output range +2,5 % *	Upper limit of output range +5 % *	Lower limit of output range -12,5 % *
•	3-wire	•		Pt200	•		4 ... 20 mA						
•	4-wire	•		Pt500	•		0 ... 10 mA	•		Lower limit of output range	Upper limit of output range +2,5 %	Upper limit of output range +5 %	Lower limit of output range
		•		Pt1000	•		2 ... 10 mA						
			•	1 kΩ		•	0 ... 10 V	•		Lower limit of output range	Upper limit of output range	Upper limit of output range +5 %	Upper limit of output range +5 %
			•	4,5 kΩ	•	•	2 ... 10 V						
						•	0 ... 5 V	•		Lower limit of output range	Upper limit of output range	Lower limit of output range	Lower limit of output range
					•	•	1 ... 5 V	•					

* acc. to NAMUR NE 43

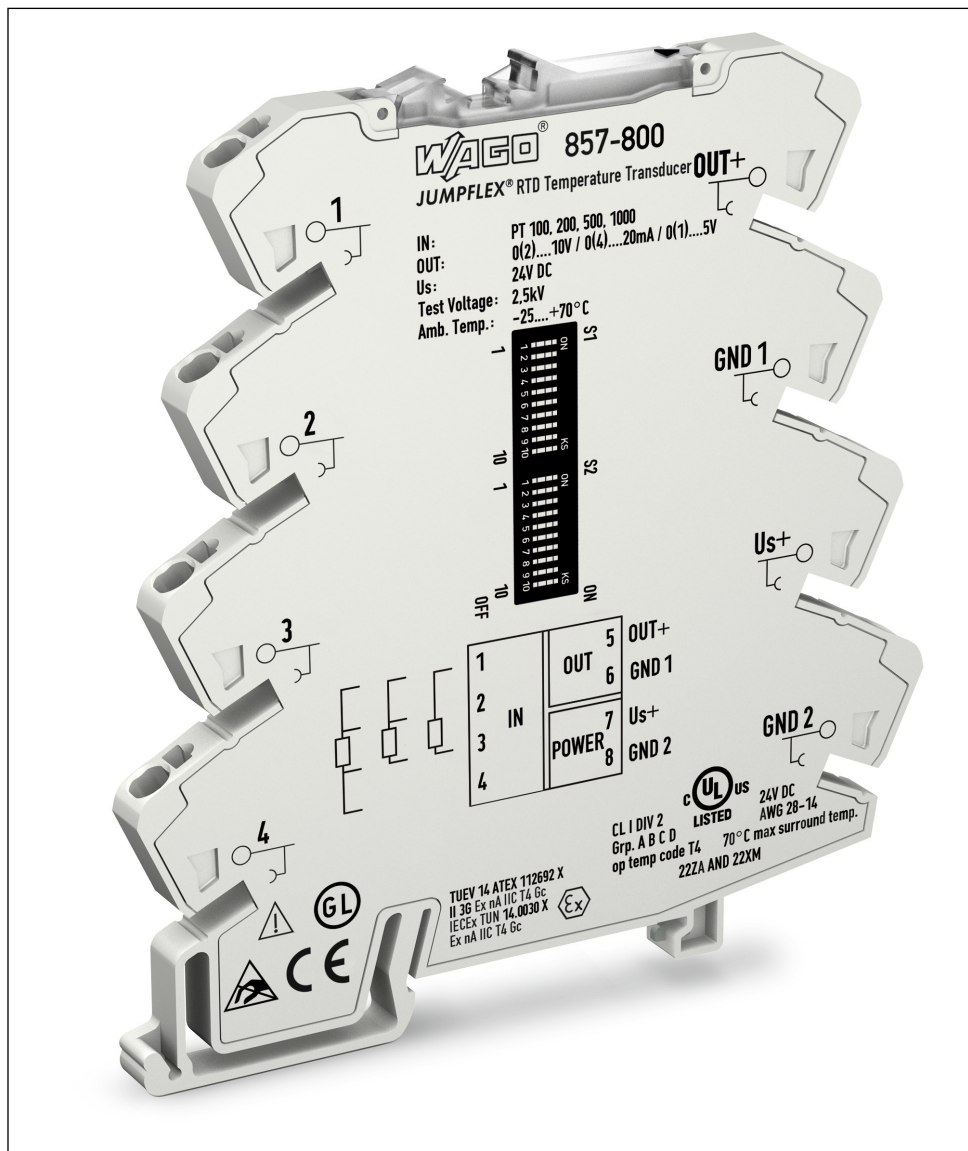
DIP Switch S2

Start temperature										End temperature																						
1	2	3	4	°C	°F	5	6	7	8	9	10	°C	°F	5	6	7	8	9	10	°C	°F	5	6	7	8	9	10	°C	°F			
•				-200	-328	•						0	32	•						76	167	•					210	410	•	•	478	887
	•			-175	-283	•						5	41	•						80	176	•					220	428	•	•	500	922
	•			-150	-238	•						10	50	•						90	194	•					240	464	•	•	535	997
•	•			-125	-193	•						15	59	•						95	203	•					250	482	•	•	578	1067
	•	•		-100	-146	•						20	68	•						100	212	•					260	500	•	•	600	1112
	•	•		-75	-103	•						25	77	•						110	230	•					270	518	•	•	635	1157
	•	•		-50	-58	•						30	86	•						120	248	•					280	536	•	•	660	1202
	•	•		-25	-13	•						35	95	•						130	266	•					290	554	•	•	678	1247
	•	•		0	32	•						40	104	•						140	284	•					300	572	•	•	700	1293
	•	•		25	77	•						45	113	•						150	302	•					320	596	•	•	725	1337
	•	•		50	118	•						50	122	•						160	320	•					340	632	•	•	750	1382
	•	•		75	165	•						55	131	•						170	338	•					360	668	•	•	775	1427
	•	•		100	212	•						60	140	•						180	356	•					380	686	•	•	800	1472
	•	•		125	257	•						65	149	•						190	374	•					400	752	•	•	825	1517
	•	•		150	302	•						70	158	•						200	392	•					420	797	•	•	850	1562

The minimum distance from the start temperature to the end temperature may not fall short of 50K degrees on the Celsius (°C) scale or 122K degrees on the Fahrenheit (°F) scale.

Default Settings

All DIP switches are in „OFF“ position for delivery.	
Sensor connection	2-wire
Sensor type	Pt 100
Start temperature	0 °C
End temperature	100 °C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA
Short circuit	0 mA



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Technische Änderungen und Irrtümer vorbehalten.