



JUMPFLEX® transducer; Temperature transducer; Pt100, Pt200, Pt500 and Pt1000; as well as resistance values ranging 0 ... 1 kOhm , 0 ... 5 kOhm

Item No.: 857-800



JUMPFLEX® transducer; Temperature transducer; Pt100, Pt200, Pt500 and Pt1000; as well as resistance values ranging 0 ... 1 kOhm , 0 ... 5 kOhm

Marking

RoHS ✓
Compliant

Business data

Supplier	WAGO
Item no.	857-800
GTIN / EAN	4045454470128
Content	1
Order amount	1
Customer item number	

Notes

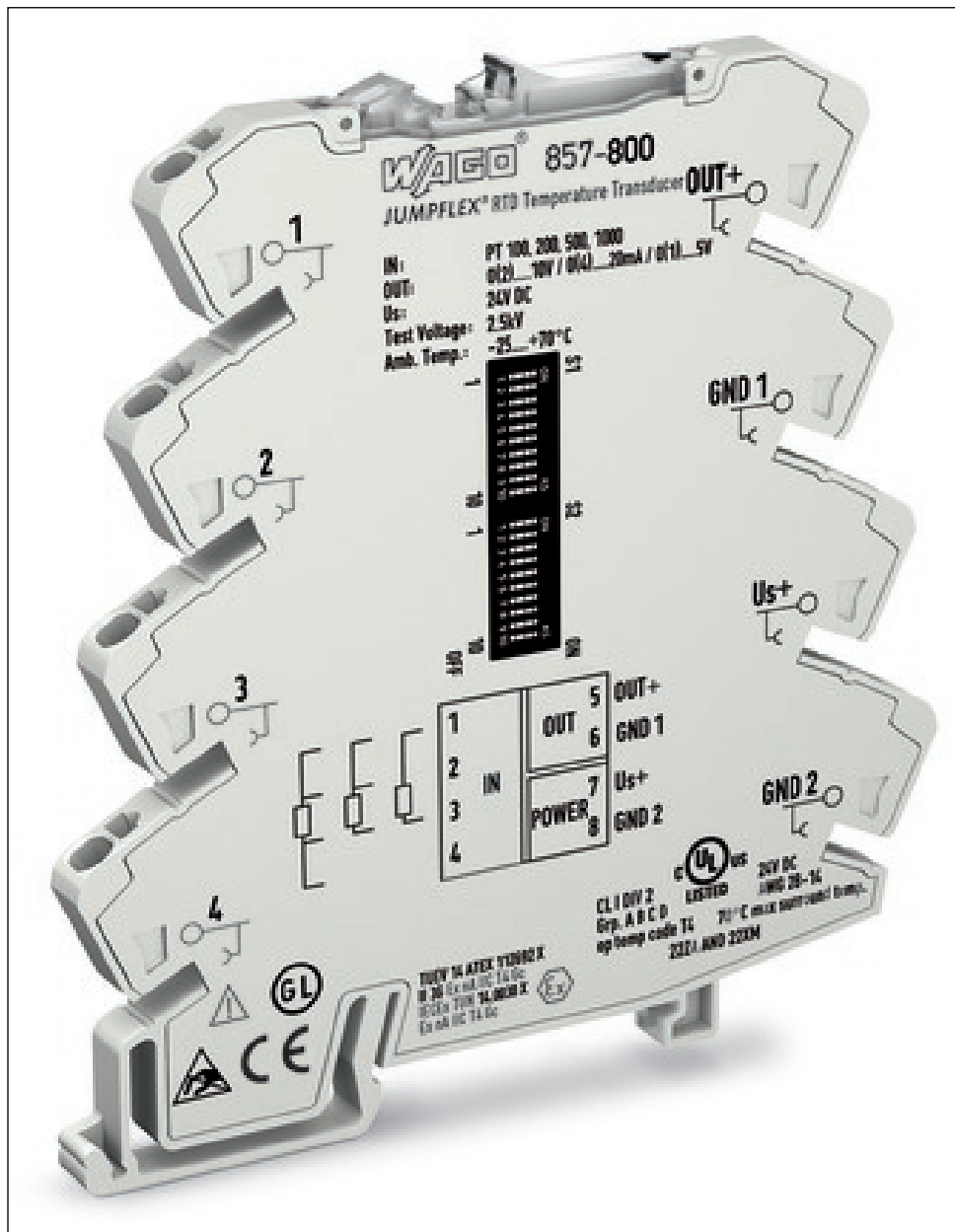
Item description: Short description: This temperature signal conditioner records Pt100, Pt200, Pt500, and Pt1000 Sensors, as well as resistors up to 4.5 kOhm, converting the temperature signal into a standard analog signal on the output side. Features: For Pt100, Pt200, Pt500 and Pt1000 sensors, as well 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

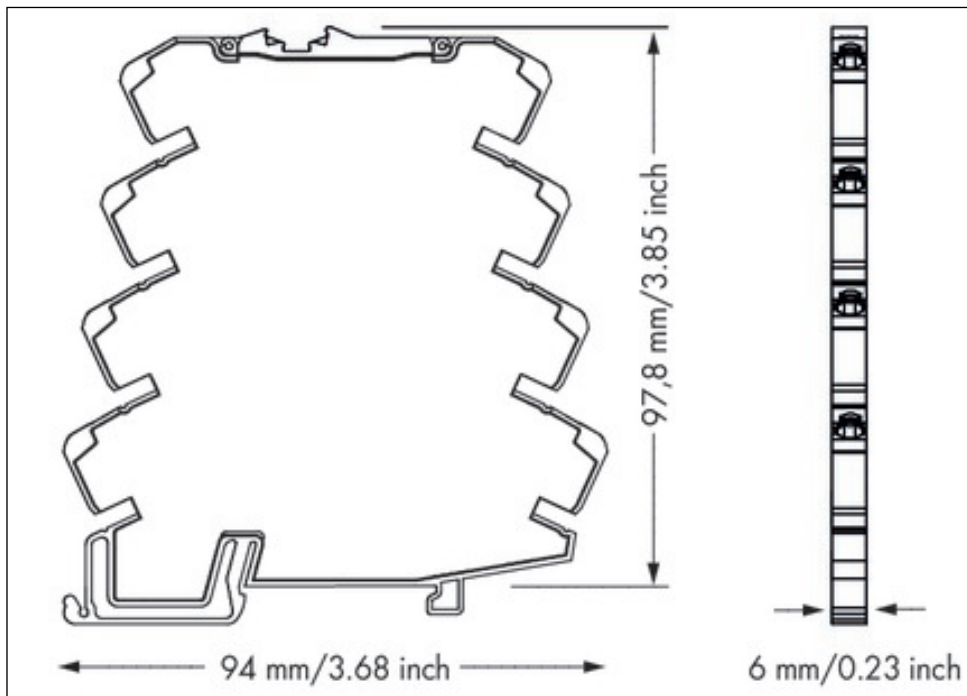
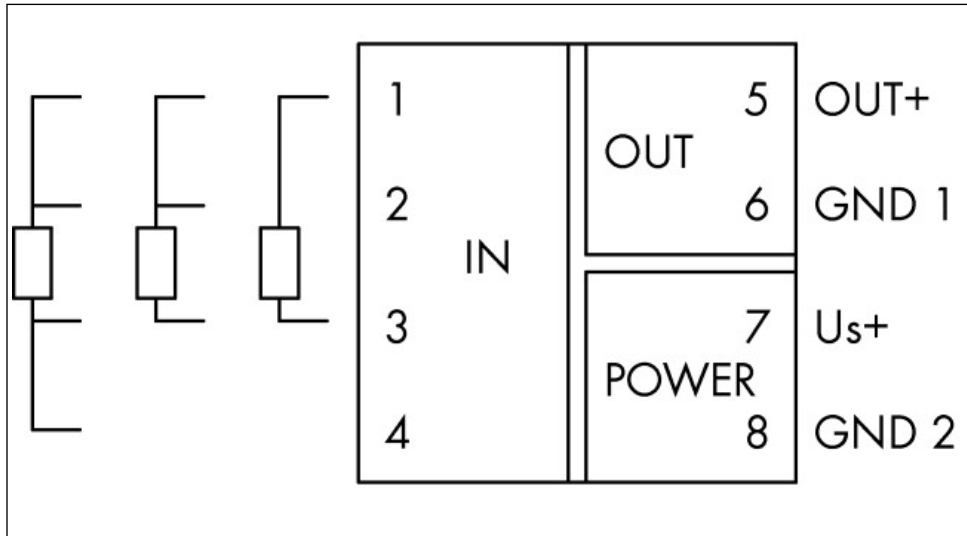
Technical data	
<i>Miscellaneous</i>	
<i>Packaging type</i>	<i>bag</i>
<i>Type of wiring</i>	<i>Front-entry wiring</i>
<i>Color</i>	<i>light gray</i>
<i>Weight [g]</i>	<i>35.3 [g]</i>
<i>Total number of potentials</i>	<i>8</i>
<i>Nominal supply voltage VS [V]</i>	<i>24 [V]</i>
<i>Supply voltage Us (min.) [%]</i>	<i>-30 [%]</i>
<i>Current consumption at 24 VDC [mA]</i>	<i>40 [mA]</i>
<i>Min. measuring span</i>	<i>-</i>
<i>Transmission error</i>	<i>0.1 % at max. measuring span</i>
<i>Transmission error of set measuring span</i>	<i>((10 K / set measuring span [K]) + 0.1) %</i>
<i>Temperature coefficient</i>	<i>0.02 % /K</i>
<i>Configuration options</i>	<i>DIP switches</i>
<i>Measured variable</i>	<i>Temperature</i>
<i>Type of power supply</i>	<i>24 VDC</i>
<i>Input signal type</i>	<i>Resistance</i>
<i>Input signal</i>	<i>PT sensors and resistors</i>
<i>Sensor types</i>	<i>Pt100, Pt200, Pt500, Pt1000</i>
<i>Sensor connection</i>	<i>2-wire, 3-wire, 4-wire (switchable)</i>
<i>Sensor supply current [mA]</i>	<i>< 0.5 [mA]</i>
<i>Temperature range</i>	<i>200 °C ... +850 °C</i>
<i>Resistor input</i>	<i>0 ... 1 k , 0 ... 4.5 k</i>
<i>Pt sensors input signal</i>	<i>Pt100</i>
<i>Input signal resistance</i>	<i>0 ... 1 k</i>
<i>Output signal type</i>	<i>Current</i>
<i>Load impedance (output/voltage)</i>	<i>> 2 k</i>
<i>Load impedance (output/current)</i>	<i>< 600</i>
<i>Step response</i>	<i>180 ms (360 ms at 3-wire)</i>
<i>Test voltage (input/output/supply)</i>	<i>2.5 kV (AC), 50 Hz, 1 min.</i>
<i>Connection technology</i>	<i>Push-in CAGE CLAMP®</i>
<i>Solid conductor</i>	<i>0.08 ... 2.5 mm² / 28 ... 14 AWG</i>
<i>Fine-stranded conductor</i>	<i>0.34 ... 2.5 mm² / 22 ... 14 AWG</i>
<i>Strip length</i>	<i>9 ... 10 mm / 0.35 ... 0.39 Inch</i>

Printview: JUMPFLEX® transducer; Temperature transducer; Pt100, Pt200, Pt500 and Pt1000; as well as resistance values ranging 0 ... 1 kOhm , 0 ... 5 kOhm - Item No.: 857-800

Technical data	
<i>Width</i>	<i>6 mm / 0.236 Inch</i>
<i>Height from upper-edge of DIN-35 rail</i>	<i>97.8 mm / 3.85 Inch</i>
<i>Depth</i>	<i>94 mm / 3.701 Inch</i>
<i>Type of mounting</i>	<i>Carrier rail 35 x 15</i>
<i>Total number of connection points</i>	<i>8</i>
<i>Ambient temperature</i>	<i>25 °C ... +70 °C</i>
<i>Conformity marking</i>	<i>CE</i>
<i>EMC immunity to interference</i>	<i>EN 61000-6-2</i>
<i>EMC emission of interference</i>	<i>EN 61000-6-4</i>

Images & drawings





857-800

OSP Switch Adjustability

4 of 6

OSP Switch (1)

Wire connection		Sensor type		Output signal		Measuring range underflow	Measuring range overflow	Wire break	Short circuit
1	2	3	4	5	6	°C	°F	mA	mA
0-wire	1-wire	PT100	PT100	0 ... 20 mA	0 ... 20 mA	Lower limit of output range -0.5%	Upper limit of output range +0.5%	Upper limit of output range +0.5%	Lower limit of output range -0.5%
0-wire	1-wire	PT100	PT100	0 ... 20 mA	0 ... 20 mA	Lower limit of output range	Upper limit of output range +0.5%	Upper limit of output range +0.5%	Lower limit of output range
0-wire	1-wire	PT100	PT100	0 ... 20 mA	0 ... 20 mA	Lower limit of output range	Upper limit of output range	Upper limit of output range	Lower limit of output range
0-wire	1-wire	PT100	PT100	0 ... 20 mA	0 ... 20 mA	Lower limit of output range	Upper limit of output range	Upper limit of output range	Lower limit of output range
0-wire	1-wire	PT100	PT100	0 ... 20 mA	0 ... 20 mA	Lower limit of output range	Upper limit of output range	Upper limit of output range	Lower limit of output range

* see to function table 4.3

OSP Switch (2)

Start temperature				End temperature																					
1	2	3	4	°C	°F	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	°C	°F		
0	1	2	3	0	32	0	10	50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	
0	1	2	3	100	212	100	212	150	302	200	392	250	482	300	572	350	662	400	752	450	842	500	932	550	1022
0	1	2	3	200	392	200	392	250	482	300	572	350	662	400	752	450	842	500	932	550	1022	600	1112	650	1202
0	1	2	3	300	572	300	572	350	662	400	752	450	842	500	932	550	1022	600	1112	650	1202	700	1292	750	1382
0	1	2	3	400	752	400	752	450	842	500	932	550	1022	600	1112	650	1202	700	1292	750	1382	800	1472	850	1562
0	1	2	3	500	932	500	932	550	1022	600	1112	650	1202	700	1292	750	1382	800	1472	850	1562	900	1652	950	1742
0	1	2	3	600	1112	600	1112	650	1202	700	1292	750	1382	800	1472	850	1562	900	1652	950	1742	1000	1832	1050	1922
0	1	2	3	700	1292	700	1292	750	1382	800	1472	850	1562	900	1652	950	1742	1000	1832	1050	1922	1100	2012	1150	2102
0	1	2	3	800	1472	800	1472	850	1562	900	1652	950	1742	1000	1832	1050	1922	1100	2012	1150	2102	1200	2192	1250	2282
0	1	2	3	900	1652	900	1652	950	1742	1000	1832	1050	1922	1100	2012	1150	2102	1200	2192	1250	2282	1300	2372	1350	2462
0	1	2	3	1000	1832	1000	1832	1050	1922	1100	2012	1150	2102	1200	2192	1250	2282	1300	2372	1350	2462	1400	2552	1450	2642

The minimum distance from the start temperature to the end temperature may not fall short of 50K degrees on the Celsius (C) scale or 100K degrees on the Fahrenheit (F) scale.

Default Settings

All OSP switches are in „OSP“ position for delivery	
Sensor connection	0-wire
Sensor type	PT100
Start temperature	0°C
End temperature	100°C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.0 mA
Wire break	0 mA
Short circuit	0 mA

Address

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Technische Änderungen und Irrtümer vorbehalten.