



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

Item No.: 857-810



Temperature signal conditioner for thermocouples; 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.	857-810
GTIN / EAN	4045454470135
Content	1

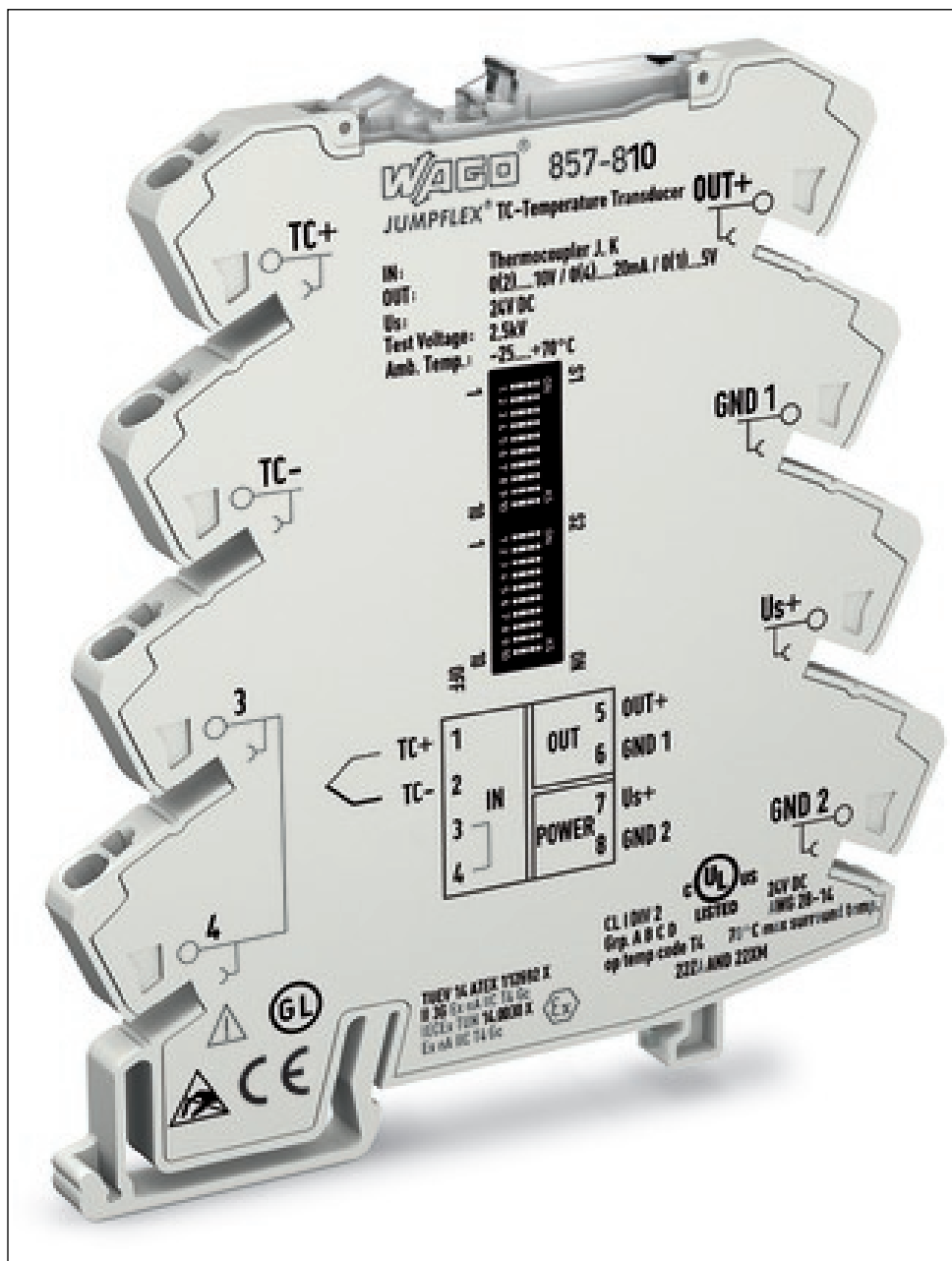
Notes

Item description: Short description: This temperature signal conditioner records signals from type J and K thermocouples and converts the temperature signal into a standard analog signal on the output side. Features: For type J and K thermocouples Cold junction compensation (on/off) Switching between measurement ranges is calibrated Detect sensor's wire break 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 Step response: 60 ms without cold junction compensation/120 ms with cold junction compensation 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

Printview: Temperature signal conditioner for thermocouples; Current and voltage output signal;
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Technical data	
<i>Miscellaneous</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>
<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>DIN-35 rail</i>
<i>Color</i>	<i>light gray</i>
<i>Fire load [MJ]</i>	<i>0.598 [MJ]</i>
<i>Weight [g]</i>	<i>35.5 [g]</i>
<i>Ambient temperature (operation)</i>	<i>-25 ... 70 °C</i>
<i>Ambient temperature (storage)</i>	<i>-40 ... 85 °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>
<i>Product Family</i>	<i>JUMPFLEX Signal Conditioners</i>
<i>Main product function</i>	<i>Temperature signal conditioners</i>
<i>Product type</i>	<i>Signal conditioners</i>
<i>Type of power supply</i>	<i>24 VDC</i>
<i>Configuration options</i>	<i>DIP switches</i>
<i>Measured variable</i>	<i>Temperature</i>

Images & drawings



857-810

DIP Switch Adjustability



DIP Switch S1

Cold junction compensation		Sensor type				Output signal		Measuring range underflow	Measuring range overflow	Wire break
1	2	3	4	5	6	7	8			
on			J			0...20 mA		Lower limit of output range -5 % ²	Upper limit of output range +2.5 % ²	Upper limit of output range +5 % ²
off	*		K	*		4...20 mA		Lower limit of output range	Upper limit of output range +2.5 %	Upper limit of output range +5 %
				*		0...10 mA	*	Lower limit of output range	Upper limit of output range +2.5 %	Upper limit of output range +5 %
				*	*	2...10 mA		Lower limit of output range	Upper limit of output range	Upper limit of output range +5 %
				*	*	0...10 V		Lower limit of output range	Upper limit of output range	Upper limit of output range +5 %
				*	*	2...10 V	*	Lower limit of output range	Upper limit of output range	Upper limit of output range +5 %
				*	*	0...5 V	*	Lower limit of output range	Upper limit of output range	Lower limit of output range
				*	*	1...5 V	*	Lower limit of output range	Upper limit of output range	Lower limit of output range

DIP 9 and 10 n.c.

² acc. to NAMUR NE 43

DIP Switch S2

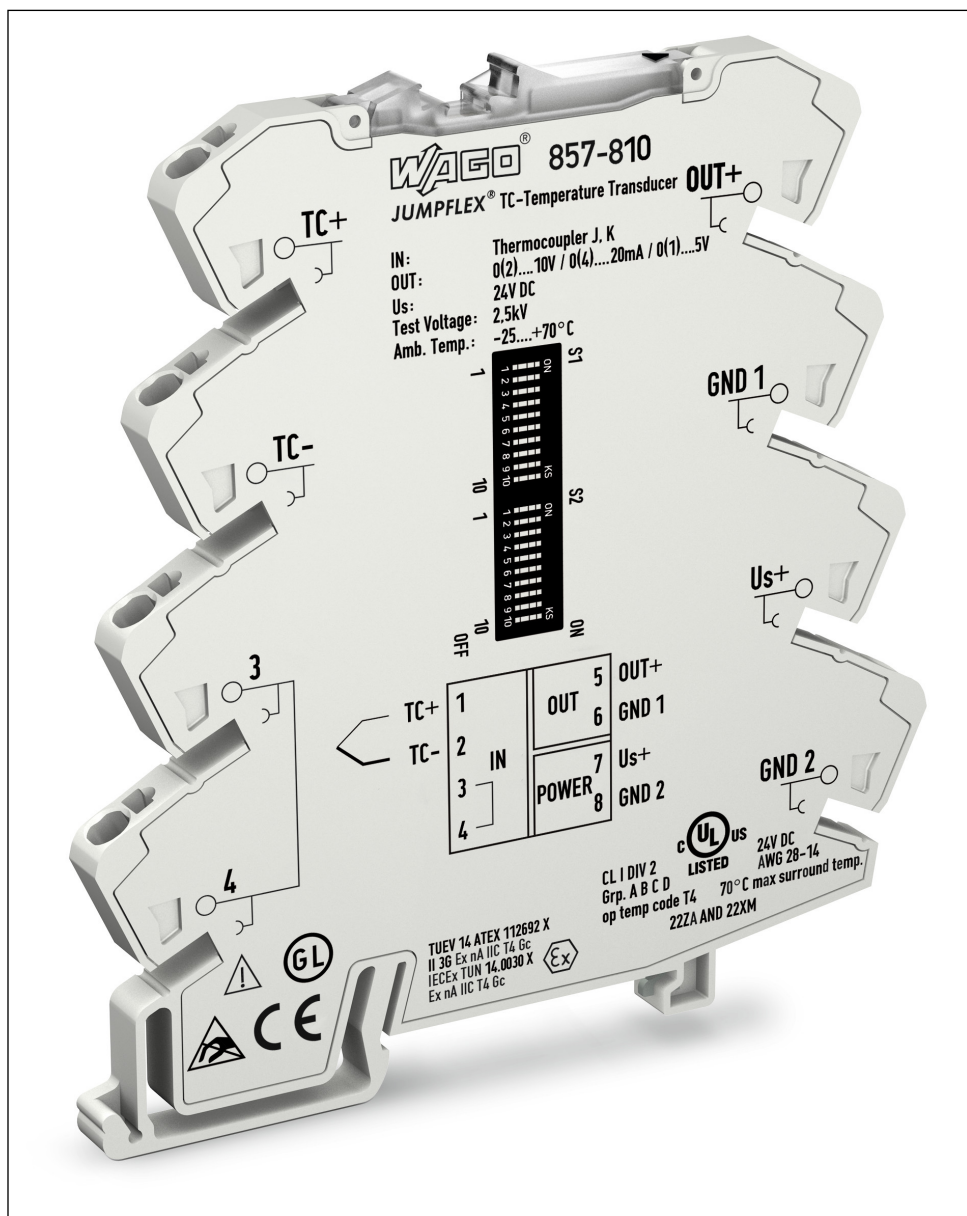
Start temperature				End temperature																									
1	2	3	4	°C		°F		5	6	7	8	9	10	°C		°F		5	6	7	8	9	10	°C		°F			
*	*	*	*	-200	-328	*	*	*	*	*	*	*	*	0	32	*	*	*	*	*	*	*	*	*	*	*	*	1028	1877
*	*	*	*	-175	-283	*	*	*	*	*	*	*	*	10	50	*	*	*	*	*	*	*	*	*	*	*	*	1050	1922
*	*	*	*	-150	-238	*	*	*	*	*	*	*	*	20	68	*	*	*	*	*	*	*	*	*	*	*	*	1075	1967
*	*	*	*	-125	-193	*	*	*	*	*	*	*	*	30	86	*	*	*	*	*	*	*	*	*	*	*	*	1100	2012
*	*	*	*	-100	-148	*	*	*	*	*	*	*	*	40	104	*	*	*	*	*	*	*	*	*	*	*	*	1125	2057
*	*	*	*	-75	-103	*	*	*	*	*	*	*	*	50	122	*	*	*	*	*	*	*	*	*	*	*	*	1150	2102
*	*	*	*	-50	-58	*	*	*	*	*	*	*	*	60	140	*	*	*	*	*	*	*	*	*	*	*	*	1175	2147
*	*	*	*	-25	-13	*	*	*	*	*	*	*	*	70	158	*	*	*	*	*	*	*	*	*	*	*	*	1200	2192
*	*	*	*	0	32	*	*	*	*	*	*	*	*	80	176	*	*	*	*	*	*	*	*	*	*	*	*	1225	2237
*	*	*	*	25	77	*	*	*	*	*	*	*	*	90	194	*	*	*	*	*	*	*	*	*	*	*	*	1250	2282
*	*	*	*	50	112	*	*	*	*	*	*	*	*	100	212	*	*	*	*	*	*	*	*	*	*	*	*	1275	2327
*	*	*	*	75	165	*	*	*	*	*	*	*	*	125	257	*	*	*	*	*	*	*	*	*	*	*	*	1300	2372
*	*	*	*	100	212	*	*	*	*	*	*	*	*	150	302	*	*	*	*	*	*	*	*	*	*	*	*	1325	2417
*	*	*	*	125	257	*	*	*	*	*	*	*	*	175	347	*	*	*	*	*	*	*	*	*	*	*	*	1350	2462
*	*	*	*	150	302	*	*	*	*	*	*	*	*	200	392	*	*	*	*	*	*	*	*	*	*	*	*	1375	2507
*	*	*	*	175	347	*	*	*	*	*	*	*	*	225	426	*	*	*	*	*	*	*	*	*	*	*	*	1400	2552
*	*	*	*	200	392	*	*	*	*	*	*	*	*	250	492	*	*	*	*	*	*	*	*	*	*	*	*	1425	2597

The minimum distance from the start temperature to the end temperature may not fall short of 100K degrees on the Celsius (C) scale or 212K degrees on the Fahrenheit (F) scale.

Default Settings

All DIP switches are in „OFF“ position for delivery.	
Cold junction compensation	on
Thermocouple	Type J
Start temperature	0 °C
End temperature	1000 °C
Output signal	0...20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA

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Technische Änderungen und Irrtümer vorbehalten.