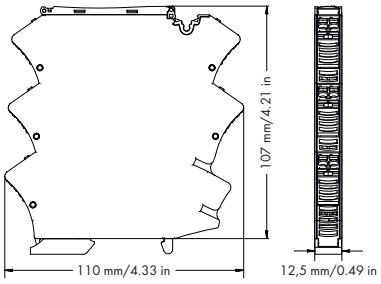
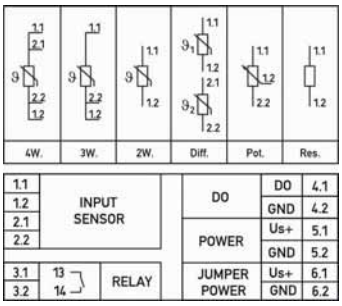
JUMPFLEX® Transducers

RTD Threshold Value Switch

Configuration via:

DIP switch | Interface configuration software | Interface configuration app | Configuration display





Short description:
WAGO's RTD Threshold Value Switch for RTD sensors, potentiometers and resistors monitors and reports signals of up to two switching thresholds.

Features:

- Both digital signal output and relay with make contact react to configured measuring range limits (switching ON/OFF delay and threshold value switch function configurable with up to two threshold values).
- Configurable RTD factor
- Adjustable software filter
- Input/Output response simulation via configuration display
- Safe 3-way isolation with 4 kV test voltage acc. to EN 61140

Description	Item No.	Pack. Unit
***JUMPFLEX*® Transducer, for DIN 35 rail**	**2857-533**	1
RTD Threshold Value Switch		

Technical Data

Configuration:	
Configuration	DIP switch, interface configuration software, interface configuration app, configuration display
Input:	
Input signal	RTD sensors, potentiometers and resistors
Sensor types	Pt100, Pt200, Pt500, Pt1000, Pt5000, Pt10000, Pt10 ... Pt20000 (expanded)
Sensor connection	2-, 3-, and 4-wire connection technology
Sensor supply current	< 0.5 mA
Temperature range	-200 °C ... +850 °C
Resistor input	0 ... 100 kΩ
Output:	
Output – Digital:	
Max. switching voltage	Supply voltage applied -0.3 V
Max. continuous current I_{DO}	100 mA (no internal restriction)
Number of switching tresholds	1 or 2
Configurable rise and fall delay time	0 ... 10 s (via DIP switch); 0 ... 60 s (expanded)
Output – Relay:	
Contact type	1 make contact (1 a)
Contact material	AgNi (gold-plated)
Max. switching voltage	250 VAC
Max. continuous current (terminal blocks in a row)	6 A (up to 60 °C), 3 A (60 °C ... 70 °C)
Dielectric strength open contact (AC, 1 min)	1 kV_{rms}
Pull-in/drop-out/bounce time typ.	8 ms / 4 ms / 8 ms
Number of switching tresholds	1 or 2
Configurable rise and fall delay time	0 ... 10 s (via DIP switch); 0 ... 60 s (expanded)

Technical Data

General specifications:	
Supply voltage U_S	24 VDC
Supply voltage range	16.8 V ... 31.2 V (-30 % ... +30 %)
Current consumption at 24 VDC	≤ 30 mA (+ I_{DO})
Measurement error	± 1 K
Temperature coefficient	≤ 0.01 %/K
Environmental requirements:	
Ambient operating temperature	-40 °C ... +70 °C
Storage temperature	-40 °C ... +85 °C
Safety and protection:	
Test voltage (input/output/supply)	4 kV AC, 50 Hz, 1 min.
Connection and type of mounting:	
Wire connection	CAGE CLAMP® S (*picoMAX*® 5.0)
Cross sections	solid/fine-stranded: 0.2 ... 2.5 mm² / AWG 24 ... 12
Strip length	9 ... 10 mm / 0.35 ... 0.39 in
Dimensions and weight:	
Dimensions (mm) W x H x L	12.5 x 107 x 110
	Height from upper-edge of DIN 35 rail
Weight	86 g
Standards and approvals:	
Conformity marking	CE
Standards/Specifications	DIN EN 61010-1:2010; DIN EN 60664-1:2008; Safe isolation acc. to DIN EN 61140:2002; IEC 61000-6-2; IEC 61000-6-4
Accessories:	For accessories, see Full Line Catalog INTERFACE ELECTRONIC 2012/2013

DIP Switch Adjustability

● = ON

2857-533

DIP Switch S1

Sensor Type				Connection Technology			Hysteresis		Rise/Fall Delay Time Relay/ Digital Output (DO)					
1	2	3		4	5		6	T / K	7	8	9	t / s	10	Not assigned
			Pt100			2-wire connection		3				0		
●			Pt200	●		3-wire connection	●	5	●			1		
	●		Pt500		●	4-wire connection				●		2		
●	●		Pt1000	●	●	Difference			●	●		3		
		●	Pt5000								●	4		
●		●	Pt10000						●		●	5		
	●	●	Resistor							●	●	8		
●	●	●	Potentiometer						●	●	●	10		

DIP Switch S2

Starting Value								End Value							
1	2	3	4	5	Temperature / °C	Resistance / Ω	Potentiometer Position	6	7	8	9	10	Temperature / °C	Resistance / Ω	Potentiometer Position
					0	OFF	OFF						100	OFF	OFF
●					OFF	10	0 %	●					OFF	10	0 %
	●				-200	15	5 %		●				-200	15	5 %
●	●				-150	22	10 %	●	●				-150	22	10 %
		●			-100	33	15 %			●			-100	33	15 %
●		●			-50	47	20 %	●		●			-50	47	20 %
	●	●			-10	68	25 %		●	●			-10	68	25 %
●	●	●			10	100	30 %	●	●	●			10	100	30 %
			●		20	120	35 %				●		20	120	35 %
●			●		30	150	40 %	●			●		30	150	40 %
	●		●		40	220	45 %		●		●		40	220	45 %
●	●		●		50	330	50 %	●	●		●		50	330	50 %
		●	●		60	470	55 %			●	●		60	470	55 %
●		●	●		70	560	60 %	●		●	●		70	560	60 %
	●	●	●		80	680	65 %		●	●	●		80	680	65 %
●	●	●	●		90	1000	70 %	●	●	●	●		90	1000	70 %
				●	100	1200	75 %					●	100	1200	75 %
●				●	150	1500	80 %	●				●	150	1500	80 %
	●			●	200	2200	85 %		●			●	200	2200	85 %
●	●			●	250	3300	90 %	●	●			●	250	3300	90 %
		●		●	300	4700	95 %			●		●	300	4700	95 %
●		●		●	350	5600	100 %	●		●		●	350	5600	100 %
	●	●		●	400	6800	OFF		●	●		●	400	6800	OFF
●	●	●		●	450	10000	OFF	●	●	●		●	450	10000	OFF
			●	●	500	12000	OFF				●	●	500	12000	OFF
●			●	●	550	15000	OFF	●			●	●	550	15000	OFF
	●		●	●	600	22000	OFF		●		●	●	600	22000	OFF
●	●		●	●	650	33000	OFF	●	●		●	●	650	33000	OFF
		●	●	●	700	47000	OFF			●	●	●	700	47000	OFF
●		●	●	●	750	56000	OFF	●		●	●	●	750	56000	OFF
	●	●	●	●	800	68000	OFF		●	●	●	●	800	68000	OFF
●	●	●	●	●	850	100000	OFF	●	●	●	●	●	850	100000	OFF

Default Settings

Sensor Type	Pt100
Connection Technology	2-wire connection
Starting Value	0 °C
End Value	100 °C
Hysteresis	3 K
Rise/Fall Delay Time Relay/Digital Output (DO)	0 s