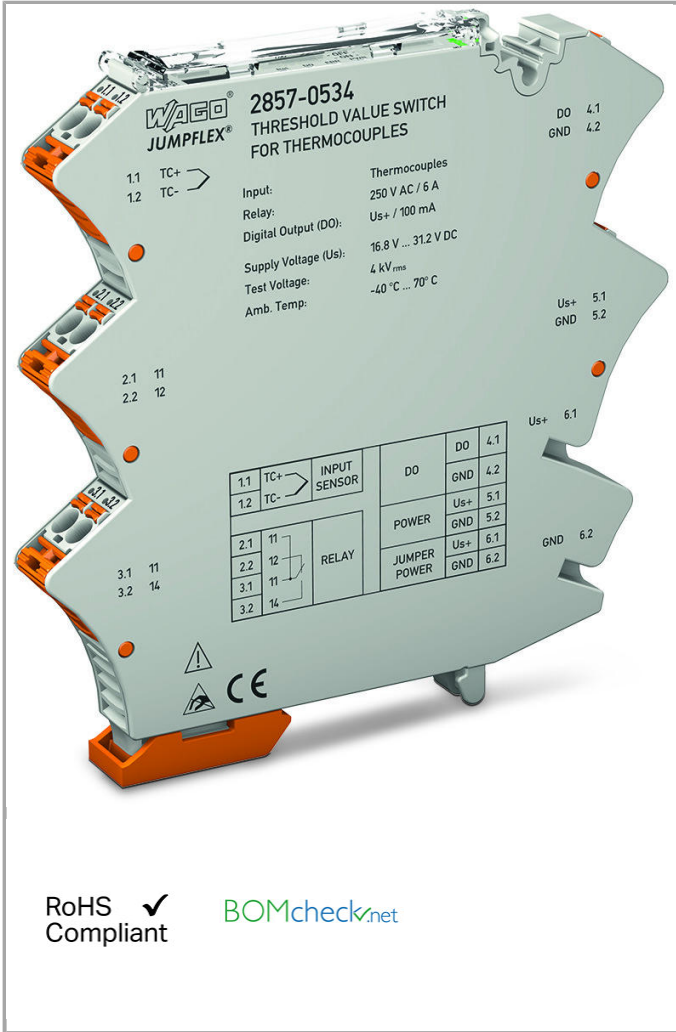


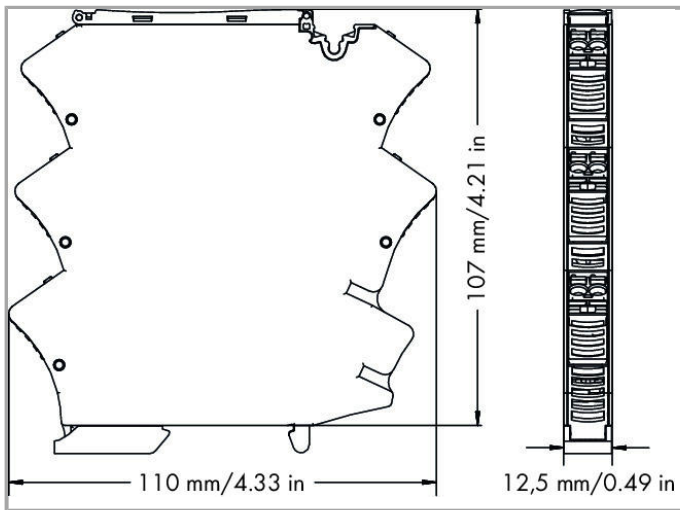
Data sheet | Item number: 2857-534
 JUMPFLEX® transducer; TC Treshold value switch



2857-534



1.1	TC+	INPUT SENSOR	DO	DO	4.1
1.2	TC-			GND	4.2
2.1	11	RELAY	POWER	Us+	5.1
2.2	12			GND	5.2
3.1	11		JUMPER	Us+	6.1
3.2	14		POWER	GND	6.2



2857-534
DIP Switch Adjustability

• = ON Default

DIP Switch S1

Sensor Type				Cold Junction Compensation	Hysteresis		Rise/Fall Delay Relay/DO			Reserve
1	2	3	4	5	6	T/K	7	8	9	10
•	•	•	J	ON	3	•	•	•	•	1
•	•	•	K	OFF	5	•	•	•	•	2
•	•	•	E							3
•	•	•	R							4
•	•	•	N							5
•	•	•	S							8
•	•	•	T							10
•	•	•	B							
•	•	•	C							

DIP Switch S2

Start Value					End Value				
1	2	3	4	5	6	7	8	9	10
				0					100
•	•	•	•	OFF	•	•	•	•	OFF
•	•	•	•	-200	•	•	•	•	-200
•	•	•	•	-150	•	•	•	•	-150
•	•	•	•	-100	•	•	•	•	-100
•	•	•	•	-50	•	•	•	•	-50
•	•	•	•	50	•	•	•	•	50
•	•	•	•	100	•	•	•	•	100
•	•	•	•	150	•	•	•	•	150
•	•	•	•	200	•	•	•	•	200
•	•	•	•	250	•	•	•	•	250
•	•	•	•	300	•	•	•	•	300
•	•	•	•	350	•	•	•	•	350
•	•	•	•	400	•	•	•	•	400
•	•	•	•	450	•	•	•	•	450
•	•	•	•	500	•	•	•	•	500
•	•	•	•	550	•	•	•	•	550
•	•	•	•	600	•	•	•	•	600
•	•	•	•	650	•	•	•	•	650
•	•	•	•	700	•	•	•	•	700
•	•	•	•	750	•	•	•	•	750
•	•	•	•	800	•	•	•	•	800
•	•	•	•	850	•	•	•	•	850
•	•	•	•	900	•	•	•	•	900
•	•	•	•	950	•	•	•	•	950
•	•	•	•	1000	•	•	•	•	1000
•	•	•	•	1050	•	•	•	•	1050
•	•	•	•	1100	•	•	•	•	1100
•	•	•	•	1150	•	•	•	•	1150
•	•	•	•	1200	•	•	•	•	1200
•	•	•	•	1300	•	•	•	•	1300
•	•	•	•	1400	•	•	•	•	1400

Item description

Short description:

WAGO's Thermocouple Threshold Value Switch for TC sensors monitors and reports signals of up to two switching thresholds.

Features:

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

Note:

Additional setting options via interface configuration software or interface configuration app

Data

Technical Data

Configuration

Configuration options

DIP switches
Interface configuration software
Interface configuration app
Configuration display

Input

Input signal type	TC sensors
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Input – TC sensors

Sensor types (TC)	Type J Type K Type E Type N Type R Type S Type T Type B Type C
Measurement range temperature (TC)	-210 ... 1200 °C (Type J); -200 ... 1372 °C (Type K)
Cold junction compensation	On/Off (Default: On)
Cold junction error	3 K (typ. 2 K)

Output – Digital

Max. switching voltage (DO)	Supply voltage applied: -0.3 V
Max. continuous current (DO)	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 or 2 (adjustable)
Configurable rise/fall delay time (DO)	0 ... 60 s (via software)

Output – Relay

Dielectric strength open contact (AC, 1 min)	1 kV _{rms}
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
Max. switching voltage	AC 250 V
Limiting continuous current (relay; terminal block assembly)	6 A (≤ 60 °C); 3 A (60 ... 70 °C)
Dielectric strength open contact (AC, 1 min)	1 kVrms
Pull-in time (typ.)	8 ms
Drop-out time (typ.)	4 ms
Bounce time (typ.)	8 ms
Number of switching thresholds (relay)	1 or 2 (adjustable)
Configurable rise/fall delay time (relay)	0 ... 60 s (via software)

Signal processing

Software filter; adjustable	moving mean value (filtering level: 30)
Hysteresis	adjustable via DIP switch or software
Step response typ.	60 ms (cold junction compensation off); 360 ms (cold junction)

compensation on)

Measurement error

Transmission error max.	±1 K
Temperature coefficient	≤ 0.01 %/K

Power supply

Type of power supply	24 VDC
Nominal supply voltage U_S	DC 24 V
Supply voltage range	±30 %
Current consumption at supply voltage	≤ 40 mA (+ I_{D0})

Safety and protection:

Test voltage (input/output/supply)	AC 4 kV; 50 Hz; 1 min
Protection class	IP20

Connection data

Connection technology	Push-in CAGE CLAMP®
WAGO terminal	picoMAX® 5.0
Solid conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm ² / 24 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inch

Geometrical Data

Width	12.5 mm / 0.492 inch
Height from upper-edge of DIN-35 rail	107 mm / 4.213 inch
Depth	110 mm / 4.331 inch

Mechanical data

Type of mounting	DIN-35 rail
------------------	-------------

Material Data

Fire load	0MJ
Weight	105.8 g

Environmental Requirements

Surrounding air (operating) temperature	-40 ... 70 °C
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Surrounding air (storage) temperature -40 ... 85 °C

Standards and specifications









Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61326-2-3; EN 50121-3-2
EMC emission of interference	EN 61000-6-4; EN 61326-2-3; EN 50121-3-2
Standards/specifications	EN 61010-1; EN 61373
















Commercial data
















Country of origin	DE
GTIN	4055143242318
Customs Tariff No.	90303380900
















Compatible products
















Marking accessories

















	Item no.: 2009-110 Marking strips; on reel; not stretchable; plain; snap-on type	2009-110
	Item no.: 2009-115 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115
	Item no.: 2009-115/000-002 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-002
	Item no.: 2009-115/000-006 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-006
	Item no.: 2009-115/000-007 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-007
	Item no.: 2009-115/000-012 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-012
	Item no.: 2009-115/000-017 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-017
	Item no.: 2009-115/000-023 WMB-Inline; for Smart Printer; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	2009-115 /000-023

	Item no.: 2009-115/000-024 WMB-Inline; for smartPRINTER; on reel; stretchable 5 - 5.2 mm; plain; snap-on type	/000-024	2009-115
	Item no.: 2009-141 Micro-WSB-Inline; on reel; plain; snap-on type		2009-141
	Item no.: 793-501 WMB marking card; as card; not stretchable; plain; snap-on type		793-501
	Item no.: 793-501/000-002 WMB marking card; as card; not stretchable; plain; snap-on type	/000-002	793-501
	Item no.: 793-501/000-005 WMB marking card; as card; not stretchable; plain; snap-on type	/000-005	793-501
	Item no.: 793-501/000-006 WMB marking card; as card; not stretchable; plain; snap-on type	/000-006	793-501
	Item no.: 793-501/000-007 WMB marking card; as card; not stretchable; plain; snap-on type	/000-007	793-501
	Item no.: 793-501/000-012 WMB marking card; as card; not stretchable; plain; snap-on type	/000-012	793-501
	Item no.: 793-501/000-017 WMB marking card; as card; not stretchable; plain; snap-on type	/000-017	793-501
	Item no.: 793-501/000-023 WMB marking card; as card; not stretchable; plain; snap-on type	/000-023	793-501
	Item no.: 793-501/000-024 WMB marking card; as card; not stretchable; plain; snap-on type	/000-024	793-501
	Item no.: 793-502 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type		793-502
	Item no.: 793-502/000-002 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	/000-002	793-502
	Item no.: 793-502/000-005 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	/000-005	793-502
	Item no.: 793-502/000-006 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type	/000-006	793-502







	Item no.: 793-502/000-007 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-007	793-502
	Item no.: 793-502/000-012 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-012	793-502
	Item no.: 793-502/000-017 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-017	793-502
	Item no.: 793-502/000-023 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-023	793-502
	Item no.: 793-502/000-024 WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type / 000-024	793-502
	Item no.: 793-503 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type	793-503
	Item no.: 793-503/000-002 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-002	793-503
	Item no.: 793-503/000-005 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-005	793-503
	Item no.: 793-503/000-006 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-006	793-503
	Item no.: 793-503/000-007 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-007	793-503
	Item no.: 793-503/000-012 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-012	793-503
	Item no.: 793-503/000-017 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-017	793-503
	Item no.: 793-503/000-023 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-023	793-503
	Item no.: 793-503/000-024 WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type / 000-024	793-503
	Item no.: 793-504 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504

	Item no.: 793-504/000-002 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-002
	Item no.: 793-504/000-005 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-005
	Item no.: 793-504/000-006 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-006
	Item no.: 793-504/000-012 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-012
	Item no.: 793-504/000-017 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-017
	Item no.: 793-504/000-023 WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type	793-504 /000-023
	Item no.: 793-505 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505
	Item no.: 793-505/000-005 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-005
	Item no.: 793-505/000-006 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-006
	Item no.: 793-505/000-007 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-007
	Item no.: 793-505/000-012 WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type	793-505 /000-012
	Item no.: 793-506 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506
	Item no.: 793-506/000-005 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-005
	Item no.: 793-506/000-006 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-006
	Item no.: 793-506/000-012 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type	793-506 /000-012

	Item no.: 793-506/000-017 WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type / 000-017	793-506
	Item no.: 793-5501 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type	793-5501
	Item no.: 793-5501/000-002 WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type / 000-002	793-5501
	Item no.: 793-5501/000-005 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-005	793-5501
	Item no.: 793-5501/000-006 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-006	793-5501
	Item no.: 793-5501/000-007 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-007	793-5501
	Item no.: 793-5501/000-012 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-012	793-5501
	Item no.: 793-5501/000-014 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-014	793-5501
	Item no.: 793-5501/000-017 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-017	793-5501
	Item no.: 793-5501/000-023 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-023	793-5501
	Item no.: 793-5501/000-024 WMB marking card; as card; stretchable 5 - 5.2 mm; plain; snap-on type / 000-024	793-5501
	Item no.: 793-566 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	793-566
	Item no.: 793-566/000-002 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type / 000-002	793-566
	Item no.: 793-566/000-005 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type / 000-005	793-566
	Item no.: 793-566/000-006 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type / 000-006	793-566

	Item no.: 793-566/000-007 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-007	793-566
	Item no.: 793-566/000-012 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-012	793-566
	Item no.: 793-566/000-017 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-017	793-566
	Item no.: 793-566/000-023 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-023	793-566
	Item no.: 793-566/000-024 WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type	/000-024	793-566
tools			
	Item no.: 210-720 Operating tool with partially insulated shaft; Type 2, blade (3.5 x 0.5) mm		210-720
assembling			
	Item no.: 249-116 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5		249-116
	Item no.: 249-117 Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5		249-117
	Item no.: 249-197 Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5		249-197
General accessories			
	Item no.: 2857-900 Configuration display		2857-900
	Item no.: 750-921 Bluetooth® Adapter		750-921
	Item no.: 750-923 Configuration cable; USB connector; Length: 2.5 m		750-923
	Item no.: 750-923/000-001 Configuration cable; USB connector; Length: 5 m	/000-001	750-923
	Item no.: 857-304 Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm		857-304
	Item no.: 857-979 Supply and through module		857-979
check			
	Item no.: 735-500 Test pin; 1 mm Ø; with solder connection for test wire		735-500

Jumper

	Item no.: 281-482 Comb-style jumper bar; insulated; 2-way; IN = IN terminal block		281-482
	Item no.: 859-402 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated		859-402
	Item no.: 859-402/000-005 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-005	859-402
	Item no.: 859-402/000-006 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-006	859-402
	Item no.: 859-402/000-029 Push-in type jumper bar; 2-way; Nominal current 18 A; insulated	/000-029	859-402
power supply			
	Item no.: 787-2852 Switched-mode power supply; for JUMPFLEX® Signal Conditioners; 1-phase; 24 VDC output voltage; 1 A output current		787-2852

Downloads

Documentation

Bid Text

2857-534	Mar 9, 2016	doc	Download
Grenzwertschalter		32.3 kB	

Instruction Leaflet

JUMPFLEX® Signal Conditioner, RTD Threshold Value Switch		pdf	Download
		2.5 MB	

Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf	Download
		265.8 kB	

Engineering-Software

Software for Interface-Products

Interface Configuration Software FULL	1.6.2.11	exe	Download
The full setup, in addition to the WAGO Interface Configuration Software, includes the installation for the Microsoft .NET Framework.	Jan 14, 2019	97.5 MB	
Interface Configuration Software SMALL	1.6.2.11	exe	Download
The full setup only includes the WAGO Interface Configuration Software.	Jan 14, 2019	47.1 MB	



CAD/CAE - Smart Data

CAD data

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Subject to changes.
