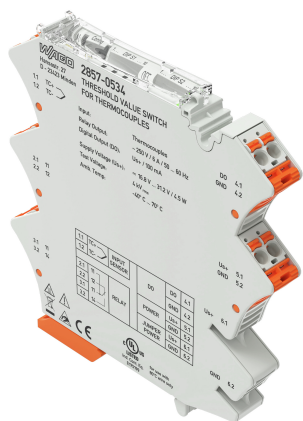
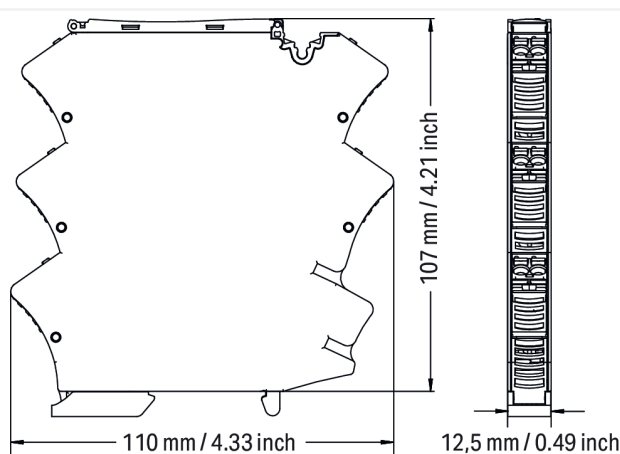


Threshold value switches; Thermocouples; 1 make contact; Digital output; Configuration via software; Supply voltage: 24 VDC; 12.5 mm module width



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

[illegible]

WAGO's thermocouple threshold value switch for TC sensors monitors and reports signals of up to two switching thresholds.

- Both digital signal output and relay with changeover contact react to configured measurement range limits (on/off switching delay and threshold value switch function can be configured with up to two threshold values).
- Adjustable software filter
- Safe three-way isolation with 4 kV test voltage per EN 61010-1

Note

This product is supplied with 24 VDC, which can be commoned using lateral push-in type jumper bars: (6.1) U_S+ (BR) and (6.2) GND 2 (BR). With this variant, it is necessary to ensure that the maximum permissible total current of 6 A is not exceeded.

Additional setting options via the WAGO Interface Configuration Software

Configuration

Configuration options	DIP switch WAGO Interface Configuration Software	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
Temperature measurement range (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 (relay)	
Number of changeover/switchover contacts	1
Contact material (relay)	AgNi + Au
Switching Voltage, Max.	250 VAC
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)

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

Operating data	
Continuous current (max.)	6 A

Safety and protection			
Rated Voltage	300 V	Test voltage	
Rated voltage of the measurement circuit connections per EN 61010-2-030	AC 300 V	Test voltage (input/relay output/supply)	4 kVAC; 60 Hz; 1 min
Measurement category per EN/UL 61010-2-030	CAT II (input)	Test voltage (input/service interface)	3 kVAC; 60 Hz; 1 min
Note on insulation parameters	Temperature sensors are not intended for use in dangerous circuits, provided the external temperature sensors used do not have basic insulation in accordance with EN/UL 61010-1 (300 VAC; overvoltage category II; pollution degree 2). The digital output (DO) is at the potential of the supply.	Test voltage (relay output/service interface)	4 kVAC; 60 Hz; 1 min
		Test voltage (supply/service interface)	2.5 kVAC; 60 Hz; 1 min
Protection type	IP20		

Output (digital)	
Switching voltage (DO) max.	Supply voltage (applied) - 0.3 V
Continuous current (DO) max.	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)

Signal processing	
Software filter (adjustable)	Moving average value (filter level: 30)
Hysteresis	Adjustable via DIP switch or software
Step response (typ.)	60 ms (cold junction compensation Off) 360 ms (cold junction compensation On)

Power supply	
Power supply type	24 VDC
Nominal supply voltage U _s	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I _{DO})



Insulation coordination (UL)	
Overvoltage category	II
Pollution degree	2
Insulation type (input, supply and service interface/relay output)	Reinforced insulation (safe isolation)
Insulation type (input/supply/service interface)	Basic insulation

Connection data	
Connection technology	Push-in CAGE CLAMP®
WAGO connector	picoMAX® 5.0
Solid conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Fine-stranded conductor	0.2 ... 2.5 mm² / 24 ... 12 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data	
Width	12.5 mm / 0.492 inches
Height	110 mm / 4.331 inches
Depth from upper-edge of DIN-rail	107 mm / 4.213 inches

Mechanical data	
Mounting type	DIN-35 rail

Material data	
Fire load	1.573 MJ
Weight	63.9 g

Environmental requirements	
Ambient temperature (operation)	-40 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Temperature range of connection cable	≥ (T _{ambient} + 10 K)
Temperature range of connection cable (UL)	80 °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 EN 50121-3-2

Commercial data	
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4055143242318
Customs tariff number	90303370000



Product classification	
UNSPSC	39122331
eCl@ss 10.0	27-37-18-10
eCl@ss 9.0	27-37-18-10
ETIM 9.0	EC001446
ETIM 8.0	EC001446
ECCN	NO US CLASSIFICATION

Environmental Product Compliance	
CAS-No.	1303-86-2 1317-36-8 7439-92-1 75980-60-8 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide Perfluorobutane sulfonic acid (PFBS) and its salts Phosphine oxide, diphenyl(2,4,6-trimethylbenzoyl)-
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	601bb33b-84cc-4805-b720-81f12c38c72c
SCIP notification number (Belgium)	131209b7-ac71-4ce7-9b2f-c117badec519
SCIP notification number (Bulgaria)	7c391072-6a84-41c0-a488-1eed30619da2
SCIP notification number (Czech Republic)	d1772c11-7a5d-49f4-8bb4-425bbedd445f
SCIP notification number (Denmark)	cfa32983-cc33-4189-b84e-a8b7c38e9bcd
SCIP notification number (Finland)	5a251d21-3cd4-4150-8b9a-2dbe4ec1814c
SCIP notification number (France)	d428f471-7411-4cc1-9954-e2e708d38bac
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SCIP notification number (Hungary)	38a2a8e6-be31-466e-a297-d4ed34448198
SCIP notification number (Italy)	76a372f1-e64e-48fc-aa2a-513cbdd7d1f7
SCIP notification number (Netherlands)	c7fe09a0-961d-444e-bccb-b777383080e3
SCIP notification number (Poland)	ef7bea4e-4cc5-4c67-a93e-8f9ee40db738
SCIP notification number (Romania)	2fa777e0-ce5b-4d0f-9b8d-8e5b77843923
SCIP notification number (Sweden)	6bc78593-b9a6-44e7-b529-4a5eada11443

Approvals / Certificates		
General approvals		Declarations of conformity and manufacturer's declarations
 		
Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03083
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03084
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

Approval	Standard	Certificate Name
EU-Declaration of Confor- mity WAGO GmbH & Co. KG	-	-



Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 2857-534

Download icon

Documentation

Manual

WAGO Threshold Value Switches

Download icon

Bid Text

2857-534	19.02.2019	xml 6.39 KB	Download icon
2857-534	20.02.2019	docx 18.68 KB	Download icon

Instruction Leaflet

Signal Conditioner; TC Threshold Value Switch	V 2.0.0 30.09.2020	pdf 2788.18 KB	Download icon
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CAD/CAE-Data

CAD data

2D/3D Models 2857-534

Download icon

CAE data

EPLAN Data Portal 2857-534	Download icon
WSCAD Universe 2857-534	Download icon
ZUKEN Portal 2857-534	Download icon

1 Compatible Products

1.1 Optional Accessories

1.1.1 Communication

1.1.1.1 Bluetooth



Item No.: 750-921

Bluetooth® Adapter

1.1.1.2 Communication cable

Item No.: 750-923

Configuration cable; USB connector; Length: 2.5 m

Item No.: 750-923/000-001

Configuration cable; USB connector; Length: 5 m



1.1.2 Installation

1.1.2.1 Mounting accessories



Item No.: 249-117
Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-197
Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray



Item No.: 249-116
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.1.3 Jumper

1.1.3.1 Jumper



Item No.: 281-482
Jumper; 2-way; insulated; gray



Item No.: 859-402/000-006
Jumper; for jumper slot; 2-way; insulated; blue



Item No.: 859-402
Jumper; for jumper slot; 2-way; insulated; light gray



Item No.: 859-402/000-005
Jumper; for jumper slot; 2-way; insulated; red



Item No.: 859-402/000-029
Jumper; for jumper slot; 2-way; insulated; yellow

1.1.4 Marking

1.1.4.1 Marker



Item No.: 2009-141
Micro-WSB-Inline; 2000 pieces on roll; plain; snap-on type; white



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; white



Item No.: 793-502
WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-566
WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-503
WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-504
WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-505
WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-506
WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white



Item No.: 793-501
WMB marking card; as card; not stretchable; plain; snap-on type; white



Item No.: 2009-115
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.1.4.2 Marking strip



Item No.: 2009-110
Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white



1.1.5 Power supply

1.1.5.1 Power supply



Item No.: 787-2852
Switched-mode power supply; 1-phase;
24 VDC output voltage; 1 A output current

1.1.6 Relay module

1.1.6.1 Relay module



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; gray

1.1.7 Terminal blocks

1.1.7.1 Supply module



Item No.: 857-979
Supply and through module

1.1.7.2 Through terminal block



Item No.: 857-979
Supply and through module

1.1.8 Test and measurement

1.1.8.1 Testing accessories



Item No.: 735-500
WAGO Test pin; 1 mm Ø; 30 V AC / 60 V DC; CAT0; 1 A; 6 mm uninsulated; Test lead for soldering up to 0,5mm²

1.1.9 Tool

1.1.9.1 Operating tool



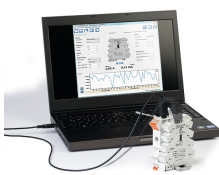
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

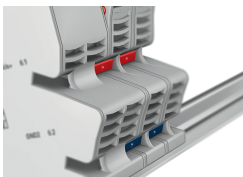


Configuration via WAGO Interface Configuration Software

Conductor termination

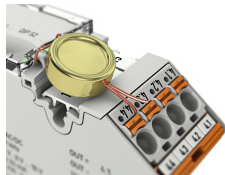


Pluggable connection technology



Commoning, not discrete wiring – Same outline allows use of a single in-line, push-in jumper.

Security



Lock-out seal option