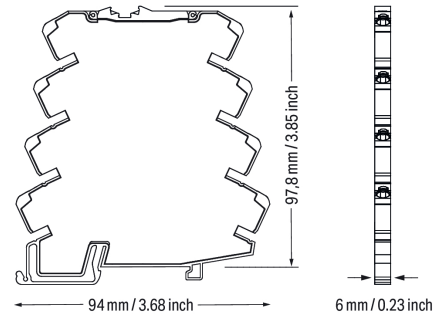


857-531
Push/Slide Switch Operation

Switching Behavior	Number of Switching Points	Values for Switching Points	Configuration					
			Switching Point 1, Relay	Switching Point 2, Relay	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
1	1	S1	.On	-	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
2	1	S1	.Off	-	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
3	2	S1+S2	.On	.Off	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
4	2	S1+S2	.On	.On	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
5	2	S1+S2	.On	.Off	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
6	2	S1+S2	.Off	.On	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED
Exit parameterization mode without storing a value	-	-	-	-	Flash for 1 sec. RedLED	Flash for 1 sec. YellowLED	Flash for 1 sec. RedLED	No Flashing LED



857-531

DIP Switch Adjustability

● = ON Default

DIP-Switch S1

Input Signal Limits ±0.25 V; ±0.5 mA				Hysteresis	
1	2	3	4	5	
●	●	●	●	●	±10 V
●	●	●	●	●	5 mV; 10 µA
●	●	●	●	●	10 mV; 20 µA
●	●	●	●	●	0 ... 10 V
●	●	●	●	●	2 ... 10 V
●	●	●	●	●	0 ... 5 V
●	●	●	●	●	1 ... 5 V
●	●	●	●	●	±5 V
●	●	●	●	●	0 ... 15 V
●	●	●	●	●	0 ... 30 V
●	●	●	●	●	±20 mA
●	●	●	●	●	0 ... 20 mA
●	●	●	●	●	4 ... 20 mA
●	●	●	●	●	0 ... 10 mA
●	●	●	●	●	2 ... 10 mA
●	●	●	●	●	±10 mA

DIP Switch S1

Configurable Rise/Fall Delay Time in sec.			Digital Output DO Signaling	
6	7	8	9	10
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●
●	●	●	●	●

Short description:

This threshold value switch for analog signals monitors standard analog signals and reports signals exceeding a preset threshold.

Configurable digital switching output:

GND switching: The digital output (DO) is switched to "GND" for all input values that are smaller than the lower switching threshold or greater than the upper switching threshold.

U_s switching: For all input values that are smaller than the lower switching threshold or greater than the upper switching threshold, the digital output (DO) adopts the value of the supply voltage.

The preset switching thresholds are 0 % and 100 % (±0.25 V / ±0.5 mA) of the input measurement range. The switching thresholds can be adjusted via the interface configuration software.

Features:

- PC configuration interface
- Changeover relay output
- Calibrated measurement range switching
- Threshold value configuration via DIP switch and teach-in function via push/slide switch
- 3-way electrical isolation with 3 kV test voltage

Notes

Safety Information

The input and digital output must be safely isolated from hazardous live parts!

Note

Use shielded signal cables!

Only use shielded signal cables for analog input and output signals. This ensures the device maintains its specified accuracy and immunity to interference, even when external disturbances affect the signal cable. Additional setting options via the WAGO Interface Configuration Software

Technical data

Configuration

Configuration options	DIP switch WAGO Interface Configuration Software Push/slide switch
-----------------------	--

Input

Input signal type	Voltage Current
Input signal (voltage)	±10 V 0 ... 30 V
Input signal (current)	±20 mA
Input resistance (current input)	≤ 200 Ω
Input resistance (voltage input)	≥ 100 kΩ
Input current (max.)	22 mA
Input voltage (max.)	31 V

Output (digital)

Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	2 (adjustable)

Output (relay)

Number of changeover/switchover contacts	1
Switching Voltage, Max.	250 VAC
Switching power (resistive) max.	AC 1500 VA; DC (see load limit curve)
Drop-out time (typ.)	4 ms
Number of switching thresholds (relay)	1 or 2 (adjustable)
Configurable rise/fall delay time (relay)	0 ... 30 s (via software)
Continuous current (max.)	6 A

Signal Processing

Hysteresis	Adjustable via DIP switch or software (valid for relays and DO)
Step response (typ.)	16 ms

Measurement Error

Transmission error (typ.)	≤ 0.1 % of upper-range value
Temperature coefficient	≤ 0.01 %/K

Power Supply

Power supply type	24 VDC (SELV)
Nominal supply voltage U_S	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 25 mA (+ I_{DO})

Safety and protection

Rated Voltage	300 V
Protection type	IP20

Test voltage

Test voltage (input/relay output/supply)	3 kVAC; 50 Hz; 1 min
--	----------------------

Insulation coordination

Overvoltage category	II
Pollution degree	2
Insulation type (input/supply)	Reinforced insulation (safe isolation)
Insulation type (relay)	Reinforced insulation (safe isolation)
Insulation type (adjacent devices)	Reinforced insulation (safe isolation)

Connection Data

Connection technology	Push-in CAGE CLAMP®
Solid conductor	0.08 ... 2.5 mm ² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm ² / 22 ... 14 AWG
Strip length	9 ... 10 mm / 0.35 ... 0.39 inches

Physical data

Width	6 mm / 0.236 inches
Height	94 mm / 3.701 inches
Depth from upper-edge of DIN-rail	97.8 mm / 3.85 inches

Mechanical data

Mounting type	DIN-35 rail
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Material data

Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.518 MJ
Weight	38.6 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Temperature range of connection cable	≥ (T _{ambient} + 35 K)
Relative humidity	5 ... 85 % (no condensation permissible)
Operating altitude (max.)	2000 m

Standards and Specifications

Conformity marking	CE
EMC immunity to interference	EN 61000-6-2; EN 61131-2; EN 61326-1; EN 50121-3-2
EMC emission of interference	EN 61000-6-4; EN 61131-2; EN 61326-1; EN 50121-3-2
Standards/specifications	EN 61373

Commercial data

Product Group	6 (INTERFACE ELECTRONIC)
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4066966662375
Customs tariff number	90303370000

Product Classification

UNSPSC	39122331
eCl@ss 10.0	27-21-01-20
eCl@ss 9.0	27-21-01-20
ETIM 9.0	EC002653
ETIM 10.0	EC002653
ECCN	NO US CLASSIFICATION

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1 75980-60-8 79-94-7 80-05-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol 4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide 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 (Bulgaria)	70c9867b-9228-49b1-8871-0ff4880135a1
SCIP notification number (Czech Republic)	475d917f-e72d-4462-a17f-b1550a3b1393

Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 004/2011	EAC CoC 03078
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCA- TIONS)	UL 508	E175199 Sec.4

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-
UK-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications



Approval	Standard	Certificate Name
DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1

Approvals for hazardous areas



Approval	Standard	Certificate Name
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 857-531 ↓

Documentation

Manual
WAGO Threshold Value Switches ↓

Bid Text			
857-531	20.02.2019	docx 17.50 KB	↓
857-531	19.02.2019	xml 6.25 KB	↓

Instruction Leaflet			
Messumformer und Trennverstärker	V 2.2.2 28.03.2023	pdf 3367.84 KB	↓

CAD/CAE-Data

CAD data
2D/3D Models 857-531 ↓

CAE data
EPLAN Data Portal 857-531 ↓
WSCAD Universe 857-531 ↓
ZUKEN Portal 857-531 ↓

1 Compatible Products

1.1 Optional Accessories

1.1.1 Cables and connectors

1.1.1.1 Communication cable



Item No.: [750-923/000-001](#)
Configuration cable; USB connector; Length: 5 m

1.1.2 Communication

1.1.2.1 Communication cable



Item No.: [750-923](#)
Configuration cable; USB connector; Length: 2.5 m

1.1.3 Interface module

1.1.3.1 Interface adapters



Item No.: [857-980](#)
Interface adapter; 16-pole; analog

1.1.4 Jumper

1.1.4.1 Jumper



Item No.: [281-482](#)
Jumper; 2-way; insulated; gray



Item No.: [859-410/000-006](#)
Jumper; for jumper slot; 10-way; insulated; blue



Item No.: [859-410](#)
Jumper; for jumper slot; 10-way; insulated; light gray



Item No.: [859-410/000-005](#)
Jumper; for jumper slot; 10-way; insulated; red



Item No.: [859-410/000-029](#)
Jumper; for jumper slot; 10-way; insulated; yellow



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



Item No.: [859-403/000-006](#)
Jumper; for jumper slot; 3-way; insulated; blue



Item No.: [859-403](#)
Jumper; for jumper slot; 3-way; insulated; light gray



Item No.: [859-403/000-005](#)
Jumper; for jumper slot; 3-way; insulated; red



Item No.: [859-403/000-029](#)
Jumper; for jumper slot; 3-way; insulated; yellow



Item No.: [859-404/000-006](#)
Jumper; for jumper slot; 4-way; insulated; blue



Item No.: [859-404](#)
Jumper; for jumper slot; 4-way; insulated; light gray



Item No.: [859-404/000-005](#)
Jumper; for jumper slot; 4-way; insulated; red



Item No.: [859-404/000-029](#)
Jumper; for jumper slot; 4-way; insulated; yellow



Item No.: [859-405/000-006](#)
Jumper; for jumper slot; 5-way; insulated; blue



Item No.: [859-405](#)
Jumper; for jumper slot; 5-way; insulated; light gray



Item No.: [859-405/000-005](#)
Jumper; for jumper slot; 5-way; insulated; red

1.1.4.1 Jumper



Item No.: 859-405/000-029

Jumper; for jumper slot; 5-way; insulated; yellow

Item No.: 859-406/000-006

Jumper; for jumper slot; 6-way; insulated; blue

Item No.: 859-406

Jumper; for jumper slot; 6-way; insulated; light gray

Item No.: 859-406/000-005

Jumper; for jumper slot; 6-way; insulated; red



Item No.: 859-406/000-029

Jumper; for jumper slot; 6-way; insulated; yellow

Item No.: 859-407/000-006

Jumper; for jumper slot; 7-way; insulated; blue

Item No.: 859-407

Jumper; for jumper slot; 7-way; insulated; light gray

Item No.: 859-407/000-005

Jumper; for jumper slot; 7-way; insulated; red



Item No.: 859-407/000-029

Jumper; for jumper slot; 7-way; insulated; yellow

Item No.: 859-408/000-006

Jumper; for jumper slot; 8-way; insulated; blue

Item No.: 859-408

Jumper; for jumper slot; 8-way; insulated; light gray

Item No.: 859-408/000-005

Jumper; for jumper slot; 8-way; insulated; red



Item No.: 859-408/000-029

Jumper; for jumper slot; 8-way; insulated; yellow

Item No.: 859-409/000-006

Jumper; for jumper slot; 9-way; insulated; blue

Item No.: 859-409

Jumper; for jumper slot; 9-way; insulated; light gray

Item No.: 859-409/000-005

Jumper; for jumper slot; 9-way; insulated; red



Item No.: 859-409/000-029

Jumper; for jumper slot; 9-way; insulated; yellow

1.1.5 Marking

1.1.5.1 Marker



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

1.1.5.2 Marking strip



Item No.: 2009-110

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

1.1.6 Power supply

1.1.6.1 Power Supply



Item No.: 787-2852

Switched-mode power supply; 1-phase; 24 VDC output voltage; 1 A output current

1.1.7 Relay module

1.1.7.1 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

1.1.8 Screwless end stop

1.1.8.1 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

1.1.9 Terminal blocks

1.1.9.1 Supply and through module



Item No.: 857-979

Supply and through module

1.1.10 Tool

1.1.10.1 Operating tool

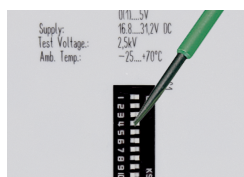


Item No.: 210-720

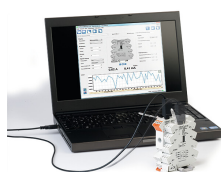
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

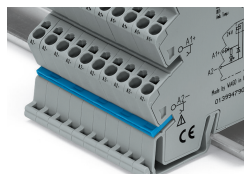


Configuration via WAGO Interface Configuration Software



Configuration via push/slide switch

Commoning



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