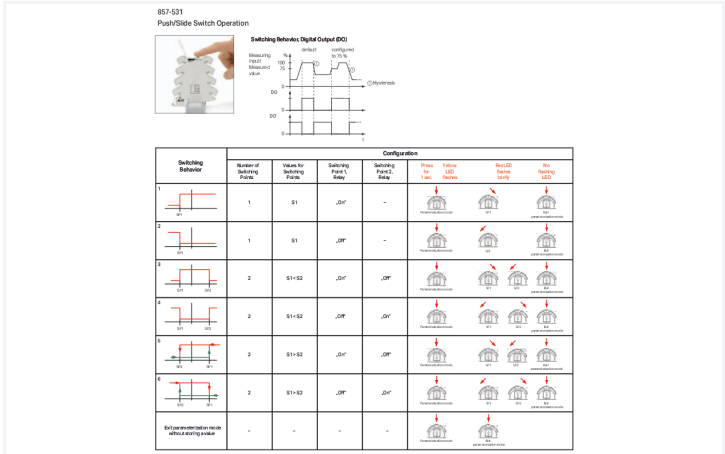
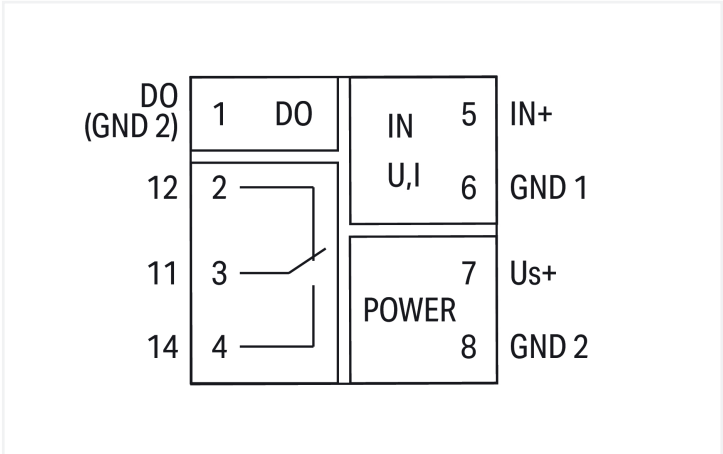
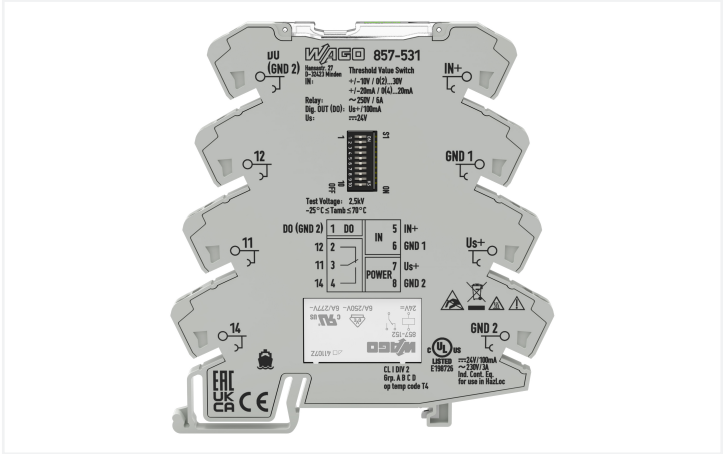


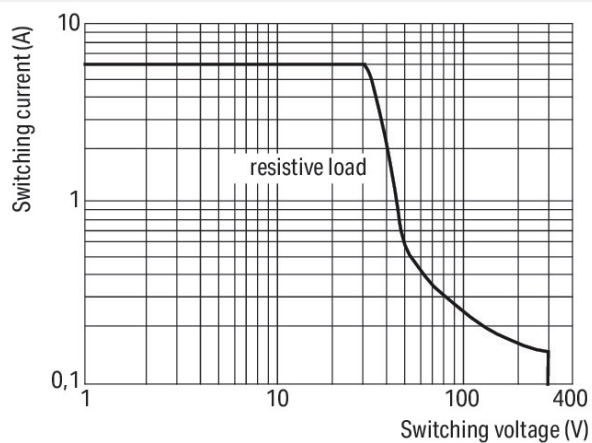
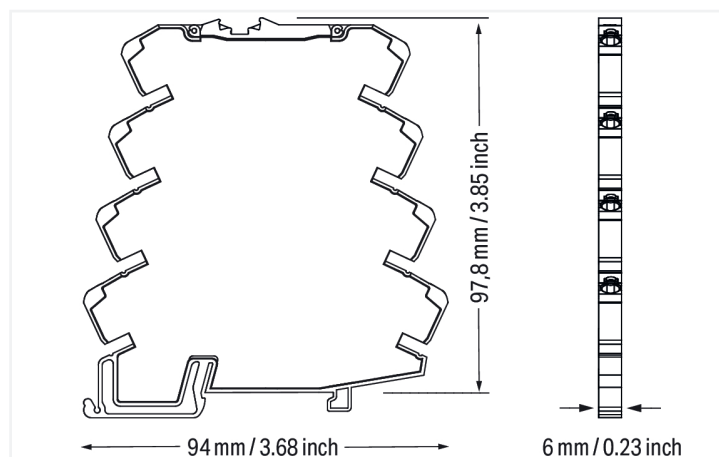


DIP Switch Adjustability

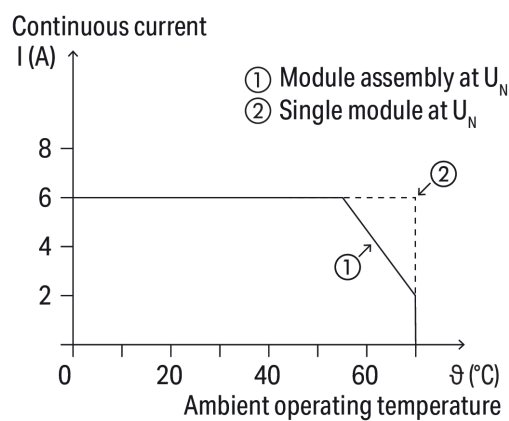
● = ON Default

DIP-Switch S1					Hysteresis				
Input Signal Limits ±0.25 V; ±0.5 mA				5					
1	2	3	4						
					±10 V	5 mV; 10 µA			
•				•	0 ... 10 V	10 mV; 20 µA			
	•				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			
			0				DO not active		
•			1		•		GND → U _A (switching)		
	•		2		•	•	U _A → GND (switching)		
•			3						
		•	4						
•			5						
		•	6						
•			8						
•	•	•	10						



DC load limit curve



Current-carrying capacity curve



Short description:

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

Configurable digital switching outputGND switching:

The digital output (DO) switches to "GND" when the input values are either below the lower switching threshold or above the upper switching threshold.
U_s switching: The digital output (DO) outputs the supply voltage for input values that are either below the lower switching threshold or above the upper switching threshold.

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 using the interface configuration software.

Features:

- PC configuration interface
- Configurable digital switching outputGND switching
- Changeover contact relay output
- Calibrated measurement range switching
- Threshold value configuration via DIP switch and teach-in function via push/slide switch

Notes	
Safety Information	Input and digital output must be safely isolated from any hazardous live parts!
Note	Use shielded signal lines! Only use shielded signal lines for analog input and output signals. Only then can you ensure that the accuracy and interference immunity specified for the device can be achieved, even in the presence of interference acting on 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)

Signal processing	
Hysteresis	Adjustable via DIP switch or software (valid for relay 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})

Operating data	
Continuous current (max.)	6 A

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 mm² / 28 ... 14 AWG
Fine-stranded conductor	0.34 ... 2.5 mm² / 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

Material data	
Insulation material (main housing)	Polyamide (PA66)
Flammability class per UL94	V0
Fire load	0.013 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	406696662375
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 8.0	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

EAC

EAC



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 LOCATIONS)	UL 508	E175199 Sec.4

Declarations of conformity and manufacturer's declarations

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

Approvals for marine applications		
		
Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
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		Bid Text	
WAGO Threshold Value Switches		857-531	20.02.2019 docx17.50 KB
		857-531	19.02.2019 xml6.25 KB

Instruction Leaflet			
Messumformer und Trennverstärker	V 2.2.2 28.03.2023	pdf 3367.84 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 857-531	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 Bluetooth



[Item No.: 750-921](#)
Bluetooth® Adapter

1.1.2.2 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; insula-
ted; blue



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



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



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



[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



1.1.4.1 Jumper



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 module



Item No.: 857-979
Supply and through module

1.1.9.2 Through terminal block



Item No.: 857-979
Supply and through module

1.1.10 Tool

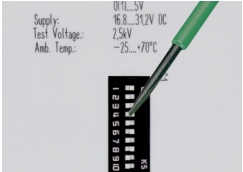
1.1.10.1 Operating tool



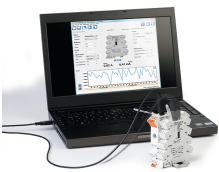
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

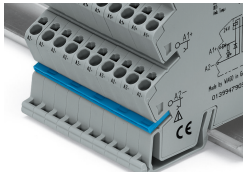


Configuration via WAGO Interface Configuration Software



Configuration via push/slide switch

Commoning



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