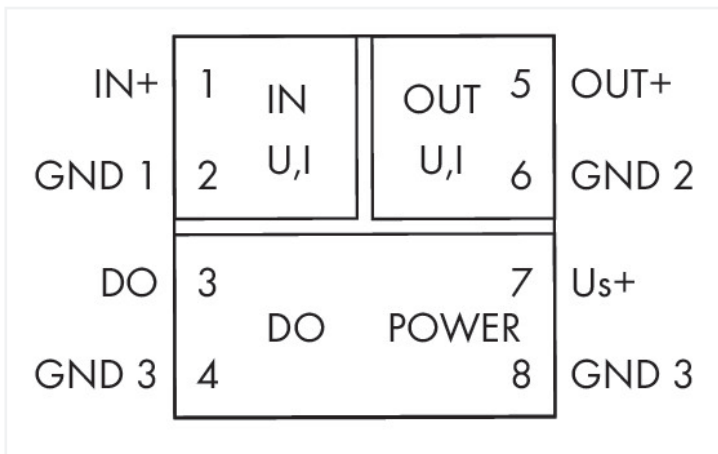
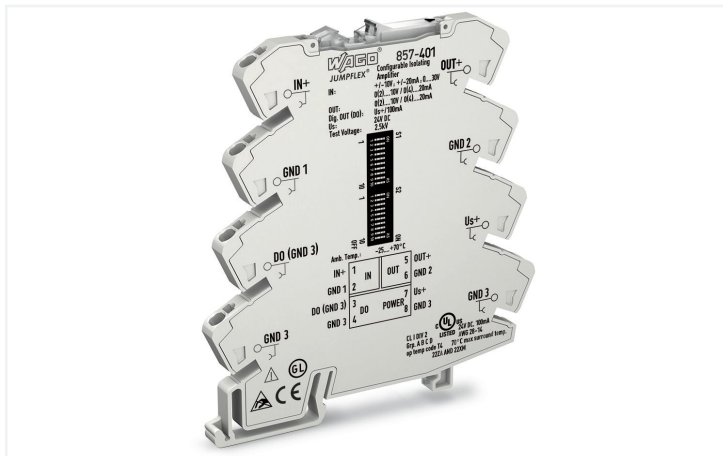


Data Sheet | Item Number: 857-401

Isolation amplifier; Current and voltage input signal; Current and voltage output signal; Digital output; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm²



<https://www.wago.com/857-401>



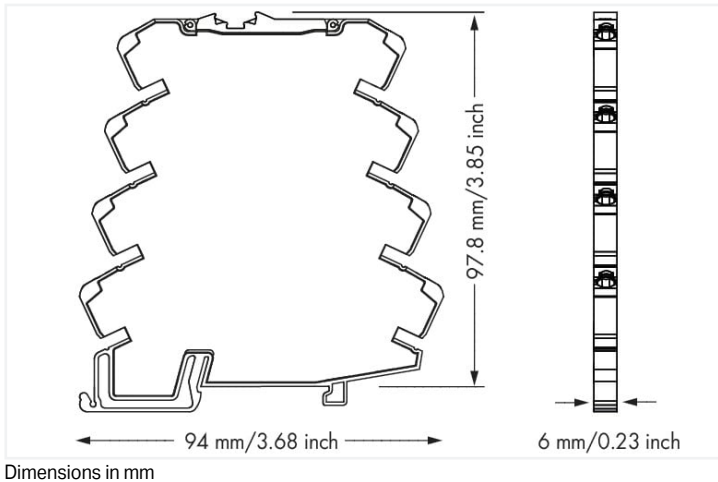
481-011

DP Switch Adjustability

•• ON

Default

Input Signal Switching											
DP S1						DP S2					
Input Signal Switch Line						Input Signal Switch Line					
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DP S1						DP S2					
Input Signal Switch Line						Input Signal Switch Line					
DP S1											



Short description:

WAGO's configurable signal conditioner converts, amplifies, filters and electrically isolates standard analog signals.

Features:

- PC configuration interface
 - Digital switching output
 - Calibrated measurement range switching
 - Standard unipolar/bipolar analog signals at input
 - Clipping capability
- for analog signal limitation to output end values
- 3-way electrical isolation with 2.5 kV test voltage

Notes

Note

Additional setting options via WAGO Interface Configuration Software or WAGO Interface Configuration App

Technical data

Configuration

Configuration options	DIP switch WAGO Interface Configuration Software WAGO Interface Configuration App
-----------------------	---

Input

Input signal type	Voltage (DC) Current (DC)
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
Measurement span (min.)	1 V
Measurement span (current) min.	2 mA

Output (analog)

Output signal type	Current Voltage
Output signal (voltage)	0 ... 5 V; 1 ... 5 V; 0 ... 10 V; 2 ... 10 V
Output signal (current)	0 ... 10 mA; 2 ... 10 mA; 2 ... 20 mA; 4 ... 20 mA
Load impedance (voltage output)	≥ 2 kΩ
Load impedance (current output)	≤ 600 Ω

Output (digital)

Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)
Number of switching thresholds (DO)	1 (adjustable)

Signaling and communication

Configuration options	WAGO Interface Configuration App WAGO Interface Configuration Software DIP switch
Input signal (voltage)	±10 V; 0 ... 30 V

Signal processing

Step response (typ.)	8 ms
----------------------	------

Measurement error

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

Supply

Power supply type	24 VDC
Nominal supply voltage U_s	DC 24 V
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I_{DO})

Safety and protection

Protection type	IP20
-----------------	------

Test voltage

Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min
------------------------------------	-------------------------

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	
Fire load	0.593 MJ
Weight	37 g

Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Relative humidity	5 ... 95 % (no condensation permissible)
Operating altitude (max.)	2000 m

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

Commercial data	
Product Group	6 (INTERFACE ELECTRONIC)
eCl@ss 10.0	27-21-01-20
eCl@ss 9.0	27-21-01-20
ETIM 8.0	EC002653
ETIM 7.0	EC002653
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4045454828509
Customs tariff number	85437090300

Approvals / Certificates

General approvals			Approvals for marine applications		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19	BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
UL UL International Nether- lands B.V. (ORDINARY LO- CATIONS)	UL 508	E175199 Sec.4	DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1
			PRS Polski Rejestr Statków	-	TE/2186/880590/18



Approvals for hazardous areas



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

Downloads

Environmental Product Compliance

Compliance Search
Environmental Product Compliance 857-401



Documentation

Bid Text			
857-401	18.07.2019	xml 6.65 KB	
857-401	18.07.2019	docx 19.75 KB	
857-401	18.07.2019	pdf 76.23 KB	

Instruction Leaflet			
Signal Conditioners	V 2.0.0 24.01.2023	pdf 2162.69 KB	

CAD/CAE-Data

CAD data
2D/3D Models 857-401



CAE data	
EPLAN Data Portal 857-401	
WSCAD Universe 857-401	
ZUKEN Portal 857-401	

Engineering-Software

Software for Interface-Products			
WAGO Interface Confi- guration Software G2 FULL	1.0.8.6 20.01.2022	exe 111289.67 KB	
WAGO Interface Confi- guration Software G2 SMALL	1.0.8.6 20.01.2022	exe 29307.84 KB	

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; 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



1.1.4.1 Jumper



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



Item No.: 859-406/000-029
Jumper; for jumper slot; 6-way; insulated; signal 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 unit



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 con-
tinuous current: 6 A; Yellow status indica-
tor; Module width: 6 mm; 2,50 mm²; 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

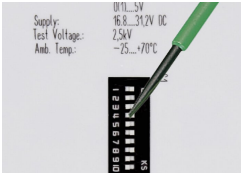
1.1.10.1 Operating tool



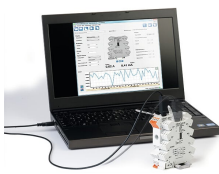
Item No.: 210-720
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

Installation Notes

Configuring



Configuration via DIP switch

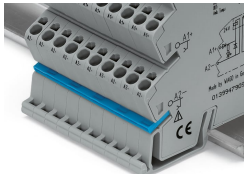


Configuration via WAGO Interface Configuration Software



Configuration via WAGO Interface Configuration App

Commoning



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