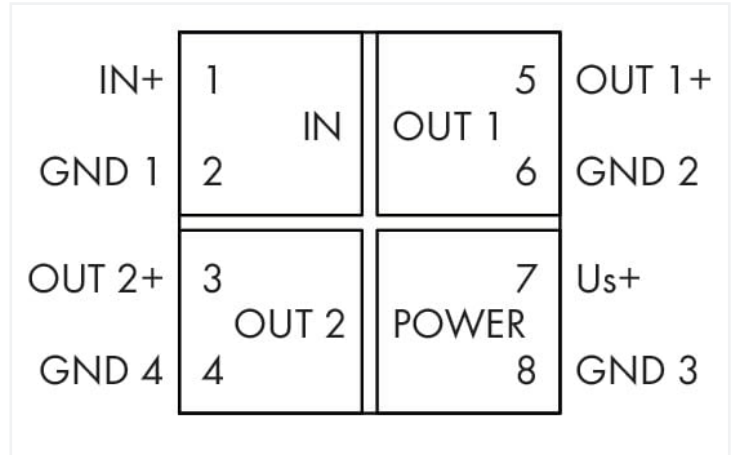
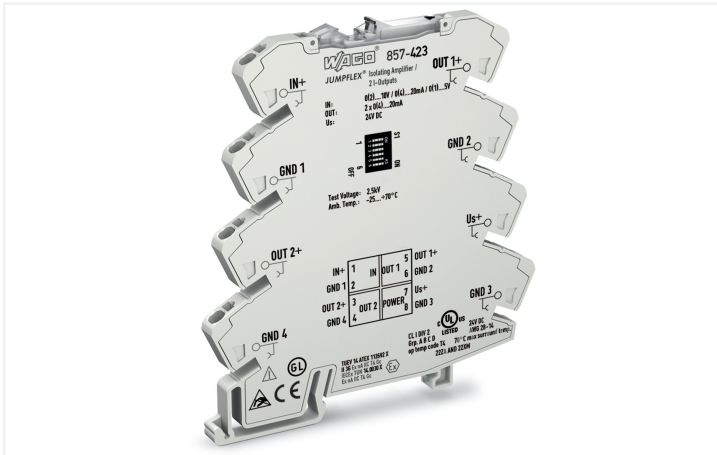


Data Sheet | Item Number: 857-423

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

<https://www.wago.com/857-423>

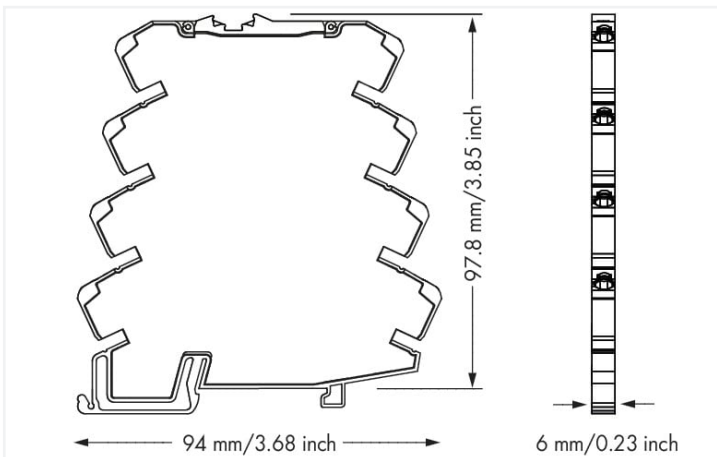
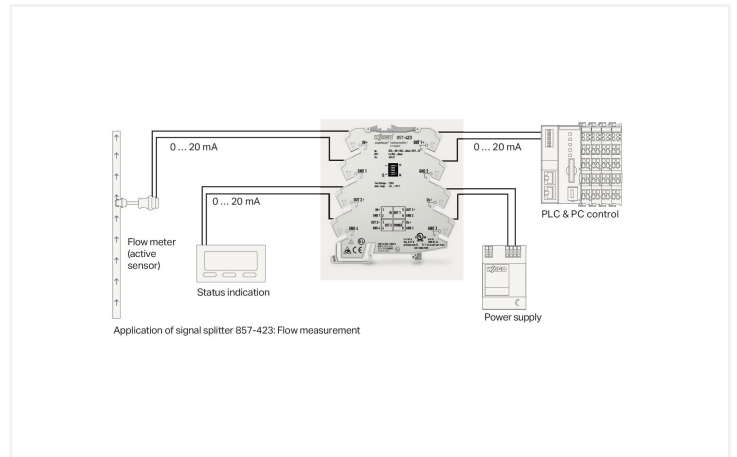


857-423
DIP Switch Adjustability

• = ON Default

DIP Switch S1 (6-fold)

1	2	3	Input Signal	4	Max. Operating Frequency	5	Output Signal 1	6	Output Signal 2
•	•	•	0 ... 20 mA	•	1 kHz	•	0 ... 20 mA	•	0 ... 20 mA
•	•	•	4 ... 20 mA	•	100 Hz	•	4 ... 20 mA	•	4 ... 20 mA
•	•	•	0 ... 10 V						
•	•	•	2 ... 10 V						
•	•	•	0 ... 5 V						
•	•	•	1 ... 5 V						



Dimensions in mm

Short description:

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

Features:

- Two configurable current outputs
- Calibrated measurement range switching
- Switchable limit frequency

Notes

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.

Technical data

Configuration

Configuration options	DIP switch
-----------------------	------------

Input

Input signal type	Voltage Current
Input signal (voltage)	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V (calibrated, switchable)
Input signal (current)	0 ... 20 mA 4 ... 20 mA (calibrated, switchable)
Input resistance (current input)	≤ 50 Ω
Input resistance (voltage input)	≥ 100 kΩ

Output (analog)

Output signal type	Current
Output signal (current)	0 ... 20 mA 4 ... 20 mA (kalibriert, umschaltbar)
Load impedance (current output)	≤ 300 Ω per channel

Signal processing

Limit frequency	100 Hz / 1 kHz (configurable via DIP switch)
Step response (typ.)	3.5 ms (100 Hz) 300 μs (1 kHz)

Measurement error

Transmission error (typ.)	≤ 0.1 % of upper-range value
Transmission error (max.)	≤ 0.2 % of upper-range value
Transmission error (under interference)	≤ 10 %
Temperature coefficient	≤ 0.01 %/K

Power supply

Power supply type	24 VDC
Nominal supply voltage U_s	DC 24 V
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 35 mA

Safety and protection

Rated Voltage	300 V
Protection type	IP20

Test voltage

Test voltage (input/output/supply)	AC 3 kV; 50 Hz; 1 min
------------------------------------	-----------------------

Insulation coordination (UL)

Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output 1/ analog output 2/supply)	Reinforced insulation (safe isolation)

Insulation coordination

Overvoltage category	II
Pollution degree	2

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
Cable type	Shielded cable

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	0.363 MJ
Weight	40.6 g

Environmental requirements

Ambient temperature (operation)	-25 ... +70 °C
Ambient temperature (storage)	-40 ... +85 °C
Processing temperature	-25 ... +50 °C
Temperature range of connection cable	≥ (T _{ambient} + 10 K)
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
EMC emission of interference	EN 61000-6-4
Standards/specifications	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 9.0	EC002653
ETIM 8.0	EC002653
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4045454471316
Customs tariff number	85437090300

Environmental Product Compliance

CAS-No.	1303-86-2 1317-36-8 7439-92-1 75980-60-8
REACH Candidate List Substance	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 (Austria)	f3bd2dd6-8897-4727-8817-eb8fa4f61833
SCIP notification number (Belgium)	6461991f-6733-4ab1-96d8-363c4c0ad2d1
SCIP notification number (Bulgaria)	0909499e-b080-4fb2-838b-98acad664bd1
SCIP notification number (Czech Republic)	9cb4d383-a36c-4264-be61-624a74c1699b
SCIP notification number (Denmark)	3e5537a9-59e8-4490-96fc-80cc1df749cf
SCIP notification number (Finland)	77584296-15bf-4327-bfa4-a92bdb8232ef
SCIP notification number (France)	a3a6bac3-78ac-411b-a7ae-18317cb7da7a
SCIP notification number (Germany)	1aac8de7-6254-4741-923d-9ee0f0d08019
SCIP notification number (Hungary)	0529448d-a98e-4ab8-8359-594effec587a
SCIP notification number (Italy)	52b6c194-a8eb-4660-9154-c8c6e3105cfe
SCIP notification number (Netherlands)	49bf022e-ca61-4f49-9ce1-2614f036ad4d
SCIP notification number (Poland)	85edb9a3-3ac3-4dab-b3a5-499070b23c99
SCIP notification number (Romania)	5acb356f-906f-48b0-84d7-748ba0bfdc2e
SCIP notification number (Sweden)	ac6b507e-39a6-4f8d-9254-a4f1bb9e7bfc

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 03081
UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

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

Approvals for marine applications

Approvals for hazardous areas



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
PRS Polski Rejestr Statków	-	TE/1098/880590/23

Approval	Standard	Certificate Name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX112692X (II 3G Ex ec IIC T4 Gc)
CCC CNEX	CNCA-C23-01	2020312310000210 (Ex ec IIC T4 Gc)
IECEX TUEV Nord Cert GmbH	-	IECEX TUN14.0030X
UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX004X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 857-423



Documentation

Bid Text

857-423	19.02.2019	xml 5.04 KB	
857-423	20.02.2019	docx 16.46 KB	

Instruction Leaflet

CCC Ex (Additional information)	26.04.2023	pdf 140.99 KB	
Messumformer und Trennverstärker		pdf 1754.72 KB	

CAD/CAE-Data

CAD data

2D/3D Models 857-423



CAE data

EPLAN Data Portal 857-423	
WSCAD Universe 857-423	
ZUKEN Portal 857-423	

1 Compatible Products

1.1 Optional Accessories

1.1.1 Installation

1.1.1.1 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

1.1.2 Interface module

1.1.2.1 Interface adapters



Item No.: 857-980

Interface adapter; 16-pole; analog

1.1.3 Jumper

1.1.3.1 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



[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

1.1.4 Marking

1.1.4.1 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

1.1.4.2 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 Terminal blocks

1.1.6.1 Supply module

Item No.: 857-979

Supply and through module

1.1.6.2 Through terminal block

Item No.: 857-979

Supply and through module

1.1.7 Tool

1.1.7.1 Operating tool

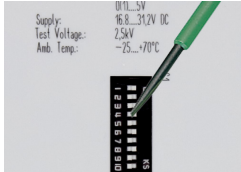


Item No.: 210-720

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

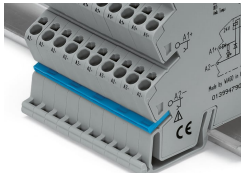
Installation Notes

Configuring



Configuration via DIP switch

Commoning



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