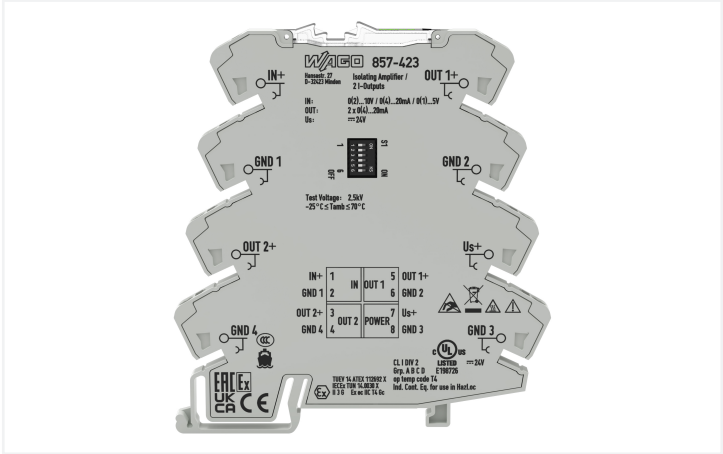
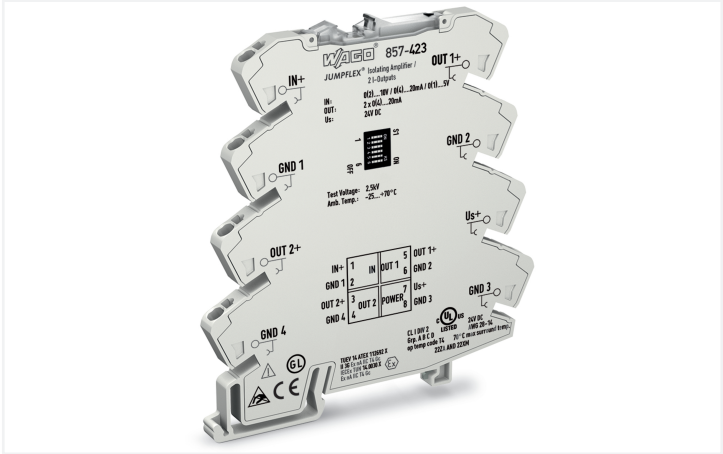


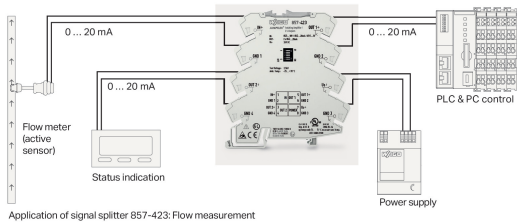
Data Sheet | Item Number: 857-423

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>



IN+	1	IN	5	OUT 1+
GND 1	2		6	GND 2
OUT 2+	3	OUT 2	7	Us+
GND 4	4	POWER	8	GND 3



Application of signal splitter 857-423: Flow measurement

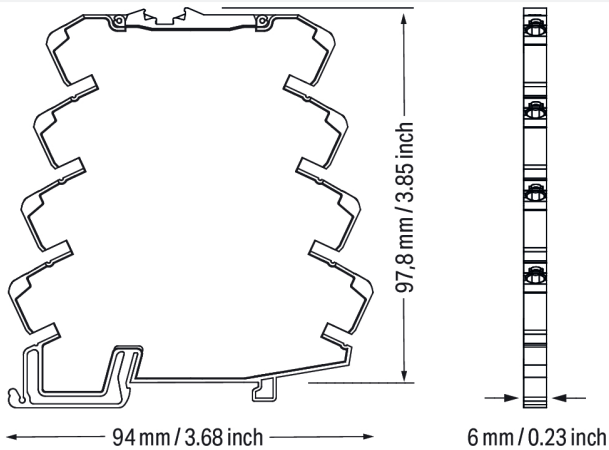
857-423

DIP Switch Adjustability

• = ON **Default**

DIP Switch S1 (6-fold)

Input Signal			Max. Operating Frequency	Output Signal 1		Output Signal 2	
1	2	3	4	5	6	7	8
•	•	•	0 ... 20 mA	1 kHz	•	0 ... 20 mA	0 ... 20 mA
•	•	•	4 ... 20 mA	•	100 Hz	•	4 ... 20 mA
•	•	•	0 ... 10 V	•	•	•	•
•	•	•	2 ... 10 V	•	•	•	•
•	•	•	0 ... 5 V	•	•	•	•
•	•	•	1 ... 5 V	•	•	•	•





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 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.



Technical data

Configuration		Input	
Configuration options	DIP switch	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 (calibrated, switchable)
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	24 VDC
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 35 mA

Safety and protection

Rated Voltage	300 V	Test voltage	
Protection type	IP20	Test voltage (input/output/supply)	3 kVAC; 50 Hz; 1 min

Insulation coordination (UL)	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output1/ 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 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
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)
PU (SPU)		1 pcs
Packaging type		Bag
Country of origin		DE
GTIN		4045454471316
Customs tariff number		85437090300

Product Classification		
UNSPSC		32101505
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
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

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

Approvals for marine applications			Approvals for hazardous areas		
Approval	Standard	Certificate Name	Approval	Standard	Certificate Name
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0	ATEX TUEV Nord Cert GmbH	EN 60079-0	TUEV14ATEX112692X (II 3G Ex ec IIC T4 Gc)
DNV DNV Germany GmbH	DNV-CG-0339,Aug.2021	TAA00001D1	CCC CNEX	CNCA-C23-01	2020312310000210 (Ex ec IIC T4 Gc)
PRS Polski Rejestr Statków	-	TE/1098/880590/23	IECEx TUEV Nord Cert GmbH	-	IECEX TUN14.0030X
			UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX004X
			UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	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

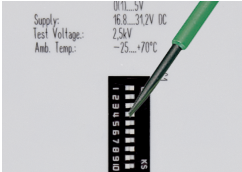


Item No.: 210-720

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

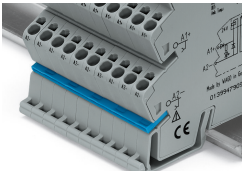
Installation Notes

Configuring



Configuration via DIP switch

Commoning



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