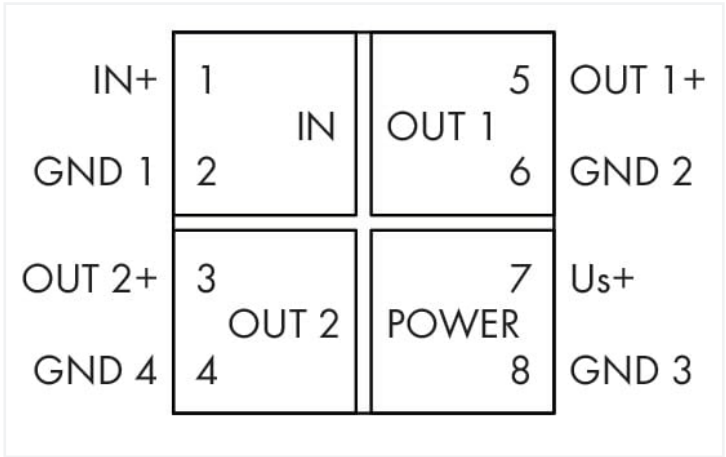
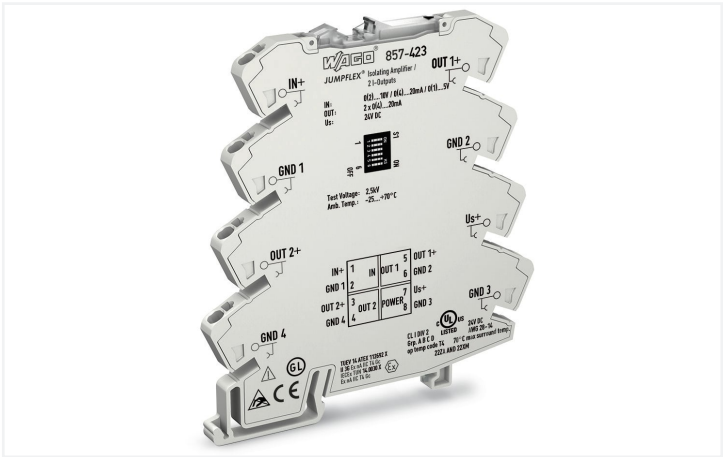


Data Sheet | Item Number: 857-423

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>

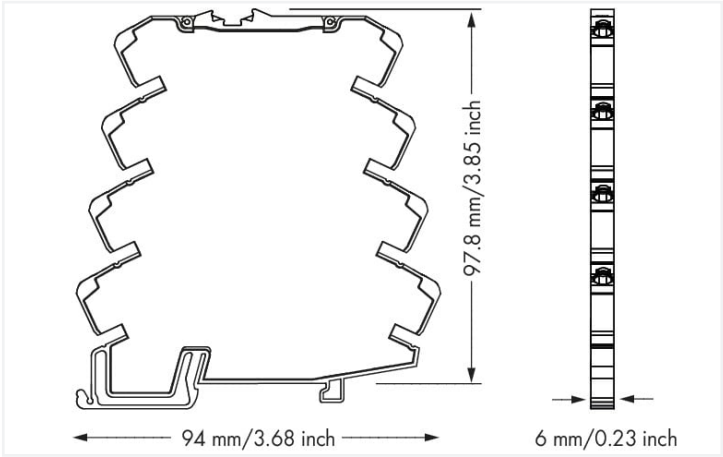
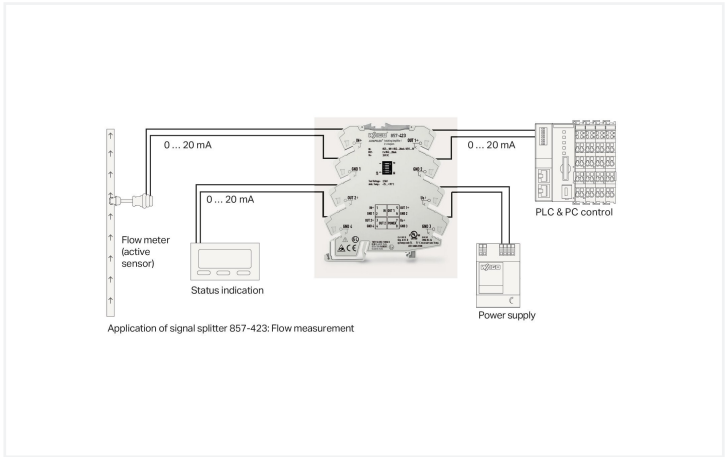


857-423
DIP Switch Adjustability

• = ON Default

DIP Switch S1 (6-fold)

Input Signal			Max. Operating Frequency	Output Signal 1		Output Signal 2
1	2	3	4	5	6	
•	•	•	•	•	•	•
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		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 switching)
		Input signal (current)	0 ... 20 mA; 4 ... 20 mA (calibrated switching)
		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 switching)
Load impedance (current output)	≤ 300 Ωper 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	Test voltage	
Protection type	IP20	Test voltage (input/output/supply)	AC 2.5 kV; 50 Hz; 1 min

Insulation coordination (UL)	
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output1/ analog output 2/supply)	Functional insulation

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	
Fire load	0.418 MJ
Weight	40.6 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
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 8.0	EC002653
ETIM 7.0	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



Environmental Product Compliance	
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 Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Sec.4

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		
		
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/2186/880590/18

Approvals for hazardous areas		
		
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)
EAC Brjansker Zertifizierungs- stelle	TP TC 012/2011	EAC RU C-DE.AM02. B.00144/19 (2 Ex nA IIC T4 Gc X)
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; 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			



1.1.4 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 unit



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

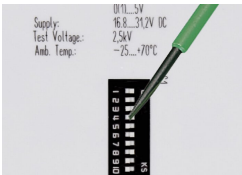
1.1.7.1 Operating tool



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

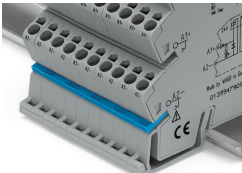
Installation Notes

Configuring



Configuration via DIP switch

Commoning



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