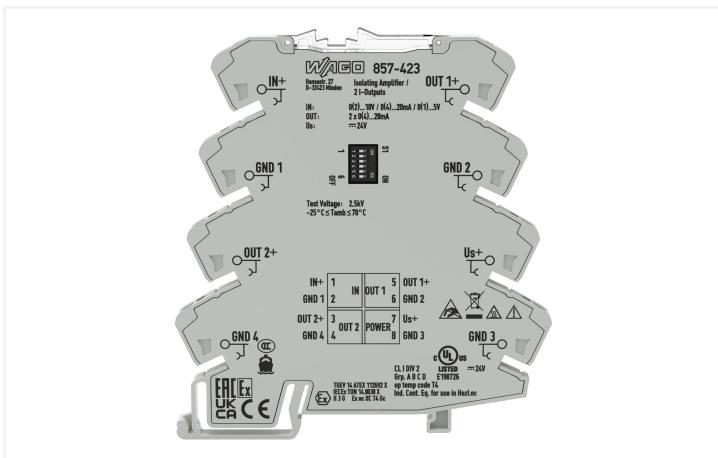
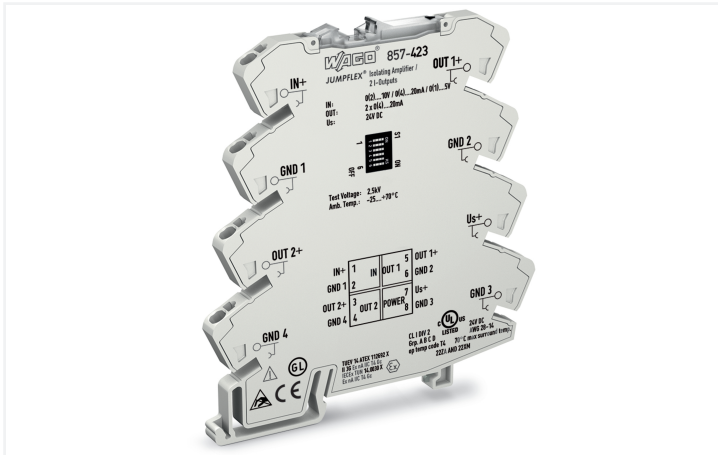


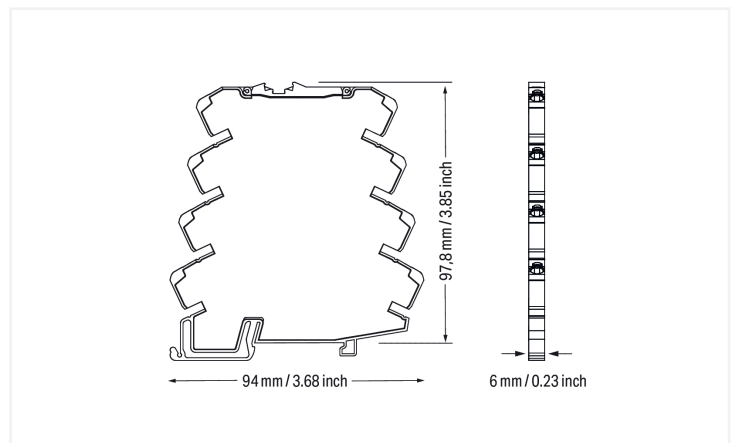
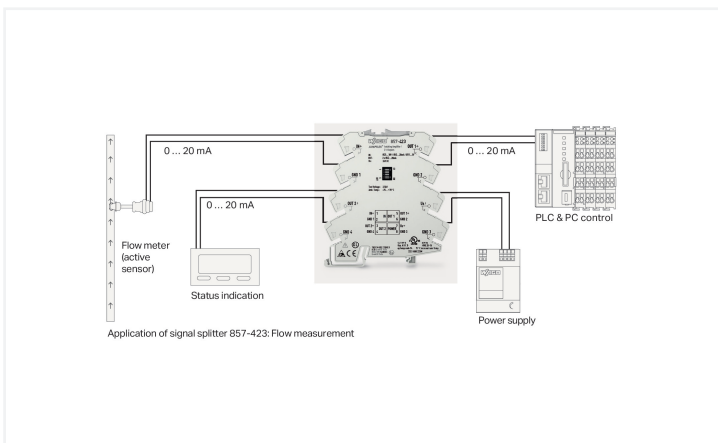
Data Sheet | Item Number: 857-423

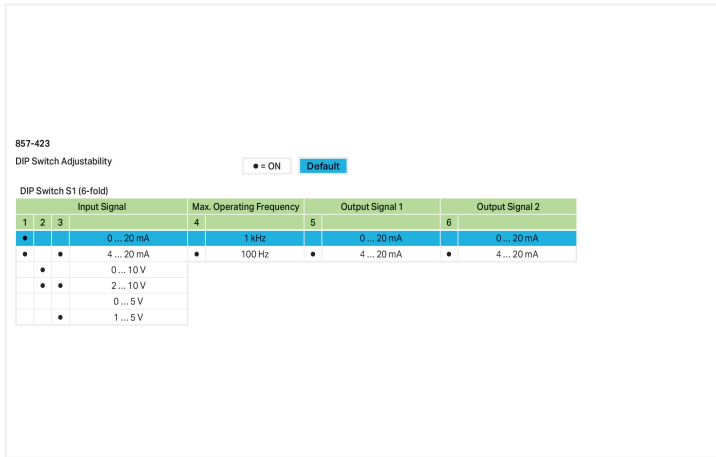
Isolation amplifier; Current and voltage input signal; 2 x current output signal; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm²

<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		8	GND 3



**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**

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 (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 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
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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 10.0	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



Approval	Standard	Certificate Name
EAC GZO Almaty Standart	TP TC 020/2011	EAC CoC 03081

Declarations of conformity and manufacturer's declarations

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/1098/880590/23

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 CNEC	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 LOCA- TIONS)	ANSI/ISA 12.12.01	E198726

Downloads

Environmental Product Compliance

Compliance Search

Environmental Product Compliance 857-423	↓
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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 in- formation)	26.04.2023	pdf 140.99 KB	↓
Messumformer und Trennverstärker		pdf 1754.72 KB	↓

CAD/CAE-Data

CAD data	CAE data
2D/3D Models 857-423	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

1.1.3.1 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; 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

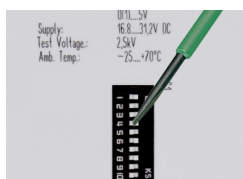


Item No.: 210-720

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

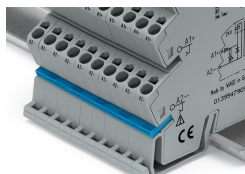
Installation Notes

Configuring



Configuration via DIP switch

Commoning



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