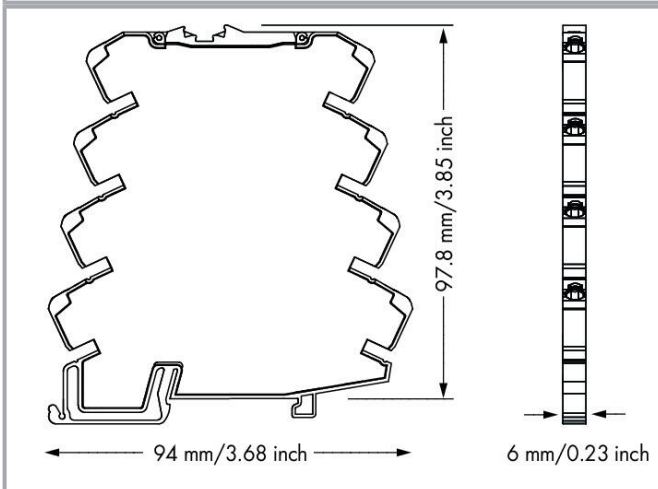
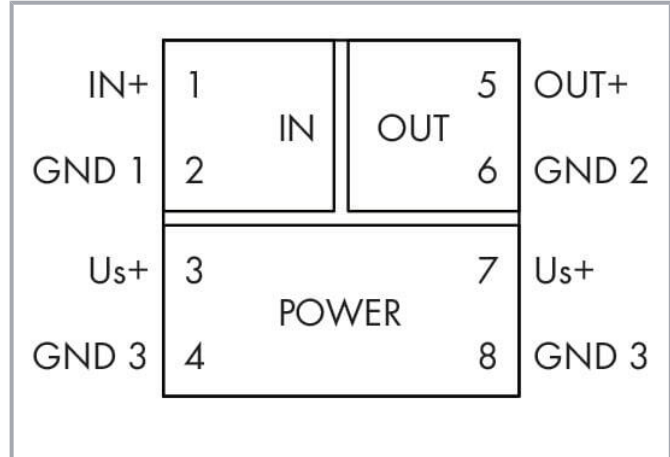
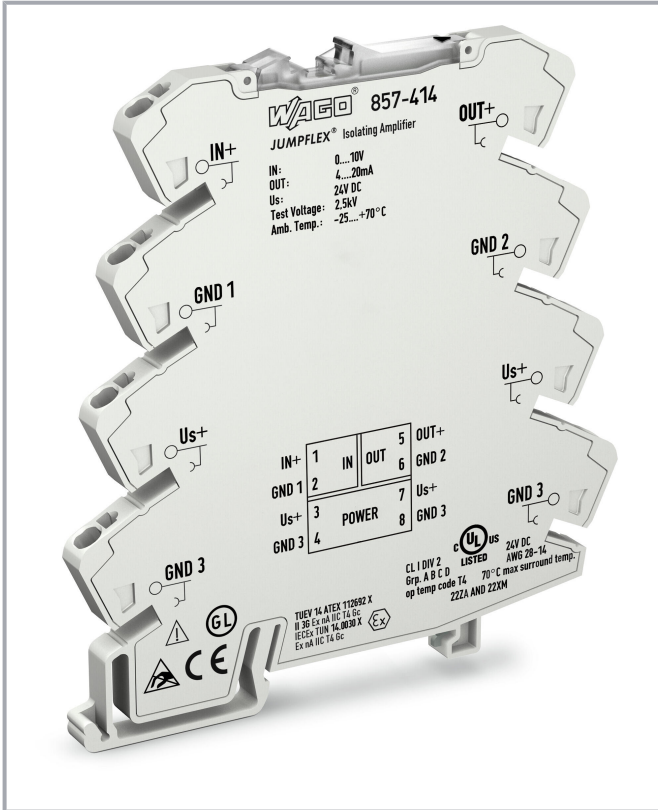


Data sheet | Item number: 857-414

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



www.wago.com/857-414



Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
 Hansastr. 27
 32423 Minden
 Phone: +49571 887-0 | Fax: +49571 887-169
 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.



Item description

Short description:

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

Features:

- Input/output: current or voltage signal
- Safe 3-way isolation with 2.5 kV test voltage per EN 61140

Data

Notes

Note	The 3 (Us+), 7 (Us+), 4 (GND 3) and 8 (GND 3) connections are internally commoned. Current carrying capacity between 3/4 and 7/8 connections: 1 A (max.)
------	---

Technical data

Configuration

Configuration options	Pre-configured
-----------------------	----------------

Input

Input signal type	Voltage
Input signal (voltage)	0 ... 10 V
Input resistance (voltage input)	$\geq 100 \text{ k}\Omega$
Input voltage (max.)	30 V

Output (analog)

Output signal type	Current
Output signal (current)	4 ... 20 mA
Load impedance (current output)	$\leq 600 \Omega$

Signal Processing

Limit frequency	100 Hz
Step response (typ.)	3.5 ms

Subject to changes. Please also observe the further product documentation!



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	≤ 25 mA

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 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

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	35.5 g

Subject to changes. Please also observe the further product documentation!



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	4045454609863
Customs tariff number	85437090300

Environmental Product Compliance

CAS-No.	7439-92-1
REACH Candidate List Substance	Lead
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	ff02fac5-bbcf-45ff-9890-1f4e607f15e2
SCIP notification number (Belgium)	f0d0c7a7-14da-45df-a3e9-0b9f87639f7e
SCIP notification number (Bulgaria)	3575c393-1750-413c-9ad2-4b5146fc8fb1
SCIP notification number (Czech Republic)	b3c358b4-dd41-4278-8f14-e2f366c2ef02
SCIP notification number (Denmark)	4812e413-f31f-45fa-932a-e5492c6a8c8c

Subject to changes. Please also observe the further product documentation!


WAGO GmbH & Co. KG
 Hansastr. 27
 32423 Minden
 Phone: +49571 887-0 | Fax: +49571 887-169
 Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
 We are always happy to take your call at +49 (571) 887-44222.


SCIP notification number (Finland)	7c33dfd1-ab52-4efc-bc48-8775d3ab9c91
SCIP notification number (France)	7eebbdb3-3f76-4850-ac5b-d37b6056c8af
SCIP notification number (Germany)	4529de71-b650-4e0a-91d8-38a9ca0b8821
SCIP notification number (Hungary)	39dd1b04-7a92-4848-9963-816c2c2dccff
SCIP notification number (Italy)	25e635be-46f5-4827-9584-affb00757694
SCIP notification number (Netherlands)	7eabc066-7f7f-4049-bbbf-2a2e329279b8
SCIP notification number (Poland)	b26518d5-38e2-4701-a36d-8bbbeccc4ca6
SCIP notification number (Romania)	7cb54a81-8b10-4125-a6b6-632b3c01d274
SCIP notification number (Sweden)	0e66ecc1-e9f8-446f-b496-3d19d87e2165

Approvals / Certificates




General approvals

Logo	Approval	Additional Approval Text	Certificate name
	EAC Brjansker Zertifizierungsstelle	TP TC 020/2011	EAC_Certificate_RU_C-DE.AM02.B.00115_19

Declarations of conformity and manufacturer's declarations

Logo	Approval	Additional Approval Text	Certificate name
	EU-Declaration of Conformity WAGO GmbH & Co. KG	-	-

Approvals for marine applications

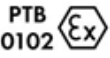





Logo	Approval	Additional Approval Text	Certificate name
	BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
	DNV DNV Germany GmbH	DNV-CG-0339, Aug. 2021	TAA00001D1
	PRS Polski Rejestr Statków	-	TE/2186 /880590/18

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.

Approvals for hazardous areas

Logo	Approval	Additional Approval Text	Certificate name
	ATEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X (II 3 G Ex nA IIC T4 Gc)
	CCC CNEX	CNCA-C23-01	2020312310000210 (Ex ec IIC T4 Gc)
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02.B. 00144/19 (2 Ex nA IIC T4 Gc X)
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0030_X
	UKEx WAGO GmbH & Co. KG	EN 60079-0	WAGO22UKEX004X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Optional accessories



Interface module

Interface adapters

	Item no.: 857-980 Interface adapter; 16-pole; analog	www.wago.com/857-980
--	--	--

Mounting

Mounting accessories

	Item no.: 249-116 Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-116
	Item no.: 249-117 Screwless end stop; 10 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray	www.wago.com/249-117

Subject to changes. Please also observe the further product documentation!

**Item no.: 249-197**

Screwless end stop; 14 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

www.wago.com/249-197**Jumpers**

Jumper

**Item no.: 859-408**

Jumper; for jumper slot; 8-way; insulated; light gray

www.wago.com/859-408**Item no.: 281-482**

Jumper; 2-way; insulated; gray

www.wago.com/281-482**Item no.: 859-404/000-005**

Jumper; for jumper slot; 4-way; insulated; red

www.wago.com/859-404/000-005**Item no.: 859-404/000-006**

Jumper; for jumper slot; 4-way; insulated; blue

www.wago.com/859-404/000-006**Item no.: 859-405/000-005**

Jumper; for jumper slot; 5-way; insulated; red

www.wago.com/859-405/000-005**Item no.: 859-405/000-029**

Jumper; for jumper slot; 5-way; insulated; yellow

www.wago.com/859-405/000-029**Item no.: 859-405**

Jumper; for jumper slot; 5-way; insulated; light gray

www.wago.com/859-405**Item no.: 859-404/000-029**

Jumper; for jumper slot; 4-way; insulated; yellow

www.wago.com/859-404/000-029**Item no.: 859-406**

Jumper; for jumper slot; 6-way; insulated; light gray

www.wago.com/859-406**Item no.: 859-405/000-006**

Jumper; for jumper slot; 5-way; insulated; blue

www.wago.com/859-405/000-006**Item no.: 859-406/000-005**

Jumper; for jumper slot; 6-way; insulated; red

www.wago.com/859-406/000-005**Item no.: 859-409/000-029**

Jumper; for jumper slot; 9-way; insulated; yellow

www.wago.com/859-409/000-029

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27


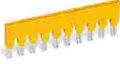

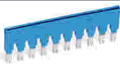










32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.

	Item no.: 859-410/000-005 Jumper; for jumper slot; 10-way; insulated; red	www.wago.com/859-410/000-005
	Item no.: 859-410/000-029 Jumper; for jumper slot; 10-way; insulated; yellow	www.wago.com/859-410/000-029
	Item no.: 859-410 Jumper; for jumper slot; 10-way; insulated; light gray	www.wago.com/859-410
	Item no.: 859-410/000-006 Jumper; for jumper slot; 10-way; insulated; blue	www.wago.com/859-410/000-006
	Item no.: 859-403/000-005 Jumper; for jumper slot; 3-way; insulated; red	www.wago.com/859-403/000-005
	Item no.: 859-402/000-029 Jumper; for jumper slot; 2-way; insulated; yellow	www.wago.com/859-402/000-029
	Item no.: 859-403/000-029 Jumper; for jumper slot; 3-way; insulated; yellow	www.wago.com/859-403/000-029
	Item no.: 859-403/000-006 Jumper; for jumper slot; 3-way; insulated; blue	www.wago.com/859-403/000-006
	Item no.: 859-408/000-005 Jumper; for jumper slot; 8-way; insulated; red	www.wago.com/859-408/000-005
	Item no.: 859-408/000-029 Jumper; for jumper slot; 8-way; insulated; yellow	www.wago.com/859-408/000-029
	Item no.: 859-409 Jumper; for jumper slot; 9-way; insulated; light gray	www.wago.com/859-409
	Item no.: 859-408/000-006 Jumper; for jumper slot; 8-way; insulated; blue	www.wago.com/859-408/000-006
	Item no.: 859-403 Jumper; for jumper slot; 3-way; insulated; light gray	www.wago.com/859-403
	Item no.: 859-409/000-005 Jumper; for jumper slot; 9-way; insulated; red	www.wago.com/859-409/000-005

Subject to changes. Please also observe the further product documentation!



Item no.: 859-404
Jumper; for jumper slot; 4-way; insulated; light gray

www.wago.com/859-404



Item no.: 859-409/000-006
Jumper; for jumper slot; 9-way; insulated; blue

www.wago.com/859-409/000-006



Item no.: 859-402/000-006
Jumper; for jumper slot; 2-way; insulated; blue

www.wago.com/859-402/000-006



Item no.: 859-402
Jumper; for jumper slot; 2-way; insulated; light gray

www.wago.com/859-402



Item no.: 859-402/000-005
Jumper; for jumper slot; 2-way; insulated; red

www.wago.com/859-402/000-005



Item no.: 859-406/000-006
Jumper; for jumper slot; 6-way; insulated; blue

www.wago.com/859-406/000-006



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

www.wago.com/859-406/000-029



Item no.: 859-407/000-006
Jumper; for jumper slot; 7-way; insulated; blue

www.wago.com/859-407/000-006



Item no.: 859-407/000-005
Jumper; for jumper slot; 7-way; insulated; red

www.wago.com/859-407/000-005



Item no.: 859-407/000-029
Jumper; for jumper slot; 7-way; insulated; yellow

www.wago.com/859-407/000-029



Item no.: 859-407
Jumper; for jumper slot; 7-way; insulated; light gray

www.wago.com/859-407

Tool

Operating tool



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

www.wago.com/210-720

Power supplies

Power supply unit



Item no.: 787-2852

Subject to changes. Please also observe the further product documentation!

Switched-mode power supply; 1-phase; 24 VDC output voltage; 1 A output current

www.wago.com/787-2852

Marking accessories

 Marking strip

**Item no.: 2009-110**

Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white

www.wago.com/2009-110

 Marker

**Item no.: 2009-115**

WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

www.wago.com/2009-115**Item no.: 793-501**

WMB marking card; as card; not stretchable; plain; snap-on type; white

www.wago.com/793-501**Item no.: 793-502**

WMB marking card; as card; MARKED; 1 ... 10 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-502**Item no.: 793-503**

WMB marking card; as card; MARKED; 11 ... 20 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-503**Item no.: 793-504**

WMB marking card; as card; MARKED; 21 ... 30 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-504**Item no.: 793-505**

WMB marking card; as card; MARKED; 31 ... 40 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-505**Item no.: 793-506**

WMB marking card; as card; MARKED; 41 ... 50 (10x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-506**Item no.: 793-566**

WMB marking card; as card; MARKED; 1 ... 50 (2x); not stretchable; Horizontal marking; snap-on type; white

www.wago.com/793-566**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

www.wago.com/793-5501

Terminal blocks

 Supply module

**Item no.: 857-979**

Supply and through module

www.wago.com/857-979

Downloads
Documentation
Bid Text

857-414

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG

Hansastr. 27

32423 Minden

Phone: +49571 887-0 | Fax: +49571 887-169

Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?

We are always happy to take your call at +49 (571) 887-44222.



X81 - Datei	2019 Jul 18	xml 5.4 kB	Download
857-414 pdf - Datei	2019 Jul 18	pdf 74.1 kB	Download
857-414 docx - Datei	2019 Jul 18	docx 18.7 kB	Download

Instruction Leaflet

CCC Ex (Additional information) 857-***	2023 Apr 26	pdf 144.4 kB	Download
Messumformer und Trennverstärker 0(4)...20 mA / 0(4)...20 mA	V 1.2.1 2020 Jan 21	pdf 1.6 MB	Download

Additional Information

Disposal and Recycling Electrical and electronic equipment, Batteries, Packaging	V 1.1.0 2022 Aug 18	pdf 2.2 MB	Download
---	------------------------	---------------	----------

CAD/CAE-Data

CAD data

2D/3D Models 857-414	URL	Download
----------------------	-----	----------

CAE data

EPLAN Data Portal 857-414	URL	Download
WSCAD Universe 857-414	URL	Download
ZUKEN Portal 857-414	URL	Download

Environmental Product Compliance

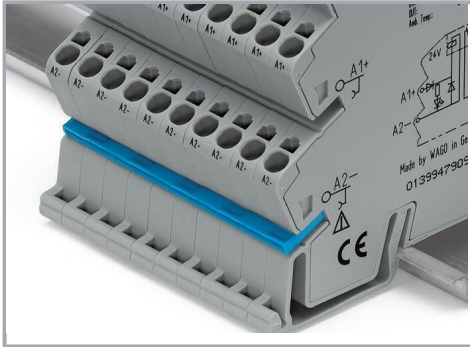
Compliance Search

Environmental Product Compliance 857-414 Isolation amplifier; Voltage input signal; Current output signal; Supply voltage: 24 VDC; 6 mm module width; 2,50 mm ²	URL	Download
---	-----	----------

Subject to changes. Please also observe the further product documentation!

Installation Notes

Commoning



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

Subject to changes. Please also observe the further product documentation!

WAGO GmbH & Co. KG
Hansastr. 27
32423 Minden
Phone: +49571 887-0 | Fax: +49571 887-169
Email: info.de@wago.com | Web: www.wago.com

Do you have any questions about our products?
We are always happy to take your call at +49 (571) 887-44222.