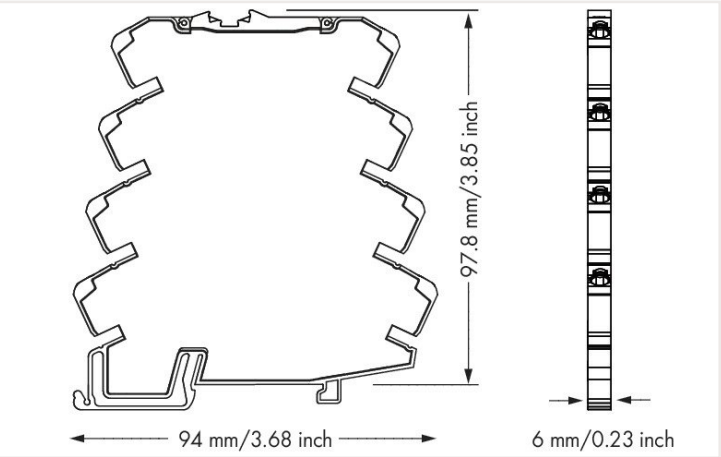
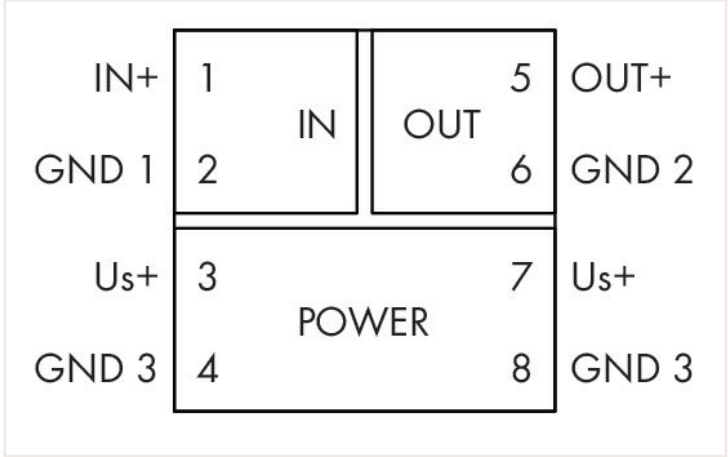


Data sheet | Item number: 857-415

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

<https://www.wago.com/857-415>



Dimensions in mm

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

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	Current
Input signal (current)	0 ... 20 mA
Input resistance (current input)	≤ 50 Ω
Input current (max.)	50 mA



Output – analog	
Output signal type	Voltage
Output signal (voltage)	0 ... 10 V
Load impedance (voltage output)	≥ 2 kΩ

Measurement error	
Transmission error (typ.)	≤ 0.1 % of upper-range value
Temperature coefficient	≤ 0.01 %/K

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

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 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

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	0.405 MJ
Weight	35.3 g

Environmental requirements	
Ambient temperature (operation)	-25 ... +70 °C
Surrounding air 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 Electronics)
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 Stück
Packaging type	Bag
Country of origin VKOrg Germany	DE
GTIN	4045454609856
Customs tariff number VKOrg Germany	85437090300

Approvals and certificates

Ex-Approvals



Approval	Standard	Certificate name
ATEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X (II 3 G Ex nA IIC T4 Gc)
CCCEX CQST/CNEX	CNCA-C23-01	2020312310000210 (Ex nA 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	IEC 60079-0	IECEX_TUN_14.0030_X
UL Underwriters Laboratories Inc. (HAZARDOUS LOCA- TIONS)	ANSI/ISA 12.12.01	E198726

Country specific Approvals



Approval	Standard	Certificate name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19

Ship Approvals



Approval	Standard	Certificate name
BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
DNV GL Det Norske Veritas, Ger- manischer Lloyd	-	TAA00001D1
PRS Polski Rejestr Statków	-	TE/2186/880590/18

UL-Approvals



Approval	Standard	Certificate name
UL UL International Nether- lands B.V. (ORDINARY LO- CATIONS)	UL 508	E175199 Sec.4



Downloads	
Environmental Product Compliance	
Compliance Search	
Environmental Product Compliance 857-415	

Documentation			
Additional Information		Bid Text	
Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf	
		259.56 KB	
		857-415	
		18.07.2019	
		xml	
		5.24 KB	
		857-415	
		18.07.2019	
		docx	
		18.08 KB	
		857-415	
		18.07.2019	
		pdf	
		72.36 KB	

Instruction Leaflet			
Messumformer und Trennverstärker	V 1.2.1	pdf	
	21.01.2020	1589.43 KB	

CAD/CAE-Data	
CAD data	CAE data
2D/3D Models 857-415	EPLAN Data Portal 857-415
	WSCAD Universe 857-415
	ZUKEN Portal 857-415

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.: 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



Item no.: 281-482
Jumper; insulated; gray

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

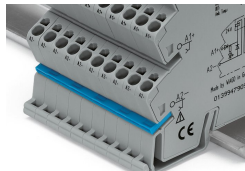


Item no.: 210-720

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

Installation notes

Commoning



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