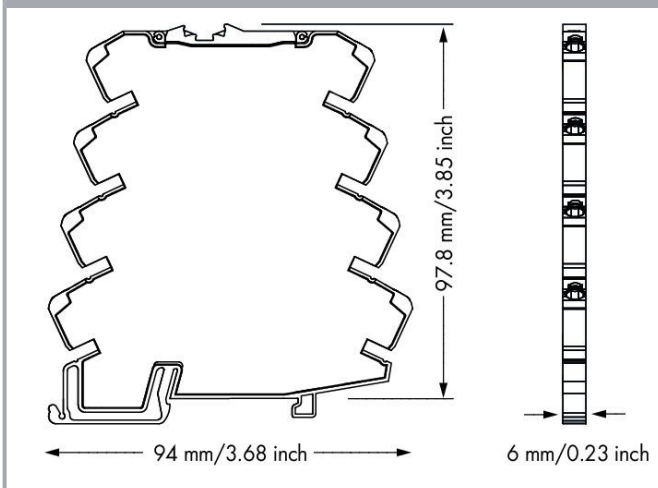
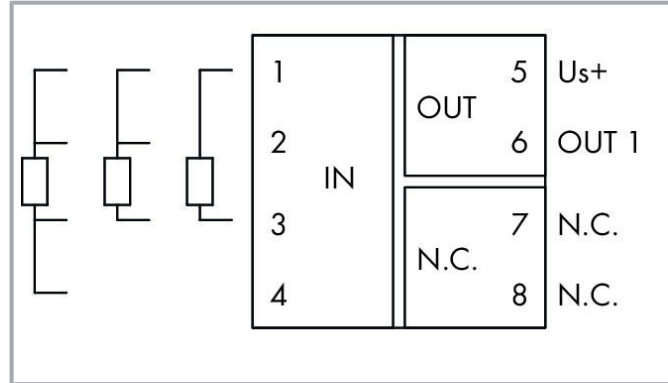
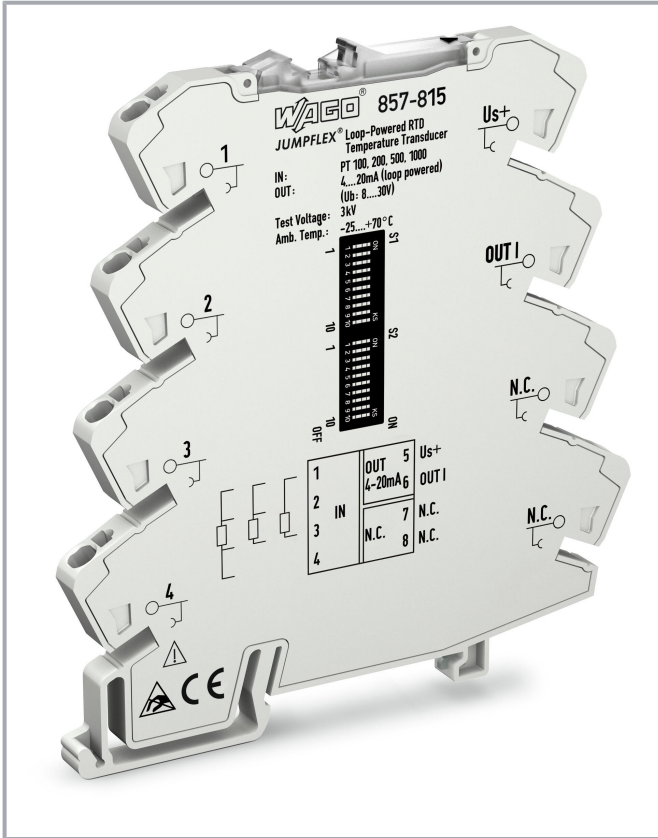


Data sheet | Item number: 857-815

Temperature signal conditioner for RTD sensors; Current output signal;
Power via output; 6 mm module width



www.wago.com/857-815



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

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



Input

Input signal type	Pt sensors Resistor
Input current (max.)	50 mA
Input voltage (max.)	30 V

Input – RTD sensors

Sensor types (RTD)	Pt100 Pt200 Pt500 Pt1000
Sensor connection	2-wire; 3-wire; 4-wire (switchable)
Sensor power supply (RTD) (max.)	≤ 0.5 mA
Measurement range, temperature (RTD)	-200 ... 850°C
Measurement span (RTD) (min.)	50 K

Input – resistors

Input range (resistor)	0 ... 1 kΩ; 0 ... 4.5 kΩ
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Output – analog

Output signal type	Current
Output signal (current)	4 ... 20 mA; 20 ... 4 mA
Load impedance (current output)	See derating graphic

Signal processing

Step response (typ.)	1000 ms
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Measurement error

Transmission error (typ.)	≤ 0.1 % at full measurement span
Transmission error for the set measurement range	≤ ((40 K/set measurement range [K]) + 0.1) %
Temperature coefficient	≤ 0.02 %/K

Supply

Power supply type	loop-powered (via output)
Supply voltage	DC 8 ... 30 V (Power is derived from the output circuit.)

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



Safety and protection

Measurement category per EN/UL 61010-2-030	CAT II (input)
Protection type	IP20

Test voltage

Test voltage (input/analog output)	3 kVAC; 50 ... 60 Hz; 1 min
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Insulation parameters per EN/UL 61010-1

Line-to-neutral conductor voltage (AC) max.	150 V
Overvoltage category	II
Pollution degree	2
Insulation type (input/analog output)	Reinforced insulation

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 inch

Physical data

Width	6 mm / 0.236 inch
Height	94 mm / 3.701 inch
Depth from upper edge of DIN-rail	97.8 mm / 3.85 inch

Mechanical data

Mounting type	DIN-35 rail
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Material data

Weight	38.9 g
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Environmental requirements

Surrounding air temperature (operation)	-25 ... 70 °C (at nominal current)
Surrounding air temperature (storage)	-40 ... 85 °C
Temperature range of the connecting cable according to EN 61010-	$\geq (T_{\text{surrounding air}} + 10 \text{ K})$

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

2-201	
Temperature range of connecting cable per UL 61010-2-201 (min.)	90 °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; EN 61326-1; EN 50121-3-2
EMC emission of interference	EN 61000-6-3; EN 61326-1; EN 50121-3-2
Standards/Specifications	EN 61010-1 EN 61373

Commercial data

PU (SPU)	1 Each
Packaging type	bag
Country of origin	DE
GTIN	4055143475648
Customs tariff number	85437090300


Approvals / Certificates

UL-Approvals


Logo	Approval	Additional Approval Text	Certificate name
	UL Underwriters Laboratories Inc. (ORDINARY LOCATIONS)	UL 61010-2-201	E175199

Optional accessories

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

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



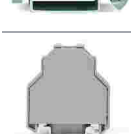
Subject to changes. Please also observe the further product documentation!

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


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
	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

Power supplies

Power supply

	Item no.: 787-2852 Switched-mode power supply; 1-phase; 24 VDC output voltage; 1 A output current; -	www.wago.com/787-2852
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Subject to changes. Please also observe the further product documentation!

Interface module

Interface adapter

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

Through terminal block

	Item no.: 857-979 Supply and through module	www.wago.com/857-979
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Jumpers

Jumper

	Item no.: 859-408 Jumper; for jumper slot; 8-way; insulated; light gray	www.wago.com/859-408
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	Item no.: 281-482 Jumper; insulated; gray	www.wago.com/281-482
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	Item no.: 859-404/000-005 Jumper; for jumper slot; 4-way; insulated; red	www.wago.com/859-404/000-005
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	Item no.: 859-404/000-006 Jumper; for jumper slot; 4-way; insulated; blue	www.wago.com/859-404/000-006
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	Item no.: 859-405/000-005 Jumper; for jumper slot; 5-way; insulated; red	www.wago.com/859-405/000-005
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	Item no.: 859-405/000-029 Jumper; for jumper slot; 5-way; insulated; yellow	www.wago.com/859-405/000-029
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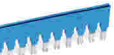








	Item no.: 859-405 Jumper; for jumper slot; 5-way; insulated; light gray	www.wago.com/859-405
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	Item no.: 859-404/000-029 Jumper; for jumper slot; 4-way; insulated; yellow	www.wago.com/859-404/000-029
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	Item no.: 859-406 Jumper; for jumper slot; 6-way; insulated; light gray	www.wago.com/859-406
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	Item no.: 859-405/000-006 Jumper; for jumper slot; 5-way; insulated; blue	www.wago.com/859-405/000-006
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Subject to changes. Please also observe the further product documentation!

	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
	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

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

	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
	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

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



Downloads

Documentation

Bid Text

857-815 X81 - Datei	2019. 2. 19.	xml 5.7 kB	Download
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857-815 docx - Datei	2019. 2. 20.	docx 18.4 kB	Download
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Instruction Leaflet

Temperature signal conditioner for RTD sensors; Current output signal; Power via output	V 2.0.0 2020. 9. 29.	pdf 2.3 MB	Download
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Additional Information

Disposal; Electrical and electronic equipment, Packaging	V 1.0.0	pdf 265.8 kB	Download
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CAD/CAE-Data

CAD data

2D/3D Models 857-815	URL	Download
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CAE data

EPLAN Data Portal 857-815	URL	Download
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WSCAD Universe 857-815	URL	Download
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ZUKEN Portal 857-815	URL	Download
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Environmental Product Compliance

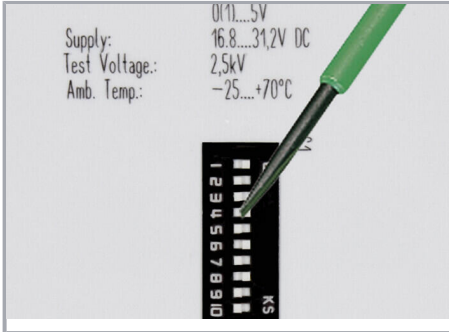
Compliance Search

Environmental Product Compliance 857-815 Temperature signal conditioner for RTD sensors; Current output signal; Power via output; 6 mm module width	URL	Download
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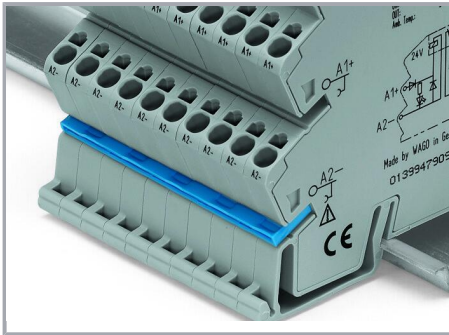
Installation Notes

Configuration



Configuration via DIP switch

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!