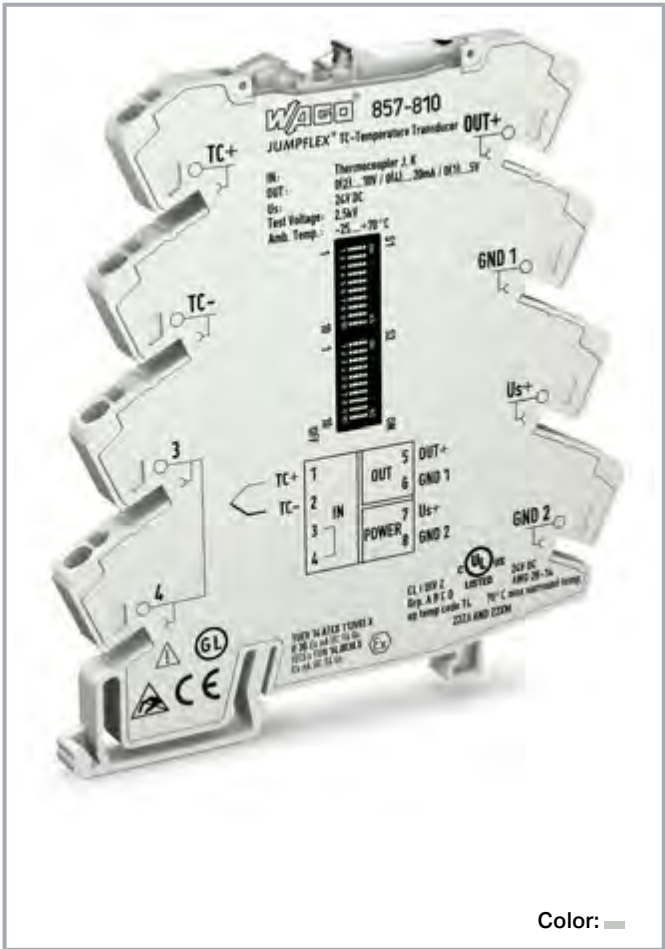
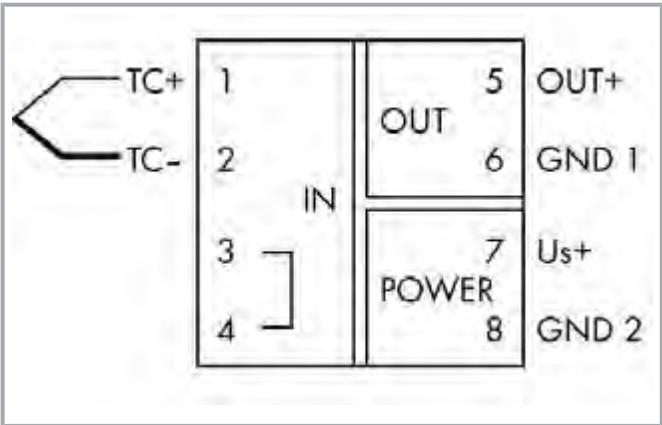


Data sheet | Item number: 857-810

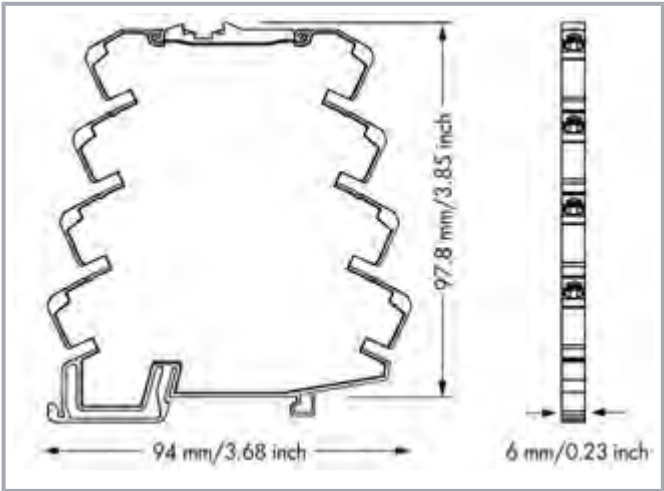
JUMPFLEX® signal conditioner; temperature; thermocouples of type J, K;
configurable



Color:



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



857-810

DIP Switch Adjustability

☐ ON
 ☒ OFF

DIP Switch S1

Cold Junction Compensation	Terminal Input	Output signal					Measurement Range Underflow	Measurement Range Overflow	Wire Break
1	2	3	4	5	6	7	8	9	10
ON	OFF	OFF	OFF	OFF	OFF	OFF	Upper limit of output range + 5 %	Upper limit of output range + 2.5 %	Upper limit of output range + 5 %
OFF	OFF	OFF	OFF	OFF	OFF	OFF	Lower limit of output range	Upper limit of output range + 2.5 %	Upper limit of output range + 5 %
OFF	OFF	OFF	OFF	OFF	OFF	OFF	Lower limit of output range	Upper limit of output range	Upper limit of output range + 5 %
OFF	OFF	OFF	OFF	OFF	OFF	OFF	Lower limit of output range	Upper limit of output range	Upper limit of output range + 5 %
OFF	OFF	OFF	OFF	OFF	OFF	OFF	Lower limit of output range	Upper limit of output range	Lower limit of output range

DIP 9 and 10 (4-5)

* see in SENSOR-ME-01

DIP Switch S2

Start Temperature										End Temperature									
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
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ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON	ON
ON	ON	ON	ON	ON	ON	ON	ON												



Input – TC sensors

Sensor types (TC)	Type J Type K
Temperature measurement range (TC)	-150 ... 1200 °C (Type J); -150 ... 1350 °C (Type K)
Measurement span (min.) (TC)	100 K
Cold junction compensation	On/Off (Default: On)
Cold junction error	3 K (typ. 2 K)

Output – analog

Output signal type	Current Voltage
Output signal (V)	0 ... 5 V 1 ... 5 V 0 ... 10 V 2 ... 10 V
Output signal (A)	0 ... 10 mA 2 ... 10 mA 0 ... 20 mA 4 ... 20 mA
Load impedance (voltage output)	$\geq 2 \text{ k}\Omega$
Load impedance (current output)	$\leq 600 \Omega$

Signal processing

Step response (typ.)	60 ms (Cold junction compensation (OFF)); 120 ms (Cold junction compensation (ON))
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Measurement error

Transmission error (typ.)	$\leq 0.1\%$ at max. measurement span (type J, K)
Transmission error for the set measurement range	$\leq (150 \text{ K/set measurement range [K]}) \%$
Temperature coefficient	$\leq 0.04 \text{ \%}/\text{K}$

Supply

Power supply type	24 VDC
Nominal supply voltage U_S	DC 24 V
Supply voltage range	$\pm 30 \%$
Power consumption at nominal supply voltage	$\leq 40 \text{ mA}$

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



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 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

Color	light gray
Weight	35.5 g

Environmental requirements

Surrounding air 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

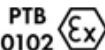
Subject to changes. Please also observe the further product documentation!

Commercial data

Product Group	6 (Interface Electronics)
PU (SPU)	1 Each
Packaging type	bag
Country of origin	DE
GTIN	4045454470135
Customs tariff number	8543704500

Approvals / Certificates

Ex-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	CCCEx CQST/CNEx	CNCA-C23-01	2020312310000210
	EAC Brjansker Zertifizierungsstelle	TP TC 012/2011	EAC RU C-DE.AM02.B. 00144/19
	IECEX TUEV Nord Cert GmbH	IEC 60079-0	IECEX_TUN_14.0030_X
	IECEX TUEV Nord Cert GmbH	EN 60079-0	TÜV_14_ATEX_112692_X
	UL Underwriters Laboratories Inc. (HAZARDOUS LOCATIONS)	ANSI/ISA 12.12.01	E198726

Ship Approvals

Logo	Approval	Additional Approval Text	Certificate name
	BV Bureau Veritas S.A.	Rules for class. of Steel Ships	40179_B0
	DNV GL Det Norske Veritas, Germanischer Lloyd	-	TAA00001D1

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



NK
Nippon Kaiji Kyokai

-

TA17255M



PRS
Polski Rejestr Statków

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TE/2186
/880590/18

UL-Approvals

Logo	Approval	Additional Approval Text	Certificate name
	UL UL International Netherlands B.V. (ORDINARY LOCATIONS)	UL 508	E175199 Sec.4

Optional accessories

Interface module

Interface adapter



Item no.: 857-980
JUMPFLEX® interface adapter; with 16-pole flat cable connector per DIN 41651; analog

Jumpers

Jumper



Item no.: 859-408
Push-in type jumper bar; Light gray; Insulated; 18 A; 8-position



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



Item no.: 859-404/000-005
Jumper; for jumper slot; 4-way; insulated; red



Item no.: 859-404/000-006
Jumper; for jumper slot; 4-way; insulated; blue



Item no.: 859-405/000-005
Jumper; for jumper slot; 5-way; insulated; red

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



Item no.: 859-405/000-029

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



Item no.: 859-405

Push-in type jumper bar; Light gray; Insulated; 18 A; 5-position



Item no.: 859-404/000-029

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



Item no.: 859-406

Push-in type jumper bar; Light gray; Insulated; 18 A; 6-position



Item no.: 859-405/000-006

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



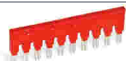
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Jumper; for jumper slot; 6-way; insulated; red



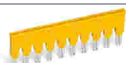
Item no.: 859-409/000-029

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



Item no.: 859-410/000-005

Jumper; for jumper slot; 10-way; insulated; red



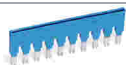
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Item no.: 859-410

Push-in type jumper bar; Light gray; Insulated; 18 A; 10-position



Item no.: 859-410/000-006

Jumper; for jumper slot; 10-way; insulated; blue



Item no.: 859-403/000-005

Jumper; for jumper slot; 3-way; insulated; red



Item no.: 859-402/000-029

Jumper; for jumper slot; 2-way; insulated; yellow



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

Item no.: 859-403/000-029

Jumper; for jumper slot; 3-way; insulated; yellow



Item no.: 859-403/000-006

Jumper; for jumper slot; 3-way; insulated; blue



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

Push-in type jumper bar; Light gray; Insulated; 18 A; 9-position



Item no.: 859-408/000-006

Jumper; for jumper slot; 8-way; insulated; blue



Item no.: 859-403

Push-in type jumper bar; Light gray; Insulated; 18 A; 3-position



Item no.: 859-409/000-005

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



Item no.: 859-404

Push-in type jumper bar; Light gray; Insulated; 18 A; 4-position



Item no.: 859-409/000-006

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



Item no.: 859-402/000-006

Jumper; for jumper slot; 2-way; insulated; blue



Item no.: 859-402

Push-in type jumper bar; Light gray; Insulated; 18 A; 2-position



Item no.: 859-402/000-005

Jumper; for jumper slot; 2-way; insulated; red



Item no.: 859-406/000-006

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



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.: 859-407/000-005

Jumper; for jumper slot; 7-way; insulated; red



Item no.: 859-407/000-029

Jumper; for jumper slot; 7-way; insulated; yellow



Item no.: 859-407

Push-in type jumper bar; Light gray; Insulated; 18 A; 7-position

Marking accessories

Marking strip



Item no.: 2009-110

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

Marker



Item no.: 2009-115

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



Item no.: 793-501

WMB marking card; as card; not stretchable; 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.: 793-503

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.: 793-566

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

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

**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

Tools

Operating tool

**Item no.: 210-720**

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

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

**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

Clamps

Through terminal block

**Item no.: 857-979**

JUMPFLEX® supply and through module

Power supplies

Power supply

**Item no.: 787-2852**

EPSITRON® / JUMPFLEX® power supply; single-phase; 24 VDC; 1 A

Downloads**Documentation****Bid Text**

857-810	Feb 19, 2019	xml
X81 - Datei		5.9 kB
857-810	Feb 20, 2019	docx
docx - Datei		17.5 kB

Instruction Leaflet

Messumformer und Trennverstärker pdf

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



Temperaturmessumformer Thermoelemente Typ J, K DIP-Schalter

2.4 MB

Additional Information

Disposal; Electrical and electronic equipment, Packaging

V 1.0.0

pdf
265.8 kB

CAD files

CAD data

2D/3D Models 857-810

CAE data

EPLAN Data Portal 857-810

WSCAD Universe 857-810

ZUKEN Portal 857-810

Environmental Product Compliance

Compliance Search

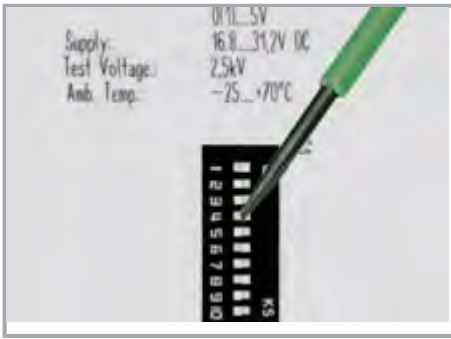
Environmental Product Compliance 857-810

Temperature signal conditioner for thermocouples; Current and voltage output signal; Configuration via DIP switch; Supply voltage: 24 VDC; 6 mm module width; light gray

Installation Notes

Configuration

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



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!