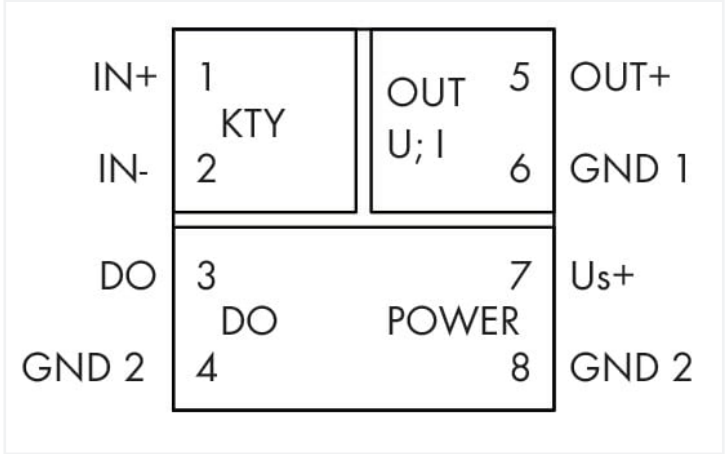
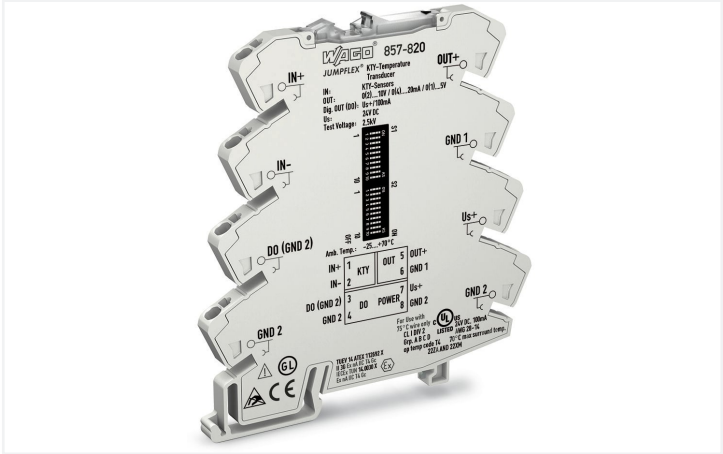


Data Sheet | Item Number: 857-820

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

<https://www.wago.com/857-820>



Color: ■ light gray

857-820
DIP Switch Adjustability

● ON **Default**

DIP Switch S1				Sensor Type	
1	2	3	4		
●	●	●	●	KT193-130, KT193-120, KT193-110, KT192-120	
●	●	●	●	KT193-121, KT192-121	
●	●	●	●	KT192-122, KT192-122	
●	●	●	●	KT193-150, KT192-150	
●	●	●	●	KT191-210, KT192-220, KT192-210, KT192-220	
●	●	●	●	KT191-221, KT192-221	
●	●	●	●	KT193-222, KT192-222	
●	●	●	●	KT191-250, KT192-250	
●	●	●	●	KT193-110, KT193-120	
●	●	●	●	KT193-121	
●	●	●	●	KT193-122	
●	●	●	●	KT193-150	
●	●	●	●	KT193-151	
●	●	●	●	KT194-130, KT194-150	
●	●	●	●	KT194-151	
●	●	●	●	KT196, KT198, ST13, ST20	

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
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Output (digital)	
Switching voltage (DO) max.	Supply voltage applied
Continuous current (DO) max.	100 mA (no internal restriction)

Signal processing	
Step response (typ.)	50 ms

Measurement error	
Transmission error (typ.)	≤ 0.1 % of upper-range value

Power supply	
Power supply type	24 VDC
Nominal supply voltage U _S	DC 24 V
Supply voltage range	±30 %
Current consumption at nominal supply voltage	≤ 40 mA (+ I _{DO})

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	
Color	light gray
Fire load	0.418 MJ
Weight	35.5 g

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	27-21-01-29
eCl@ss 9.0	27-21-01-20
ETIM 8.0	EC002919
ETIM 7.0	EC002919
PU (SPU)	1 pcs
Packaging type	Bag
Country of origin	DE
GTIN	4050821053002
Customs tariff number	85437090300

Environmental Product Compliance	
CAS-No.	1303-86-2 1317-36-8 7439-92-1 79-94-7
REACH Candidate List Substance	2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol Diboron trioxide Lead Lead monoxide
RoHS Compliance Status	Compliant,With Exemption
RoHS Exemption	6(c) 7(a) 7(c)-I 7(c)-II
SCIP notification number (Austria)	34941bc9-8e48-46c9-a7b2-4825f5329246
SCIP notification number (Belgium)	75a377f0-35a3-4b2e-b165-bce77bd274cc
SCIP notification number (Bulgaria)	5cf1a5be-e025-43b0-825a-1b18a8f7f565
SCIP notification number (Czech Republic)	bdb21d8c-e1b4-4b2d-9bfa-0c6300dbc530
SCIP notification number (Denmark)	095db8cb-41af-4e82-af2d-44fdbf1dd68e
SCIP notification number (Finland)	cc1af7e7-ac8e-4237-9b82-3be1333c8700
SCIP notification number (France)	2c3fa22b-66cf-465e-924f-b8524df6b7d3
SCIP notification number (Germany)	4e95591a-ceaf-4f18-a2eb-555acfd521ee
SCIP notification number (Hungary)	40a070aa-3e73-4134-802a-93e9ee82407c
SCIP notification number (Italy)	8848a2d7-75d7-4e9e-9370-a97d25b26a7c
SCIP notification number (Netherlands)	e1443cd2-bc18-43af-bdba-091fbfcb17ce
SCIP notification number (Poland)	f67dea86-39d8-4962-9e6f-233cd0e10f47
SCIP notification number (Romania)	0d661d8e-e744-421d-ab87-6acc1b302ed5
SCIP notification number (Sweden)	9854cc75-067c-44e6-9b84-fc9b27e877de



Approvals / Certificates

General approvals



Approval	Standard	Certificate Name
EAC Brjansker Zertifizierungs- stelle	TP TC 020/2011	EAC_Certificate_RU_C- DE.AM02.B.00115_19
UL Underwriters Laboratories Inc. (ORDINARY LOCATI- ONS)	UL 508	E175199 Sec.4

Declarations of conformity and manufacturer's declarations

Approval	Standard	Certificate Name
EU-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/2186/880590/18

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 CNEX	CNCA-C23-01	2020312310000210 (Ex ec 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	-	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 857-820



Documentation

Bid Text
857-820
19.02.2019
xml 5.81 KB
↓
857-820
20.02.2019
docx 17.26 KB
↓

Instruction Leaflet
CCC Ex (Additional in- formation)
26.04.2023
pdf 140.99 KB
↓
Messumformer und Trennverstärker
pdf 1808.06 KB
↓



CAD/CAE-Data	
CAD data 2D/3D Models 857-820 ↓	CAE data EPLAN Data Portal 857-820 ↓
	WSCAD Universe 857-820 ↓
	ZUKEN Portal 857-820 ↓

1 Compatible Products
1.1 Optional Accessories
1.1.1 Interface module
1.1.1.1 Interface adapters



[Item No.: 857-980](#)
Interface adapter; 16-pole; analog

1.1.2 Jumper
1.1.2.1 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



[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



1.1.2.1 Jumper



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; blue	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			

1.1.3 Marking

1.1.3.1 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

1.1.3.2 Marking strip



Item No.: 2009-110 Marking strips; for Smart Printer; on reel; not stretchable; plain; snap-on type; white
--

1.1.4 Power supply

1.1.4.1 Power supply unit



Item No.: 787-2852 Switched-mode power supply; 1-phase; 24 VDC output voltage; 1 A output current



1.1.5 Relay module

1.1.5.1 Relay module



Item No.: 857-304
Relay module; Nominal input voltage: 24 VDC; 1 changeover contact; Limiting continuous current: 6 A; Yellow status indicator; Module width: 6 mm; 2,50 mm²; gray

1.1.6 Screwless end stop

1.1.6.1 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

1.1.7 Terminal blocks

1.1.7.1 Supply module



Item No.: 857-979
Supply and through module

1.1.7.2 Through terminal block



Item No.: 857-979
Supply and through module

1.1.8 Tool

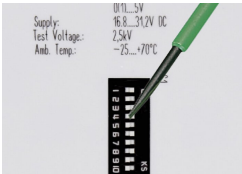
1.1.8.1 Operating tool



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

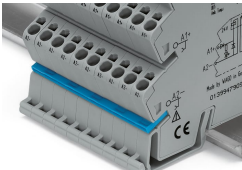
Installation Notes

Configuring



Configuration via DIP switch

Commoning



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