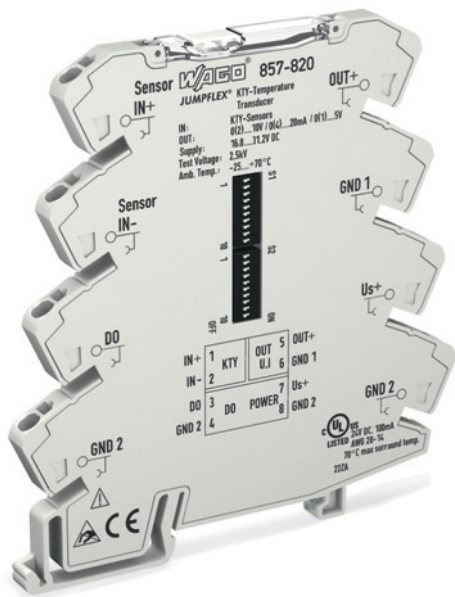
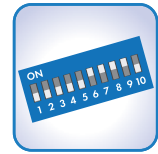
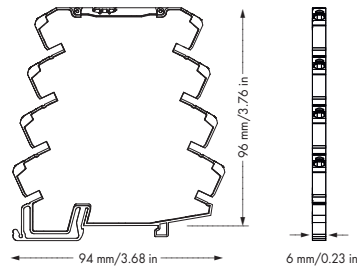


JUMPFLEX® Signal Conditioners**KTY Signal Conditioner**

Configuration via:



DIP switch



IN+	1	KTY	OUT	5	OUT+
IN-	2		U; I	6	GND 1
DO	3	DO	POWER	7	Us+
GND 2	4			8	GND 2

Short description:

The 857-820 KTY Signal Conditioner records signals from KTY sensors featuring all standard characteristics. On the output side, the KTY temperature signal conditioner converts the temperature signal into a standard analog signal.

Characteristics:

- Supports all standard KTY sensors
- Calibrated scale switching
- Clipping capability allows analog standard signal limitation to upper range values
- Safe 3-way isolation with 2.5 kV test voltage to EN 61140

Technical Data**Configuration:**

Configuration DIP switch

Input:

Input signal KTY sensors

Max. input signal ± 30 VDC

Sensor types KTY81-110, KTY81-120, KTY81-150
 KTY82-110, KTY82-120, KTY82-150,
 KTY81-121, KTY82-121, KTY81-122,
 KTY82-122, KTY81-210, KTY81-220,
 KTY82-210, KTY82-220, KTY81-221,
 KTY82-221, KTY81-222, KTY82-222,
 KTY81-250, KTY82-250, KTY83-110,
 KTY83-120, KTY83-150, KTY83-121,
 KTY83-122, KTY83-151, KTY84-130,
 KTY84-150, KTY84-151, KTY16, KTY19,
 ST13, ST20

Sensor connection 2-conductor

Output:

Output signal 0 ... 10 mA, 2 ... 10 mA,
 0 ... 20 mA, 4 ... 20 mA,
 0 ... 5 V, 1 ... 5 V,
 0 ... 10 V, 2 ... 10 V

Load impedance $\leq 600 \Omega$ (I output)
 $\geq 2 k\Omega$ (U output)

Step response < 50 ms

Output - Digital

Max. switching voltage Supply voltage applied
 Max. continuous current 500 mA (up to 60 °C)
 100 mA (60 °C ... 70 °C)

Description**Item No.****Pack. Unit**

JUMPFLEX® Signal Conditioner, for DIN 35 **857-820**
 KTY Signal Conditioner

Technical Data**General specifications:**

Nominal supply voltage V_s 24 VDC
 Supply voltage range V_s -30 % ... +30 %
 Current consumption at 24 VDC ≤ 40 mA
 Transmission error ≤ 0.1 % of upper range value

Environmental requirements:

Ambient operating temperature -25 °C ... +70 °C
 Storage temperature -40 °C ... +85 °C

Safety and protection:

Test voltage (input/output/supply) 2.5 kV AC, 50 Hz, 1 min.

Connection and type of mounting:

Wire connection Push-in CAGE CLAMP®
 Cross sections solid:
 0.08 mm² ... 2.5 mm² / AWG 28 ... 14
 fine-stranded:
 0.34 mm² ... 2.5 mm² / AWG 22 ... 14
 Strip lengths 9 ... 10 mm / 0.35 ... 0.39 in

Dimensions and weight:

Dimensions (mm) W x H x L 6 x 96 x 94
 Height from upper-edge of DIN 35 rail
 Weight 50 g

Standards and approvals:

Conformity marking **CE**
 UL 508
 ANSI/ISA 12.12.01 Class I, Div. 2, Grp. ABCD, T4
 Shipbuilding GL, PRS, BV
 EMC immunity of interference EN 61000-6-2
 EMC emission of interference EN 61000-6-4

Accessories see pages 226 ... 236

DIP Switch Adjustability

● = ON

857-820

DIP Switch S1

Sensor Type				
1	2	3	4	
				KTY81-110, KTY81-120, KTY82-110, KTY82-120
●				KTY81-121, KTY82-121
	●			KTY81-122, KTY82-122
●	●			KTY81-150, KTY82-150
		●		KTY81-210, KTY81-220, KTY82-210, KTY82-220
●		●		KTY81-221, KTY82-221
	●	●		KTY81-222, KTY82-222
●	●	●		KTY81-250, KTY82-250
			●	KTY83-110, KTY83-120,
●			●	KTY83-121
	●		●	KTY83-122
●	●		●	KTY83-150
		●	●	KTY83-151
●		●	●	KTY84-130, KTY84-150
	●	●	●	KTY84-151
●	●	●	●	KTY16, KTY19, ST13, ST20

DIP Switch S2

Start Temperature				End Temperature																	
1	2	3	°C	4	5	6	7	8	°C	4	5	6	7	8	°C	4	5	6	7	8	°C
●			-55	●					0	●	●		●		100	●		●		●	200
	●		-50		●				10			●	●		110		●	●		●	210
●	●		-40	●	●				20	●		●	●		120	●	●	●		●	220
		●	-30			●			30		●	●	●		130				●	●	230
●		●	-20	●		●			40	●	●	●	●		140	●			●	●	240
	●	●	-10		●	●			50					●	150		●		●	●	250
●	●	●	0	●	●	●			60	●				●	160	●	●		●	●	260
							●		70		●			●	170			●	●	●	270
				●			●		80	●	●			●	180	●		●	●	●	280
				●	●		●		90			●		●	190		●	●	●	●	290
																●	●	●	●	●	300

DIP Switch S1

Output Signal					Measuring Range Underflow	Measuring Range Overflow	Wire Break	Short Circuit
6	7	8	9	10				
					Lower limit of output range	Upper limit of output range	Upper limit of output range	Lower limit of output range
●					-5 % **2	+2.5 % **2	5 % **2	-12.5 % **2
	●				Lower limit of output range	Upper limit of output range	Upper limit of output range	Lower limit of output range
●	●		●			+2.5 %	5 %	
		●			Lower limit of output range	Upper limit of output range	Upper limit of output range	Upper limit of output range
●		●	●			range	5 %	5 %
	●	●			Lower limit of output range	Upper limit of output range	Lower limit of output range	Lower limit of output range
●	●	●	●	●		range		

* but not when lower limit of output range = 0V or 0mA

**2 acc. to NAMUR NE 43

Default Setting

All DIP switches are in „OFF“ position for delivery.	
Sensor type	KTY81-110, KTY81-120, KTY82-110, KTY82-120
Start temperature	0 °C
End temperature	100 °C
Output signal	0 ... 20 mA
Measuring range underflow	0 mA
Measuring range overflow	20.5 mA
Wire break	21 mA
Short circuit	0 mA
Digital output	not active

DIP Switch S2

9	10	Digital Output DO Signaling
		DO not active
	●	DO U _s + switching
●	●	DO GND switching