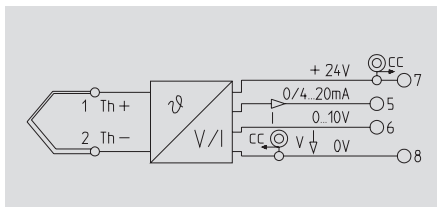
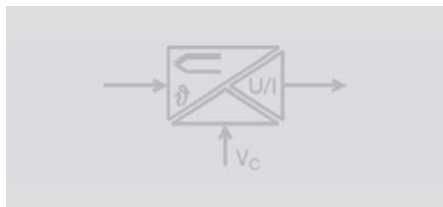


# Thermo element, signal isolator/converter

**Thermo disconnecter converter Type:** **Thermo Select**  
**K, J, T, E, N, R, S, B**

- Calibration not necessary
- Cold-junction compensation
- Output signal selectable
- Power supply can be cross connected via plug-in jumper



## Technical data

Input	
Sensor	thermo-elements (IEC 584) type: K,J,T,E,N,R,S,B
Temperature input range	-200...+1820 °C
Output	
Output voltage/Output current	0...10 V/0(4)...20 mA
Load resistance voltage/Current	>= 1 kΩ / <= 600 Ω
Temperature coefficient	+/- (200 ppm from span + 0.075 K)/K
Step response time	with filter: 1.1 s; without filter: 6 s
Wire break detection	LED flashes (output value > 20mA, > 10V)
General data	
Supply voltage	24 Vdc +/- 20 %
Current consumption	< 38 mA at Iout = 20 mA
Current-carrying cap. of cross-connect.	<= 2 A
Operation temperature	0 °C...+55 °C
Storage temperature	-20 °C...+85 °C
Approvals	CSA / UL/UR / CE / ESD
Insulation coordinates	
Standards	EN 50178, EN 60584, IEC 584
EMC standards	EN 50081, EN50082, EN55011

Dimensions	
Clamping range (rating- / min. / max.)	mm <sup>2</sup>
Length x width x height	mm

Information	
TU=23°C, single module	

## Ordering data

Type of connection	
Screw connection	
Tension clamp c.	

Information	
-------------	--

## Accessories

Information	
Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection	

Screw connection		Tension clamp c.	
2.50 / 0.50 / 2.50	1.50 / 0.50 / 2.50		
92.4 x 12.5 x 112.4	92.4 x 12.5 x 112.4		

Type	Qty.	Order No.
WTS4 THERMO	1	8432300000
WTS4 THERMO	1	8432310000

Information	
Voltage supply 24V and 0V with ZQV 2.5N/2 cross-connection	

## Switch position/setting options

SW 1			SW 2						
Type	1	2	3	Span	1	2	3	4	5
K	■	■	■	100 °C	■	■	■	■	■
J	□	■	■	150 °C	■	■	■	■	□
T	■	□	■	200 °C	■	■	■	■	■
E	□	□	■	250 °C	■	■	■	■	□
N	■	■	□	300 °C	■	■	■	■	■
R	□	■	□	350 °C	■	■	■	■	■
S	■	□	□	400 °C	■	■	■	■	■
B	□	□	□	450 °C	■	■	■	■	□
				500 °C	■	■	■	■	■
				550 °C	■	■	■	■	■
SW 1			SW 2						
Tmin	4	5	6	7	Span	1	2	3	4
0 °C	■	■	■	■	600 °C	■	■	■	■
-10 °C	■	■	■	□	650 °C	■	■	■	□
-20 °C	■	■	□	■	700 °C	■	■	■	■
-30 °C	■	■	□	■	750 °C	■	■	■	■
-40 °C	■	□	■	■	800 °C	■	■	■	■
-50 °C	■	□	□	■	850 °C	■	■	■	□
-100 °C	■	□	□	■	900 °C	■	■	■	■
-150 °C	■	□	□	■	950 °C	■	■	■	■
-200 °C	■	□	□	■	1000 °C	■	■	■	■
+50 °C	□	■	■	■	1050 °C	■	■	■	□
+100 °C	□	■	■	■	1100 °C	■	■	■	■
+150 °C	□	■	■	■	1150 °C	■	■	■	■
+200 °C	□	■	■	■	1200 °C	■	■	■	■
+250 °C	□	□	■	■	1250 °C	■	■	■	□
+500 °C	□	□	□	■	1300 °C	■	■	■	■
					1350 °C	■	■	■	■
					1400 °C	■	■	■	■
					1450 °C	■	■	■	■
SW 2			SW 1						
Output	6	7	Span	1	2	3	4	5	
0 - 10 V	■	□	1500 °C	■	■	■	■	■	
0 - 20 mA	□	□	1600 °C	■	■	■	■	■	
4 - 20 mA	□	■	1700 °C	■	■	■	■	■	
			1800 °C	■	■	■	■	■	

■ = on  
□ = off

## Temperature coefficient

K	-200°C ... -150°C	± (5K + 0.1% of set range)
	-150°C ... 1200°C	± (3K + 0.1% of set range)
	1200°C ... 1372°C	± (4K + 0.1% of set range)
J	-200°C ... -150°C	± (4K + 0.1% of set range)
	-150°C ... 1200°C	± (3K + 0.1% of set range)
T	-200°C ... -150°C	± (5K + 0.1% of set range)
	-150°C ... 400°C	± (3K + 0.1% of set range)
E	-200°C ... -150°C	± (4K + 0.1% of set range)
	-150°C ... 1000°C	± (3K + 0.1% of set range)
N	-200°C ... -150°C	± (6K + 0.1% of set range)
	-150°C ... 1300°C	± (3K + 0.1% of set range)
R	-50°C ... 200°C	± (10K + 0.1% of set range)
	200°C ... 1760°C	± (6K + 0.1% of set range)
S	-50°C ... 200°C	± (10K + 0.1% of set range)
	200°C ... 1760°C	± (6K + 0.1% of set range)
B	50°C ... 250°C	± (25K + 0.1% of set range)
	250°C ... 500°C	± (10K + 0.1% of set range)
	500°C ... 1820°C	± (6K + 0.1% of set range)

Articles with coloured order number are kept permanently in stock at the central warehouse in Germany. Delivery times see page X.2