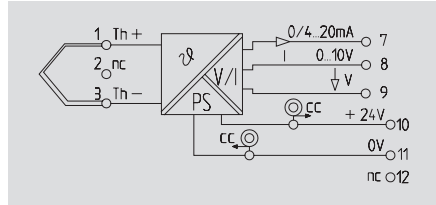
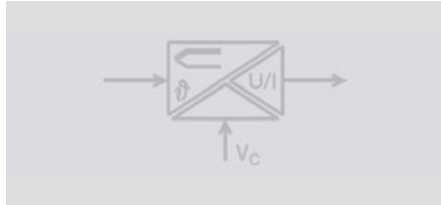


Thermo element, signal isolator/converter

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

- 3-way isolation
- Calibration not necessary
- Cold-junction compensation
- Output signal selectable
- Power sup. can be cross-conn. by jumper



Typ	Select of thermocoupler SW1			Selection of minimum temperature				
	1	2	3	ϑ _{min}	4	5	6	7
K	■	■	■	0°C	■	■	■	■
J	□	■	■	-10°C	■	■	■	□
T	■	□	■	-20°C	■	■	□	■
E	□	□	■	-30°C	■	■	□	□
N	■	■	□	-40°C	■	□	■	■
R	□	■	□	-50°C	■	□	■	□
S	■	□	□	-100°C	■	□	□	■
B	□	□	□	-150°C	□	□	□	□
				-200°C	□	■	■	■
				+50°C	□	■	■	■
				+100°C	□	■	■	■
				+150°C	□	■	■	■
				+200°C	□	□	■	■
				+250°C	□	□	■	■
				500°C	□	□	■	■
				Special range	□	□	□	□

Span	Selection of temperature span SW2					Selection of output		
	1	2	3	4	5	Output	SW2	
100°C	■	■	■	■	■	0...10V	■	□
150°C	■	■	■	■	□	0...20mA	□	□
200°C	■	■	■	□	□	4...20mA	□	■
250°C	■	■	■	□	□			
300°C	■	■	■	□	□			
350°C	■	■	□	■	□			
400°C	■	■	□	□	■			
450°C	■	■	■	□	□			
500°C	■	□	■	■	■			
550°C	■	□	■	■	□			
600°C	■	□	■	■	□			
650°C	■	□	■	■	□			
700°C	■	□	■	■	□			
750°C	■	□	■	■	□			
800°C	■	□	■	■	□			
850°C	■	□	■	■	□			
900°C	□	■	■	■	■			
950°C	□	■	■	■	□			
1000°C	□	■	■	■	□			
1050°C	□	■	■	■	□			
1100°C	□	■	■	■	■			
1150°C	□	■	■	■	□			
1200°C	□	■	■	■	□			
1250°C	□	■	■	■	□			
1300°C	□	□	■	■	■			
1350°C	□	□	■	■	□			
1400°C	□	□	■	■	□			
1450°C	□	□	■	■	□			
1500°C	□	□	■	■	■			
1600°C	□	□	■	■	□			
1700°C	□	□	■	■	■			
1800°C	□	□	■	■	□			

man. adjust.	Switching on the manual fine adjustment SW1	
	6	7
off	□	□
on	■	■

Filter	Switching on the filter function SW2	
	6	7
off	□	□
on	■	■

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)

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
Offset current/Offset voltage	max. 100 µA/max. 0.05 V
Step response time	max. 1.4 s; with filter: max. 7.5 ms
Line resistance in measuring circuit	50 Ω
Wire break detection	LED flashes (output value > 20mA, > 10V)
Fine adjustment	>= +/- 5 % (switchable)
Status indicator	active: LED on/cond. broken: LED flashing/Error: LED off
General data	
Supply voltage	24 Vdc +/- 25 %
Power consumption	800...850...950 mW at Iout= 20 mA
Current-carrying cap. of cross-connect.	<= 2 A
Operation temperature	0 °C...+55 °C
Storage temperature	-20 °C...+85 °C
Default settings	type K; 0...1000°C; 4...20mA; filter: off; man. adjustment: off
Approvals	GL / CE / cURus
Insulation coordinates	
Standards	EN 50178, EN 60584, IEC 584
EMC standards	EN 50081, EN50082, EN55011
Rated voltage	300 V
Impulse withstand voltage	4 kV
Isolation voltage input, output/	2 kVeff / 5s/
Overvoltage category	III
Pollution severity	2
Clearance & creepage path	>= 3 mm

Screw connection	Tension clamp c.
2.50 / 0.50 / 2.50	1.50 / 0.50 / 2.50
92.4 x 17.5 x 112.4	92.4 x 17.5 x 112.4

TU=23°C, single module

Dimensions	
Clamping range (rating- / min. / max.)	mm²
Length x width x height	mm

Information	
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Ordering data

Type of connection	Type	Qty.	Order No.
Screw connection	WAS5 PRO Thermo	1	8560720000
Tension clamp c.	WAZ5 PRO Thermo	1	8560730000

Information	
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Accessories

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

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