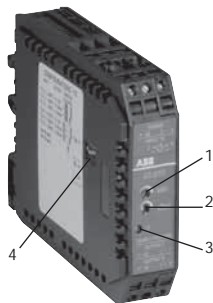


Temperature signal converter for thermocouples CC-E/TC

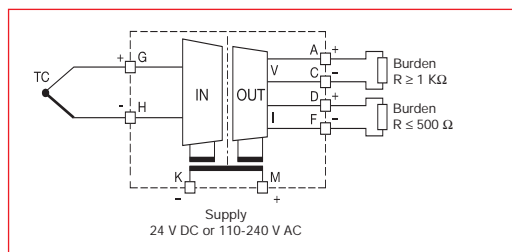


CC-E/TC

- 1 Gain adjustment
- 2 Offset adjustment
- 3 U: green LED - supply voltage
- 4 DIP switch for input and output configuration (only available on universal devices)

CC-E/TC analog signal converter for thermocouple signals of the types J and K with 3-way electrical isolation

- Universally configurable device (type E/TC)
- 6 single-function devices
- "Plug and Play", no adjustment of single-function devices required



DIP switch settings for CC-E/TC (universal)

Input	Output	SW1					
		1	2	3	4	5	6
TC-J: 0...600 °C	0...10 V		■	■			■
TC-J: 0...600 °C	0...20 mA		■	■			■
TC-J: 0...600 °C	4...20 mA		■	■			■
TC-K: 0...1000 °C	0...10 V	■					
TC-K: 0...1000 °C	0...20 mA	■					
TC-K: 0...1000 °C	4...20 mA	■					
High fail safe					■		
Low fail safe						■	

2CDC 282 009 F0004

Legend	
■	ON
□	OFF
□	no influence

Type	Input signal	Output signal	Order code
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Supply voltage: 24 V DC
universal

Type	Input signal	Output signal	Order code
CC-E/TC	thermocouple types J and K	0-10 V, 0-20 mA, 4-20 mA	1SVR 011 702 R2600①
single-function			
CC-E TC/V	type J 0-600 °C	0-10 V	1SVR 011 750 R0100
CC-E TC/I		0-20 mA	1SVR 011 751 R2600
CC-E TC/I		4-20 mA	1SVR 011 752 R2700
CC-E TC/V	type K 0-1000 °C	0-10 V	1SVR 011 753 R2000
CC-E TC/I		0-20 mA	1SVR 011 754 R2100
CC-E TC/I		4-20 mA	1SVR 011 755 R2200

Supply voltage: 110-240 V AC
universal

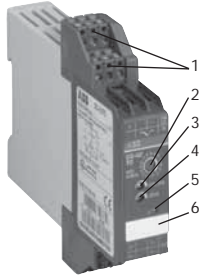
Type	Input signal	Output signal	Order code
CC-E/TC	thermocouple types J and K	0-10 V, 0-20 mA, 4-20 mA	1SVR 011 707 R2300
single-function			
CC-E TC/V	type J 0-600 °C	0-10 V	1SVR 011 760 R0300
CC-E TC/I		0-20 mA	1SVR 011 761 R2000
CC-E TC/I		4-20 mA	1SVR 011 762 R2100
CC-E TC/V	type K 0-1000 °C	0-10 V	1SVR 011 763 R2200
CC-E TC/I		0-20 mA	1SVR 011 764 R2300
CC-E TC/I		4-20 mA	1SVR 011 765 R2400

Pack. units: 1 piece



Temperature signal converter for thermocouples CC-U/TC

Analog signal converters

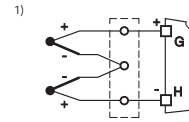
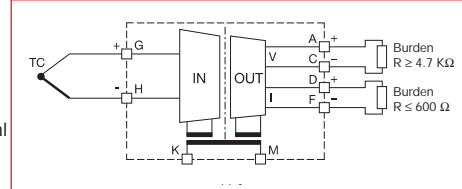


CC-U/TC

- 1 Plug-in connecting terminals
- 2 Gain: Coarse adjustment
- 3 Gain: Fine adjustment
- 4 Offset adjustment
- 5 U: green LED - supply voltage
- 6 Marker

CC-U/TC universal signal converter for thermocouples with 3-way electrical isolation

- Temperature signal converter for thermocouples of the types K, J, T, S, E, N, R, B
- Continuously adjustable voltage signal input 0-10 mV and 0-50 mV
- Differential temperature meas. possible ¹⁾
- Configurable output signal response on input signal interruption (low fail safe / high fail safe)
- Adjustment and operating elements on the front-side
- Short-circuit proof signal outputs
- Plug-in connecting terminals for inputs, outputs and supply



¹⁾ without cold-junction compensation:
switch SW2.2 = OFF

DIP switch settings

Typ	Temperature range	SW1						SW2							
		1	2	3	4	5	6	1	2	3	4	5	6		
K	0-100...900 °C														
K	0-250...1350 °C														
J	0-100...750 °C														
T	0-100...400 °C														
T	-150-0...400 °C														
S	0-250...1550 °C														
E	0-100...700 °C														
E	0-200...1000 °C														
N	0-100...650 °C														
N	0-200...1300 °C														
R	0-250...1350 °C														
R	0-450...1700 °C														
B	0-700...1750 °C														
mV	0-2...10 mV														
mV	0-10...50 mV														
	LOW FAIL SAFE ^{*)}														
	HIGH FAIL SAFE ^{*)}														

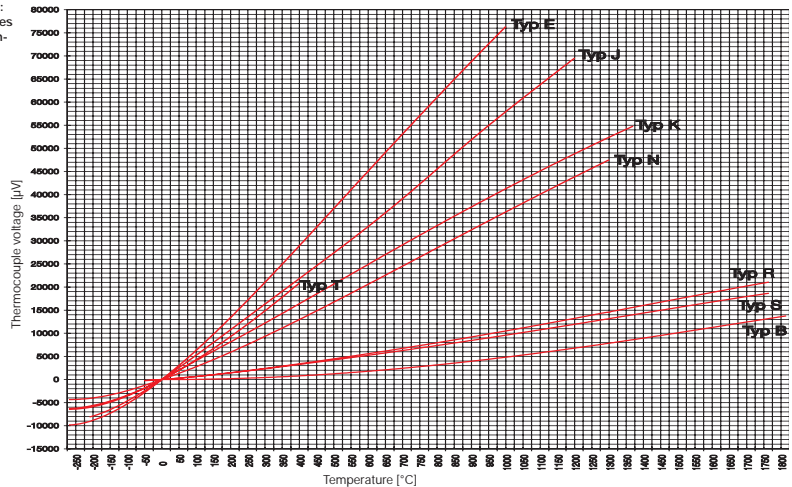
^{*)} Detection of input signal interruptions:

If the input signal circuit is interrupted, the output signal changes to the adjusted minimum value (low fail safe) or maximum value (high fail safe).

Output	SW2					
	1	2	3	4	5	6
0...5 V						
0...10 V						
1...5 V						
2...10 V						
-10...+10 V						
-5...+5 V						
-10...0 V						
-5...0 V						
0...+6.66 V						
-10...+3.33 V						
-5...+1.66 V						
0...4 V						
-10...+2 V						
-5...+1 V						
1.25...6.25 V						
-7.5...+2.5 V						
-3.75...+1.25 V						
1.66...6.33 V						
-6.66...+6.66 V						
-3.33...+3.33 V						
-8...0 V						
-4...0 V						
0...1 mA						
0...20 mA						
0...10 mA						
0...5 mA						
0...13.33 mA						
0...66.66 μA						
0...16 mA						
0...500 μA						
0...8 mA						
0...400 μA						
2.5...12.5 mA						
12.5...62.5 μA						
3.33...16.66 mA						
16.6...83.3 μA						
0...1 mA						
2...10 mA						
100...500 μA						

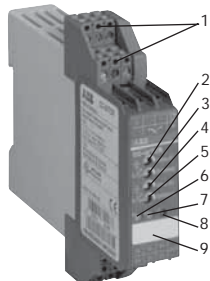
Legend	
■	ON
□	OFF
□	no influence

Characteristic curves: Thermocouple voltages depending on the temperature



Type	Supply voltage 50/60 Hz	Order code	Pack. unit pieces
CC-U/TC	24-48 V DC / 24 V AC	1SVR 040 004 R0700	1
	110-240 V AC / 100-300 V DC	1SVR 040 005 R0000	1

Temperature signal converter for thermocouples CC-U/TCR with relay output

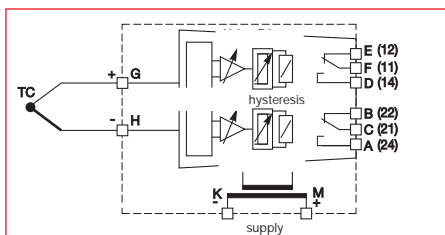


CC-U/TCR

- 1 Plug-in connecting terminals
- 2 Threshold value for R1
- 3 Hysteresis for R1
- 4 Threshold value for R2
- 5 Hysteresis for R2
- 6 U: green LED - supply voltage
- 7 R2: yellow LED - Relay 2 energized
- 8 R1: yellow LED - Relay 1 energized
- 9 Marker

CC-U/TCR universal signal converter for thermocouples, with 2 threshold relay outputs and 3-way electrical isolation

- Temperature signal converter for thermocouples of the types K, J, T, S
- 2 threshold relay outputs with one change-over contact each (threshold and respective hysteresis can be adjusted independently from each other)
- Open-circuit or closed-circuit principle configurable by means of a DIP switch
- 2 yellow LEDs for clear status indication of the output relays
- Plug-in connecting terminals for inputs, outputs and supply



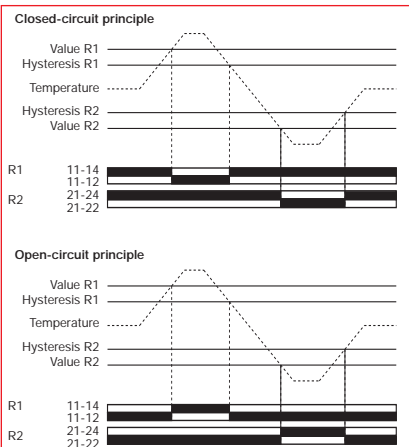
DIP switch settings

Typ	Temperature range	SW1					
		1	2	3	4	5	6
J	0...240 °C						
J	0...480 °C						
J	0...1200 °C						
K	0...250 °C						
K	0...500 °C						
K	0...1350 °C						
T	-150...+120 °C						
T	0...220 °C						
T	0...400 °C						
S	0...210 °C						
S	0...380 °C						
S	0...880 °C						
S	0...1550 °C						

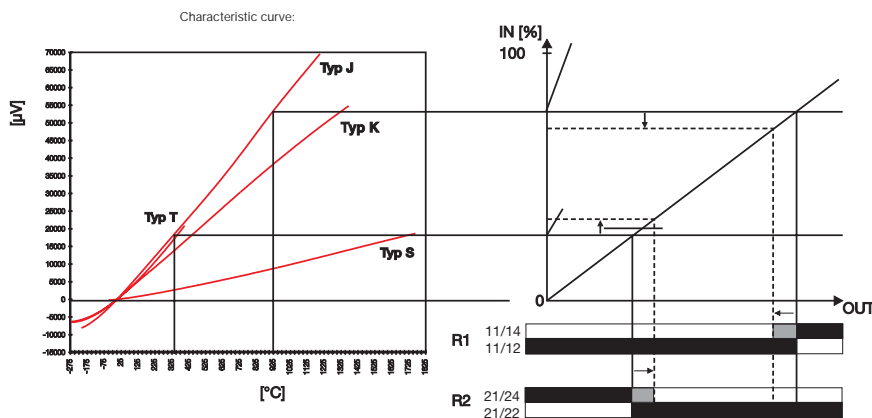
	1	2	3	4	5	6
Closed-circuit principle						
Open-circuit principle						

Legend	
■	ON
□	OFF
■	no influence

Function diagrams CC-U/TCR



Switching points of the output relay depending on the input range, configuration open-circuit principle



Type	Supply voltage 50/60 Hz	Order code	Pack. unit pieces
CC-U/TCR	24-48 V DC / 24 V AC	1SVR 040 014 R2000	1
	110-240 V AC / 100-300 V DC	1SVR 040 015 R2100	1