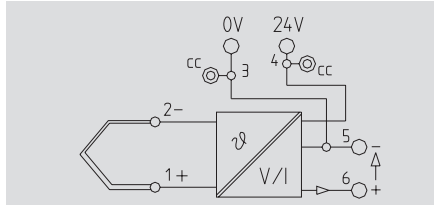
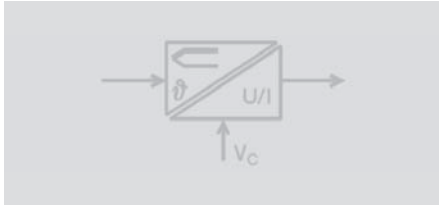


# Thermo element, signal isolator/converter

## Thermo disconnecter converter type: K

- 2-way isolation between input/output and voltage supply
- Cold-junction compensation
- Linearization
- Output can be switched calib. via DIP-switch

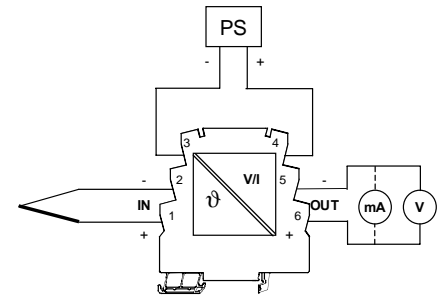
## Thermo K Output Select



Output	Switch			
	1	2	3	4
0 ... 10 V	■	■	■	□
0 ... 20 mA	□	□	□	□
4 ... 20 mA	□	□	□	■
0 ... 5 V	■	■	■	■

■ = on  
□ = off

### Connection



### Technical data

#### Input

Sensor  
Temperature input range

#### Output

Output voltage/Output current  
Load resistance voltage/Current  
Accuracy  
Temperature coefficient  
Step response time  
Wire break detection  
Residual ripple

#### General data

Supply voltage  
Power consumption  
Current-carrying cap. of cross-connect.  
Operation temperature  
Storage temperature  
Default settings  
Approvals

#### Insulation coordinates

Standards  
EMC standards  
Rated voltage  
Impulse withstand voltage  
Isolation voltage Input, output/  
Overvoltage category  
Pollution severity  
Clearance & creepage path

thermo-elements according IEC 584, type: K  
0...1000 °C

0...10V / 0...5V/0(4)...20 mA

$\geq 10 \text{ k}\Omega / < = 600 \Omega$

$< 0.6 \%$  of measuring range

$\leq 250 \text{ ppm/K}$  of final value

$< 0.7 \text{ s}$

output value:  $> 20 \text{ mA}, > 10 \text{ V}$

$< 20 \text{ mVeff}$

24 Vdc +/- 10 %

approx. 0.6 W

$\leq 20 \text{ A}$

0 °C...+55 °C

-20 °C...+85 °C

0...20mA

CE / ESD / cURus

EN 50178, EN 60584, IEC 584

EN 50081, EN 50082, EN 55011, EN 61000-6-2, EN 61326

100 V

1.5 kV

500 Veff/

III

2

$\geq 1.5 \text{ mm}$

#### Dimensions

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

#### Information

#### Screw connection

2.50 / 0.50 / 2.50  
88.0 x 6.1 x 97.8

#### Tension clamp c.

1.50 / 0.50 / 2.50  
92.0 x 6.1 x 97.8

Tu=23°C, single module

### Ordering data

#### Type of connection

Screw connection  
Tension clamp c.

#### Type

MAS Thermo-K 0...1000°C Output select1  
MAZ Thermo-K 0...1000°C Output select1

#### Qty.

#### Order No.

8594830000  
8594860000

#### Information

### Accessories

#### Information

Voltage supply 24V and 0V with ZQV 4N/x cross-connection

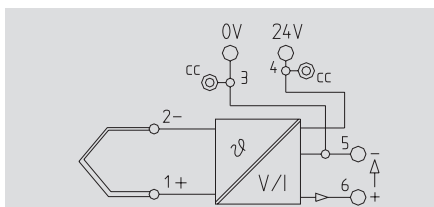
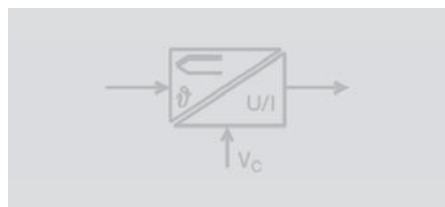
Articles with coloured order number are kept permanently in stock at the central warehouse in Germany.  
Delivery times see page X.2

# Thermo element, signal isolator/converter

## Thermo disconnecter converter type: J

- 2-way isolation between input/output and voltage supply
- Cold-junction compensation
- Linearization
- Output can be switched calib. via DIP-switch

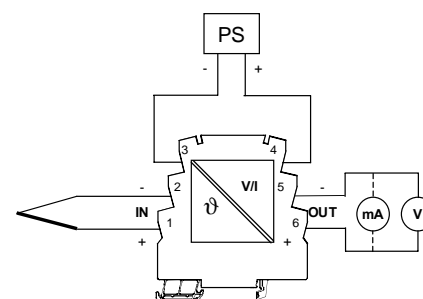
## Thermo J Output Select



Output	Switch			
	1	2	3	4
0 ... 10 V	■	■	■	□
0 ... 20 mA	□	□	□	□
4 ... 20 mA	□	□	□	■
0 ... 5 V	■	■	■	■

■ = on  
□ = off

### Connection



### Technical data

#### Input

Sensor  
Temperature input range

#### Output

Output voltage/Output current  
Load resistance voltage/Current  
Accuracy  
Temperature coefficient  
Step response time  
Wire break detection  
Residual ripple

#### General data

Supply voltage  
Power consumption  
Current-carrying cap. of cross-connect.  
Operation temperature  
Storage temperature  
Default settings  
Approvals

#### Insulation coordinates

Standards  
EMC standards  
Rated voltage  
Impulse withstand voltage  
Isolation voltage Input, output/  
Overvoltage category  
Pollution severity  
Clearance & creepage path

thermo-elements according IEC 584, type: J  
0...700 °C

0...10V / 0...5V/0(4)...20 mA

$\geq 10 \text{ k}\Omega / < = 600 \Omega$

$< 0.7 \%$  of measuring range

$\leq 250 \text{ ppm/K}$  of final value

$< 0.7 \text{ s}$

output value:  $> 20 \text{ mA}, > 10 \text{ V}$

$< 20 \text{ mVeff}$

24 Vdc +/- 10 %

approx. 0.6 W

$\leq 20 \text{ A}$

0 °C...+55 °C

-20 °C...+85 °C

0...20mA

CE / ESD / cURus

EN 50178, EN 60584, IEC 584

EN 50081, EN 50082, EN 55011, EN 61000-6-2, EN 61326

100 V

1.5 kV

500 Veff/

III

2

$\geq 1.5 \text{ mm}$

#### Dimensions

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

#### Information

#### Screw connection

2.50 / 0.50 / 2.50  
88.0 x 6.1 x 97.8

#### Tension clamp c.

1.50 / 0.50 / 2.50  
92.0 x 6.1 x 97.8

Tu=23°C, single module

### Ordering data

#### Type of connection

Screw connection  
Tension clamp c.

#### Type

#### Qty.

#### Order No.

MAS Thermo-J 0...700°C Output select 1 **8615210000**  
MAZ Thermo-J 0...700°C Output select 1 **8615240000**

#### Information

### Accessories

#### Information

Voltage supply 24V and 0V with ZQV 4N/x  
cross-connection

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