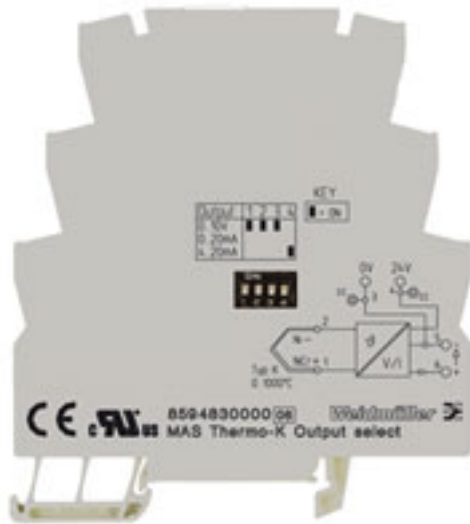


**MICROSERIES**  
**MAS Thermo-K 0... 1000°C**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com



The MAS/MAZ thermal signal isolating converter with external power supply in 6.1 mm width: for recording, transmitting, linearising and isolating thermal signals in compliance with IEC 584, type K or J.

DC current signals and standardised voltage signals are available on the output side. They can be adjusted using the DIP switches.

The input and outputs are designed with 0.5 kV of electrical isolation. The output circuit is used to supply 24 VDC.

It can be bridged on the module side using pluggable ZQV 4N cross-connectors. The thermal signal isolating converters have either a screw or tension-clamp wire connection.

They can be used in many applications around the world because of their international approvals (cULus, C1D2 and ATEX Zone2).

**General ordering data**

Type	MAS Thermo-K 0... 1000°C
Order No.	<a href="#">8594830000</a>
Version	MICROSERIES, Thermocouple
GTIN (EAN)	4032248252466
Qty.	1 pc(s).

## MICROSERIES MAS Thermo-K 0... 1000 °C

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 14-0  
 Fax: +49 5231 14-292083  
 www.weidmueller.com

## Technische Daten

### Dimensions and weights

Length	88 mm	Width	6.1 mm
Depth	97.8 mm	Net weight	43 g

### Temperatures

Operating temperature	0 °C...+55 °C	Storage temperature	-20 °C...+85 °C
-----------------------	---------------	---------------------	-----------------

### Probability of failure

MTTF	437 Years
------	-----------

### Input

Supply voltage	24 V DC $\pm$ 10 %	Number of inputs	1
Temperature input range	0...1000 °C	Sensor	Thermocouple acc. to IEC 584, type: K

### Output

Wire break detection	Output value: > 20 mA, >10 V	cold junction compensation	Yes
load impedance voltage	$\geq$ 10 k $\Omega$	Number of outputs	1
load impedance current	$\leq$ 400 $\Omega$ @ 24 V	Output voltage, note	0...10V / 0...5V
Output current	0...20 mA, 4...20 mA		

### General data

Accuracy	< 0.6 % of measuring range	Configuration	DIP switch
Current-carrying capacity of cross-connect.	$\leq$ 20 A	Galvanic isolation	2-way isolator
Input/Output	Thermocouple type: J / 0(4)...20 mA, 0...10 V, 0...5V	Linearity	Yes
Mounting rail	TS 35	Power consumption	ca. 0.6 W
Step response time	< 0.7 s	Supply voltage	24 V DC $\pm$ 10 %
Temperature coefficient	$\leq$ 250 ppm/K of final value	Type of connection	Screw connection

### Insulation coordination

Clearance & creepage distances	$\geq$ 1.5 mm	EMC standards	EN 55011, EN 61000-6 /-2, EN 61326
Galvanic isolation	2-way isolator	Impulse withstand voltage	1.5 kV
Insulation voltage	500 V <sub>eff</sub> / 1 s	Insulation voltage input or output/rail	500 V <sub>eff</sub>
Insulation voltage input or output/supply	500 V <sub>eff</sub>	Pollution severity	2
Rated voltage	100 V	Standards	DIN EN 50178, DIN EN 61000-4-2
Surge voltage category	III		

### Classifications

UNSPSC	30-21-18-01	eClass 5.1	27-20-02-06
eClass 6.2	27-20-02-06	eClass 7.1	27-20-02-06

**Datenblatt****MICROSERIES  
MAS Thermo-K 0... 1000°C**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Technische Daten****Product information**

Descriptive text accessories      Cross-connectors for power supplies and markers – refer to Accessories

**Approvals**

Approvals



ROHS      Conform

**Downloads**

Package insert      [instruction sheet.pdf](#)  
Declaration of Conformity      [Declaration of Conformity.pdf](#)  
EPLAN      [8594830000.ema](#)  
[3D Modell](#)

**Datenblatt****MICROSERIES**  
**MAS Thermo-K 0... 1000°C****Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com**Zeichnungen****Electric symbol**