

Product information

► Electronic devices

Converter for Pt-sensor as KTY-alternative

Typ: CONV BOX

Pt/KTY-Converter



- Basic information

The converter evaluates the resistance of a Pt sensor and provides the corresponding resistance of a KTY sensor. It can replace for the discontinued KTY84 sensor in all electrical equipment.

- Application

Connecting motors and generators with Pt sensors to control units expecting KTY sensors at the input

- General function

The converter evaluates the resistance of a Pt sensor and provides the corresponding resistance of a KTY sensor. There is no necessity to replace a full functional inverter or other control unit when a device with Pt output has to be connected. Newer Spare parts without KTY Sensors can easily connected to older control units.

- Advantage

No need to change a control unit when replacing a motor.

Connecting devices with different sensors to one control unit is possible.

Spare parts with Pt-sensors can be used in older systems.

Independence from KTY availability

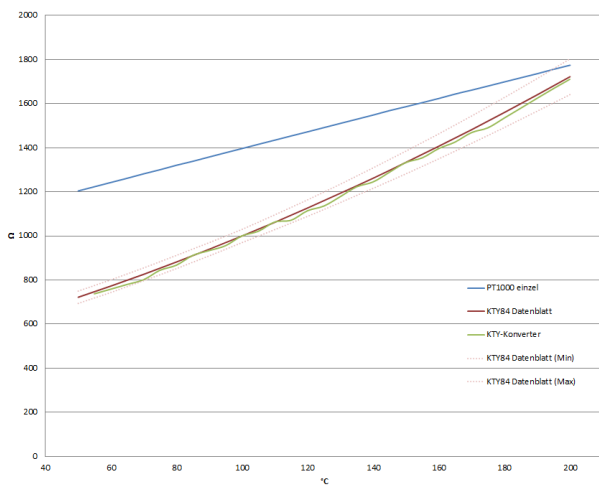
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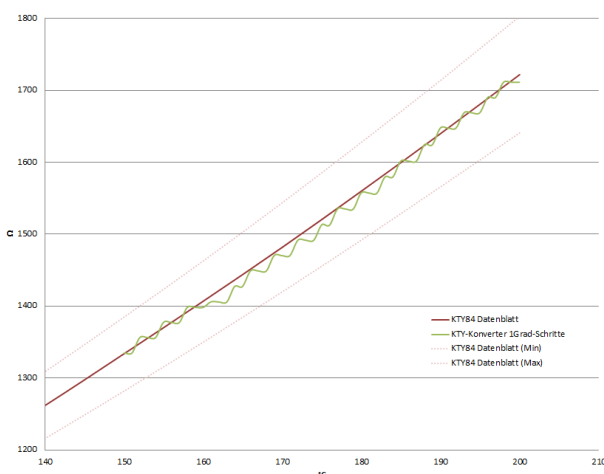
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Comparison between Pt1000, KTY84-130 and Pt1000-converter



Comparison between KTY84-130 and Pt1000-Converter (1°C steps)



- Comparison between Pt1000, KTY84-130 and Pt1000-converter

- PT1000 class B (blue)
- KTY84-130, values (red) from the original NXP datasheet, including the tolerance (red dots)
- Pt1000-converter (green) output

- Comparison between KTY84-130 and Pt1000-Converter

- Detailed view of Pt1000-converter signal, and the curve of the KTY84-130 sensor.
- The ripple of the Pt1000-converter signal (green) is caused by the resolution of the internal digital potentiometer.

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Electrical data:

Input: 1 sensor
Pt100 or Pt1000

Output : KTY84-xx

Power supply:
24: 22 Vdc – 26 Vdc
(with galvanic isolation)

Power consumption: < 1VA
Ambient temperature: 0 ... 60°C
Storage temperature: -40°C ... +75°C
Temperature measurement range: 0°C ... +270°C

Sensor IN:

typ. Measurement current: <1mA

Sensor OUT:

max. current : 10mA
Pin 8 (+) und Pin 9 (-)

Mechanical data:

Housing: Metal RAL 7035
Material: Aluminium
Dimension: length x width x height
100mm x 130mm x 91mm

Mounting: 4xM5

Protection class: IP 68

Input: M23 17 pin female jack
Output: M23 17 pin male jack

RDT input and output of the converter on pin 8 and 9.
All other contacts looped trough

Power supply: M12 5 pin jack
Pin 1 + (brown)
Pin 3 - (blue)

Order code: page 5

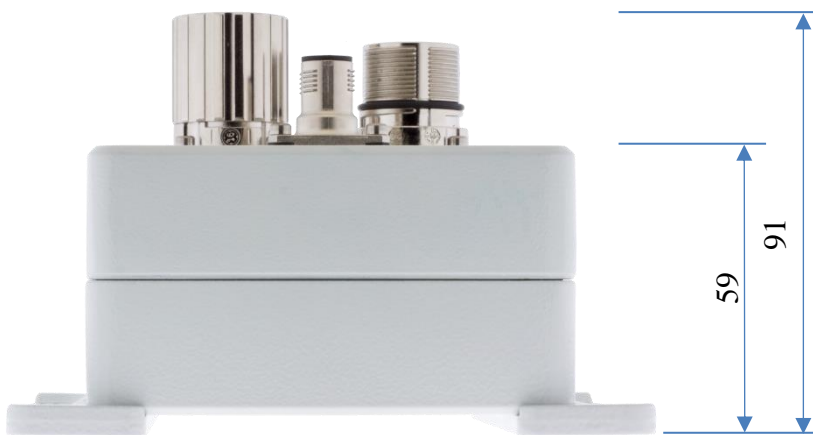
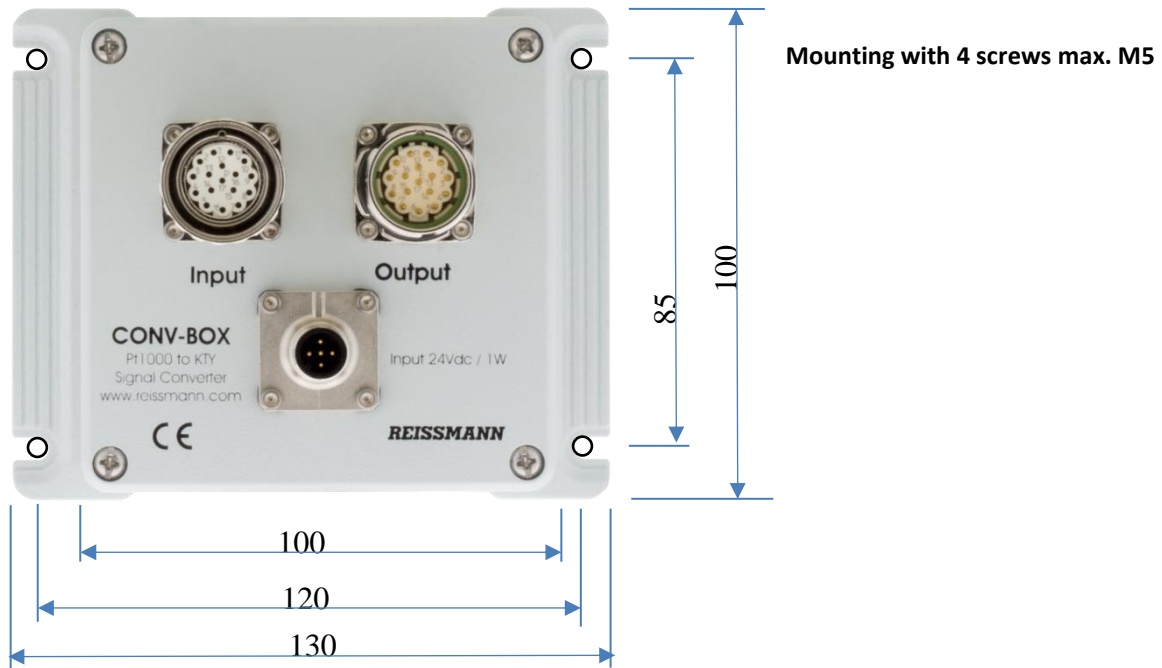
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-Dimension



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-Order code

Name	Voltage	Sensor IN	Sensor OUT	Dimension	Part number
CONV-BOX-Pt100	24V DC	Pt100	KTY 84-130	130mm*100mm*91mm	005441
CONV-BOX-Pt1000	24V DC	Pt1000	KTY 84-130	130mm*100mm*91mm	005289

Other KTY sensors on demand.

Responsibility:

The statements concerning our products are based upon our current technical knowledge and application technological experience. Liability shall be accepted in the context of the individual contract according to our delivery- and sales conditions. The user is not released to check our information and recommendations before using the product. In the course of our product development, we reserve the right to make technical changes.

For further information and advice please contact: