Converter for Pt-sensor as KTY-alternative

Typ: CONV DIN

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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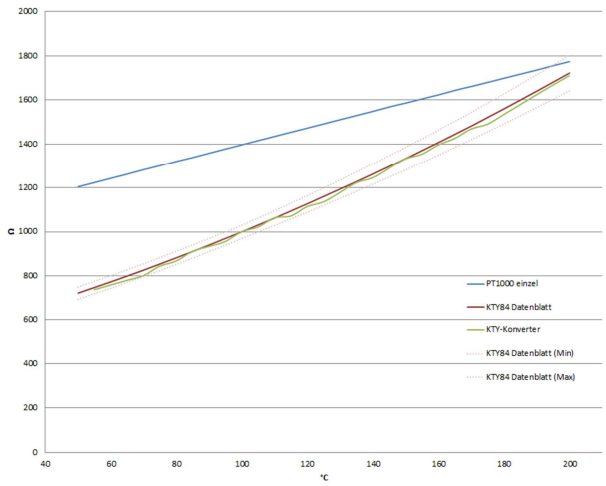
Converter for Pt-sensor as KTY-alternative

Typ: CONV DIN

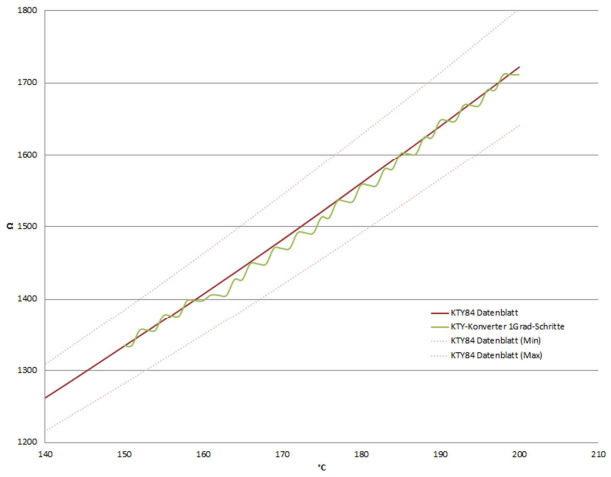
Comparison between Pt1000, KTY84-130 and Pt1000-converter



- 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 (1°C steps)



- 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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Converter for Pt-sensor as KTY-alternative

Typ: CONV DIN

Electrical data

Input:	1 sensor Pt100 or Pt1000
Output:	KTY84-xx
Power supply:	24V (22 Vdc – 26 Vdc) (with galvanic isolation) Test voltage 1kv
Terminal:	DC+ / DC-
Power consumption:	< 1VA
ambient temperature:	0 ... 60°C
storage temperature:	-40°C ... +75°C
temperature measurement range:	0°C ... +270°C
Additional functions	
wire break or short circuit:	red LED
module online:	green LED
Sensor IN	
Typ. measurement current:	<1mA
Terminal:	Pt / Pt
Sensor OUT	
Max. current:	10mA
Terminal:	KTY+ / KTY-

Terminals NC not connected.

Mechanical data

housing:	Plastic blue
material:	Polyamide
dimensions:	width x height x dept. 22,5mm x 107mm x 99 mm
mounting:	DIN-rail TS 35
protection class (device):	IP 20
connection:	screw terminal pitch 5mm max. 2,5mm²
order code:	page5

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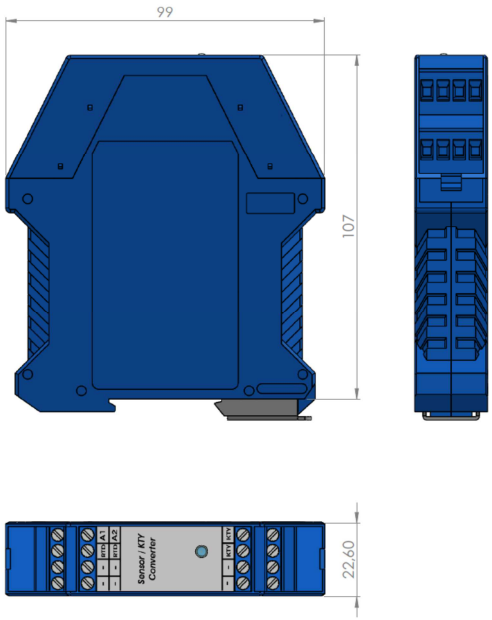
Converter for Pt-sensor as KTY-alternative

Typ: CONV DIN

- Technical data

Dimensions:



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Converter for Pt-sensor as KTY-alternative

Typ: CONV DIN

Order code:

Name	Voltage	Sensor IN	Sensor OUT	Dimension	part number
CONV-DIN-24-Pt100	24V DC	Pt100	KTY 84-130	107mm*99mm*22,5 mm	004904
CONV-DIN-24-Pt1000	24V DC	Pt1000	KTY 84-130	107mm*99mm*22,5 mm	004894

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:

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