

Pt / KTY-Converter



Plug & Play solution for the encoder signal wire according to Siemens standard 6FX (green wire) with the SUB-D 25 pin connector. It is compatible with the following Siemens inverter systems and components:

- Sinamics
- Simodrive
- Masterdrives
- SMC20

- 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

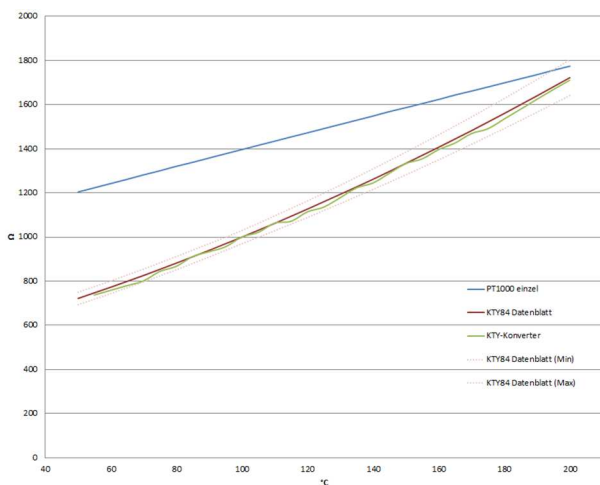
Product information

▶ Electronic devices

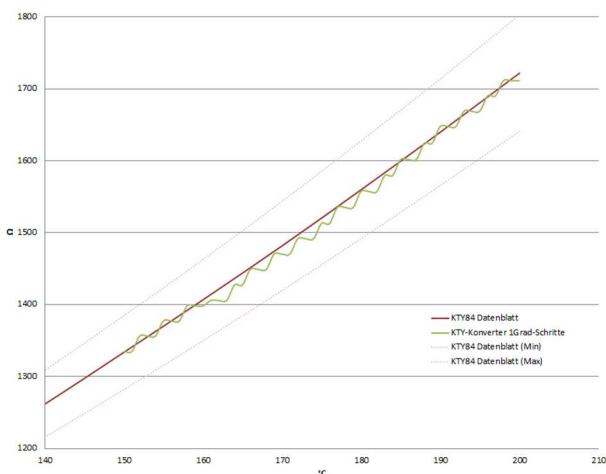
Converter for Pt-sensor as KTY-alternative

Typ: CONV SUB

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.

Product information

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Converter for Pt-sensor as KTY-alternative

Typ: CONV SUB

Electrical data:

Input: 1 sensor
Pt100 or Pt1000

Output : KTY84-xx

Power supply:
5V: 4,5 Vdc – 5,5 Vdc

Power supply from the internal 5V System on Pin 10(+) and Pin 7(-).

Power consumption: < 500mW
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 KTY:

max. sensor current: 10mA
Pin 13 (+) und Pin 25 (-)

Mechanical data:

Housing: Aluminium

Dimension: length x width x height
76mm x 60mm x 18 mm



Fixation: Hexagonal jack screws 4-40 UNC

Protection class: IP 20

Input: D-SUB 25 male

Output: D-SUB 25 female

RDT input and output of the converter on pin 13(+) and 25 (-). All other contacts looped trough

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Typ: CONV SUB

-Order code

Name	Voltage	Sensor IN	Sensor OUT	Dimension	Part number
CONV-SUB-Pt1000-KTY84	5V DC	Pt1000	KTY 84-130	76*60*18 mm	005869

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.