

Measuring Transducer for Motor Protection

TMU300 for 3 x Pt100

TMU300



Part number: **T236076**

Transducers for motor protection TMU300 are transducers for 1-3 sensors Pt100 (RTD).

A new, current-saving measuring-system makes it possible to evaluate 3 sensors with a transducer that is supplied by a loop 4-20 mA.

Application:

Recording of temperatures at e.g. motors, generators, transformers or compressors and forward them to relays or controls for evaluation.

In difference to PTC with sensors Pt100 a adjustable switching temperature can be realized. The temperature protection can be adapted to the requirements at any time.

Optimal operation and longer life by intelligent management possible. E.g. no start at high motor temperatures.

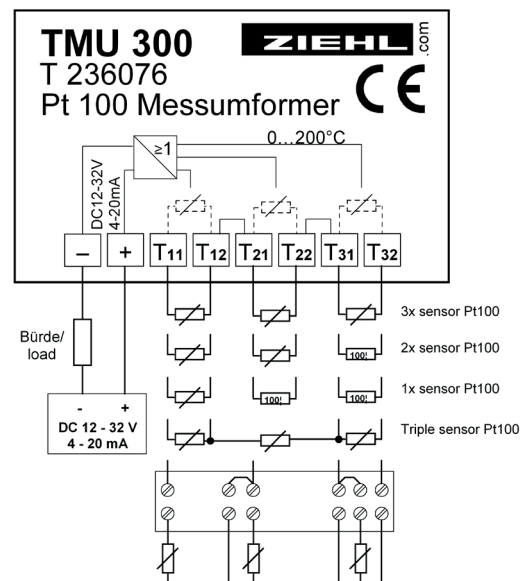
The cast-resin sealed electronics can be used at temperatures up to 85 °C and thus be placed near the sensors, e.g. in the terminal box of a motor. This reduces influence of EMC and line resistance. The signal 4-20 mA can be transmitted over long distances

This design is protected.

The sensors Pt100 are connected in 2-wire-technique. The output signal is a current 4-20 mA. The value of the output current corresponds with the temperature of the hottest sensor.

Characteristics:

- connection of 1-3 sensors Pt 100 in 2-wire-technique
- measuring range 0...200 °C
- automatic selection of warmest sensor
- $I < 3,5 \text{ mA}$ at short circuit in any sensor
- $I > 25 \text{ mA}$ at interruption in any sensor
- analog output 4-20 mA
- rated ambient temperature up to 85 °C
- no supply voltage required (supplied by 4-20 mA-loop)
- with sealed-in electronics



Technical Data

Input

1 - 3 x Pt 100 DIN 43 760/IEC 751
without compensation of line resistance

Output

Current output
Voltage loop
Error
Temperature coefficient

DC 4...20 mA
DC 12...32 V
class 2,5
0,025 %/°K

Reference conditions
adm. operating temperature

IEC 770, $T_u = 23 \text{ °C} \pm 5 \text{ °C}$, $U_s = \text{DC } 24 \text{ V} \pm 1 \text{ V}$
-20...+85 °C

Dimensions (W x H x D)

TMU300
Design 420 with terminals
60 x 55 x 32 mm
Screw mounting 2 x M4
IP 40 / IP 20
approx. 70 g

Attachment
Protection housing / terminals
Weight