senseca

Produktinformation

Resistance Transmitter RT500

- **Measuring range 0..50 Ω up to 100 kΩ**
- **Processor technology with 12 Bit AD/DA-converter**
- **Teach-in programming for start- and end-value**
- **Increase or decrease output characteristic programmable**
- **Operation mode indicated by use of a 2-color LED**

Characteristics

RT500 transmitter converts a resistance- or potentiometer signal into industry standard signals. Initial and final value may be in the range of 0..100 kOhm. Easy programming by means of Teach-in. The measuring range will be selected automatically. The input circuit is designed in 3-wire technology and can provide compensation of the line resistance. The linear output signal is generated between minimum and maximum input resistance.

Technical data

Power supply
Supply voltage : 85..265 V AC or 10..30 V AC/DC
Frequency : 47..63 Hz
Power consumption : < 3 VA
Operating
temperature : -10..+50 °C
Conformity : CE
Input
Measuring range : R_{max}: 50 Ω..100 kΩ,
  Condition: ΔR ≥ 0.5 R_{max}
  characteristic curve increasing or decreasing
Solution : 600..3000 Digit
  (depends on measuring range)
Sampling frequency : 250 Hz real-time processing
Line resistance : max. 10 Ω, line compensation
  in 3-wire-circuits
Outputs
Current : 0/4..20 mA, selectable, burden ≤ 1 kΩ
Voltage : 0/2..10 V, selectable, load max. 15 mA
  short-circuit-proof
  (parallel with current output max. 5 mA)
Attention! No isolation between in- and output.
Rise time (T_{90}) : < 8 ms
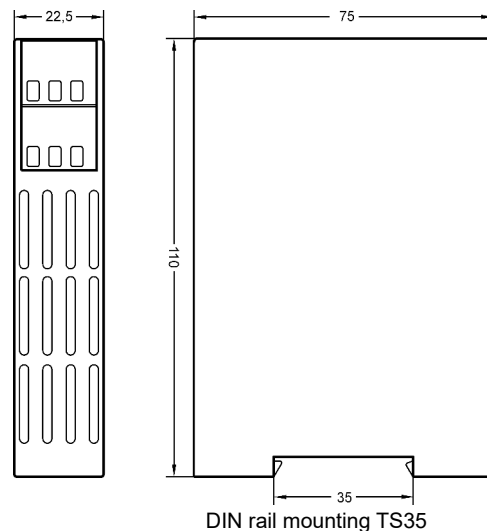Accuracy : <0,7 % (typ. <0,25 %)
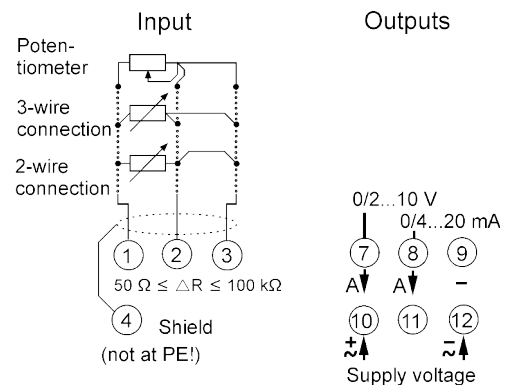**Case** : Polycarbonate, UL94V-0, TH35
Weight : approx. 200 g
Connection : screw terminals, max. 2.5 mm²
Protection class : case IP30, terminals IP20 acc. to BGV A3

Dimensions

DIN rail mounting TS35

Connection diagram

Ordering code

RT500 - [1.] - [2.]

1.	Measuring range	
40	R_{max} in range 50 Ω up to 100 kΩ programmable (see examples)	
2.	Supply voltage	
0	85..265 V AC	
5	10..30 V AC/DC	

Examples:
1.) Range 15..90 Ω
2.) Range 0..1000 Ω
3.) Range 100..200 Ω

Attention!
Minimal span 0.5 x Rmax