

**Product Information**

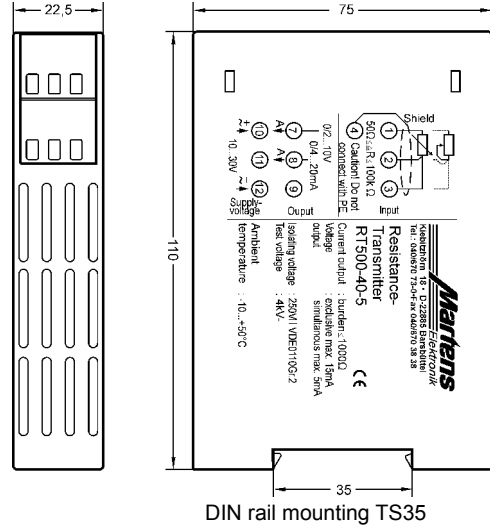
**Resistance Transmitter  
 RT500**

Connection : screw terminals, max. 2.5 mm<sup>2</sup>  
 Protection class : case IP30,  
 terminals IP20 acc. to BGV A3

**Dimensions**



- 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**

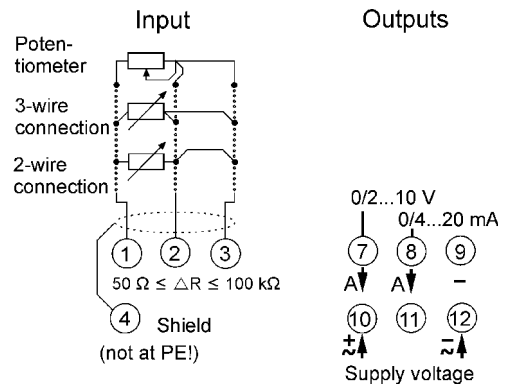
**Power supply**  
 Supply voltage : 85..265 V AC or 10..30 V AC/DC  
 Frequency : 47..63 Hz  
 Power consumption : < 3 VA  
**Operating temperature** : -10..+50 °C  
**CE-conformity** : EN 55022, EN6 0555,  
 IEC 61000-4-4/5/11/13

**Input**  
 Measuring range : R<sub>max</sub>: 50 Ω..100 kΩ,  
 Condition: ΔR ≥ 0.5 R<sub>max</sub>  
 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<sub>90</sub>)** : < 8 ms  
**Accuracy** : ± 0.2 % of the measuring range  
**Case** : Polycarbonate, UL94V-0  
 TS 35 acc. to DIN EN 60715:2001-09  
**Weight** : approx. 200 g

**Connection diagram**



**Ordering code**

1. 2.  
 RT500 - [ ] - [ ]

<b>1. Measuring range</b>	
40	R <sub>max</sub> in range 50 Ω up to 100 kΩ programmable (see examples)
<b>2. Supply voltage</b>	
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 R<sub>max</sub>