

Current and Voltage Transmitter CVT500



- Measuring input for DC- and sinusoidal AC-signals
- Arithmetic average value measurement RMS calibrated
- Frequency range 40..200 Hz

Characteristics

Transmitter CVT 500 convert current or voltage signals to proportional industry standard signal 0/4..20 mA, 0/2..10 V DC. Direct measurement of currents up to 5 A and voltages up to 400 V are possible.

Technical data

Power supply

Supply voltage : 230 V AC $\pm 10\%$ or 24 V DC $\pm 15\%$
Frequency AC : 47..63 Hz
Power consumption: < 3 VA

Operating

temperature : -10..+50 °C
CE-conformity : EN 61326-1:2013; EN 60664-1:2007

Inputs

Accuracy : $\leq 0.5\%$ ($\leq 0.2\%$ single adjustment)
Frequency : 40..200 Hz (other ranges on request)

Standard measuring ranges

Current : 0..1 A and 0..5 A sinusoidal or DC
R_i : 20 m Ω (5 A-input) or 100 m Ω (1 A-input)
Overload : 2-times, 4-times max. 5 s
Voltage : 0..125 V and 0..250 V AC or DC
R_i : 600 k Ω (125 V-) or 1,2 M Ω (250 V-input)
Overload : max. 500 V AC/DC

Custom measuring ranges

Voltage : end value in range 0.1..400 V AC/DC
R_i : 4.8 k Ω /V
Overload : 5-times U_N, max. 500 V AC/DC
Current : end value in range 0.001..5 A AC/DC
R_i : 100 m Ω \div (custom range [A])
Overload : 2-times, 4-times max. 5 s
End value : adjustable $\pm 5\%$

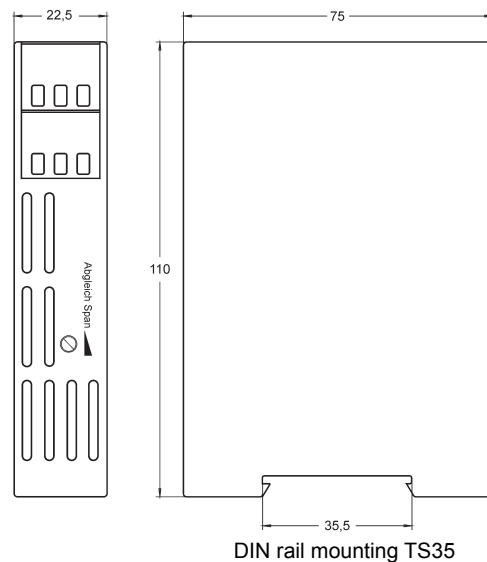
Output

Output changing

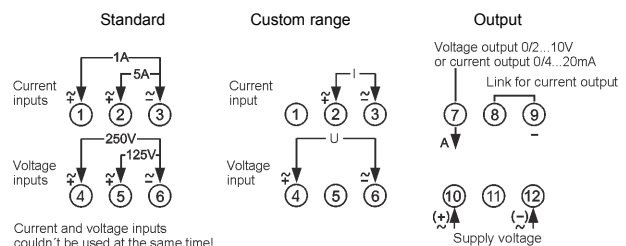
Voltage/current : link between terminal 8 and 9
Current output : 0/4..20 mA selectable, burden $\leq 500\ \Omega$
Rise time (T₉₀) : < 650 ms
Burden error : < 0.1% (R_L = <200 Ω), < 0.2% (R_L = <500 Ω)
Voltage : 0/2..10 V selectable, load max. 10 mA

Case : Polycarbonate, UL94V-0
TS 35 acc. to DIN EN 60715:2001-09
Weight : approx. 200 g
Connection : screw terminals, max. 2.5 mm²
Protection class : case IP30, terminals IP20 acc. to BGV A3

Dimensions



Connection diagram



Ordering code

CVT500 - 1. - 2. - 3.

1. Current ranges	
0	not installed (custom measuring range voltage)
1 / 5	standard device 0..1 A and 0..5 A AC / DC
2. Voltage ranges	
0	not installed (custom measuring range current)
125 / 250	standard device 0..125 V and 0..250 V AC/DC
3. Supply voltage	
0	230 V AC $\pm 10\%$
5	24 V DC $\pm 15\%$