

AC voltage transmitter VT 500

True r.m.s. measurement

Features

- 6 voltage measurement ranges
0 ... 100/200/300/400/500/600 V AC
- Switch selectable averaging function (slow)
- Output 0/4 ... 20 mA, and 0/2 ... 10 V
- Full 3-port isolation
- Supply voltage 85 ... 265 V AC
or 10 ... 30 V AC/DC
- Power-on LED
- 22,5 mm case for DIN rail mounting



General information

Voltage transmitter VT500 converts true r.m.s. voltage measuring values of all types of waveforms into industry standard signals for process control systems.

For example, the load voltage of an frequency converter can be detected and converted.

Short information

- | | |
|----------------|---|
| Multi range | Measuring range and output configuration can be selected by 6 stage rotary- and a DIP-switch at the front panel.
The final value of the measuring range is adjustable +/-35%.
In case all measuring values in the range 65 ... 800V can be completely adjusted without a gap. |
| Current output | Max. burden 1 kOhm. |

Technical Data

Power supply

Supply voltage	: 85 ... 265 V AC or 10 ... 30 V AC/DC	
Frequency range AC	: 40 ... 400 Hz	
Power consumption	: < 3 VA	
Working temperature	: -10 ... 60 °C	
Isolation voltage	: 500 V AC/DC	acc. VDE 0110 group 2
	: 600 V AC/DC	between input/output/supply
Test voltage	: 4 kV DC	between output/supply
	: 6 kV DC	between output and supply/input

Input

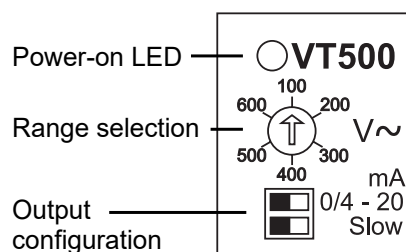
AC voltage	: 0 ... 100/200/300/400/500/600 V AC, overload max. 1200 V
Input resistance	: $R_i = 720 \text{ k}\Omega$
Frequency range	: 40 ... 2000 Hz basic wave (16 _{2/3} Hz on request)
Initial value	: adjustable $\pm 5 \%$
Final value	: adjustable $\pm 35 \%$

Output

Current output	: 0/4 ... 20 mA,	switch selectable, burden $\leq 1 \text{ k}\Omega$
Voltage output	: 0/2 ... 10 V DC,	switch selectable, load max. 15 mA,
		short circuit proof (simultaneously with current output max. 5 mA)
Rise time (t_{90})	: $\leq 150 \text{ ms}$	
Accuracy	: $\leq 0.5 \%$; ($\leq 0.2 \%$ factory calibration for one range available)	
Temperature coefficient	: $\leq 10 \text{ ppm/K}$	

Case	: standard case of polycarbonate 8020 UL94V-1
Weight	: approx. 200 g
Connection	: screw terminals with pressure plate, max. 2.5 mm ² , wire
Protection	: case IP30, terminals IP20 finger safe acc. German BGV A3

Front panel controls

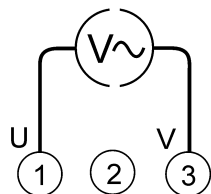


Measuring ranges

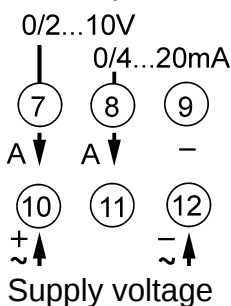
Range V~	Rotary switch position
100	1
200	2
300	3
400	4
500	5
600	6

Connection diagram

Input
0...100/200/300/400/500/600 V AC

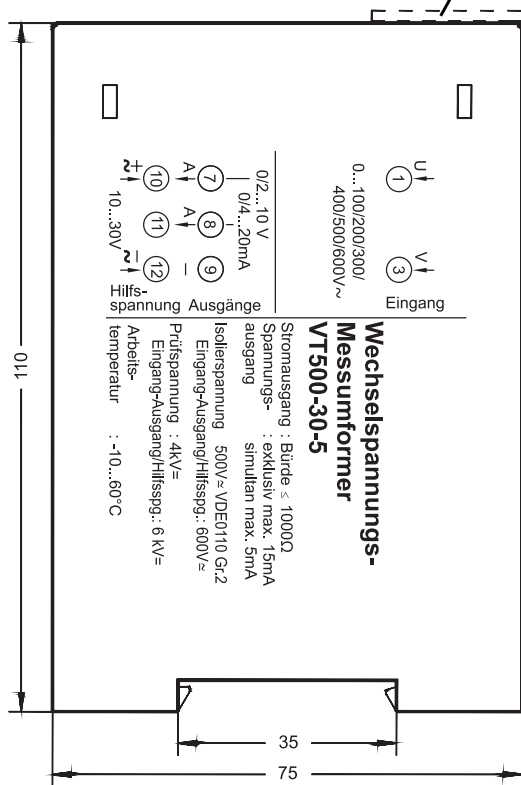
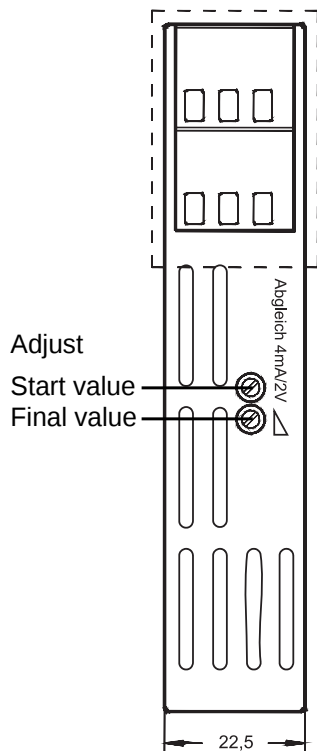


Output

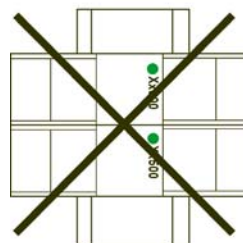
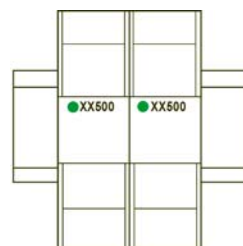


Caution!
Operation with input voltage
> 400V AC, only with
terminal cover type KA-VT

Dimensions



Caution!
Mounting of multiple units
without distance is only
permitted in horizontal
orientation.



Ordering code

VT500 -

1.

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2.

1. Measuring ranges

30 0 ... 100/200/300/400/500/600 V AC

Custom ranges on request

2. Supply voltage

0 85 ... 265 V AC

5 10 ... 30 V AC/DC

Accessory

KA-VT Terminal cover for voltages > 400 V AC

For ac current measurement we deliver the Current transmitter CT 500 with 12 current measuring ranges.