

Isolating signal converter **TV 500** ... with integr. transmitter supply **ST 500**

Features

- Switch selectable inputs
0/4 ... 20mA and 0/2 ... 10V
- Switch selectable outputs
0/4 ... 20mA simultaneous 0/2 ... 10V
- Supply voltage 100 ... 265V AC
or 10.8 ... 30V AC/DC
- Full 3-port isolation
- Integrated transmitter supply
(only ST500)
- Power on LED
- 22.5mm case for DIN rail mounting



General information

TV500 isolating signal converter can be used to isolate and convert field signals 0/4...20mA or 0/2...10V DC into industry standard signals for process control systems. The ST500 provides a fully floating isolated transmitter supply.

Short information

Current output	max. burden 1 kΩ
Multi-range	input and output can be configured by DIP-switch at the front panel.
Transmission frequency	measuring range 10: max. 18Hz ($t_{90} < 20\text{ms}$), measuring range 11: max. 1kHz ($t_{90} < 100\mu\text{s}$).

Technical data

Power supply

Supply voltage	: 100...265V AC or 10.8...30V AC/DC
Frequency AC	: 47...63 Hz
Power consumption	: < 3.5VA
Working temperature	: -10...+60°C
Rated voltage	: 500V according to VDE 0110 Gr. 2 between input / output / supply
Test voltage	: 4 kV between input / output / supply
CE - conformity	: EN55022, IEC1000-4-4/5/11/13, EN60555-2

Input

Current input	: 0...20mA, 4...20mA switch selectable, Ri = 25 Ohm max. 100mA overload
Voltage input	: 0...10V DC, 2...10V DC switch selectable, Ri approx. 40kOhm, max. 100V overload
Measuring range and 4mA/2V	: adjustable approx. +/-5%

Output

Current output	: 0...20mA, 4...20mA switch selectable, burden max. 1kOhm
Voltage output	: 0...10V, 2...10V switch selectable, max. load 15 mA, short circuit protected(simultaneous to current output max. 5mA)
Accuracy	: ≤ 0.3%
Rise time (t ₉₀)	: measuring range 10: < 20ms, max. Frequenz 18Hz measuring range 11: <100µs, max. Frequenz 1kHz

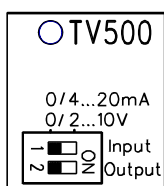
Transmitter supply

: ca. 24V DC, Ri approx. 150Ohm, short circuit current approx. 35mA (ST500 only)
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Case

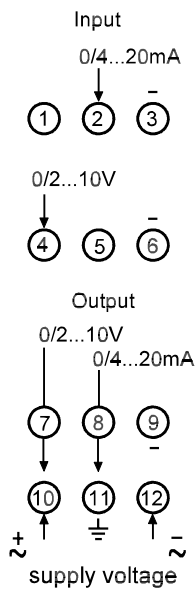
: standard case of polycarbonate 8020 UL94V-1	
Weight	: ca. 200g
Connection	: screw terminals with pressure plate, max. 2.5 mm ² , wire
Protection	: case IP30, terminals IP20 finger safe acc. German VBG 4

Front panel switches

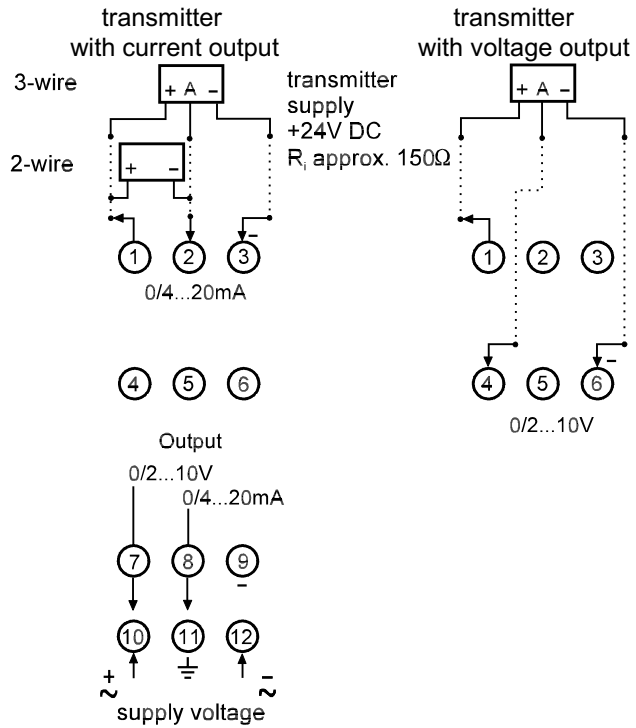


	0...20mA 0...10V	4...20mA 2...10V
Input	S1 off	S1 on
Output	S2 off	S2 on

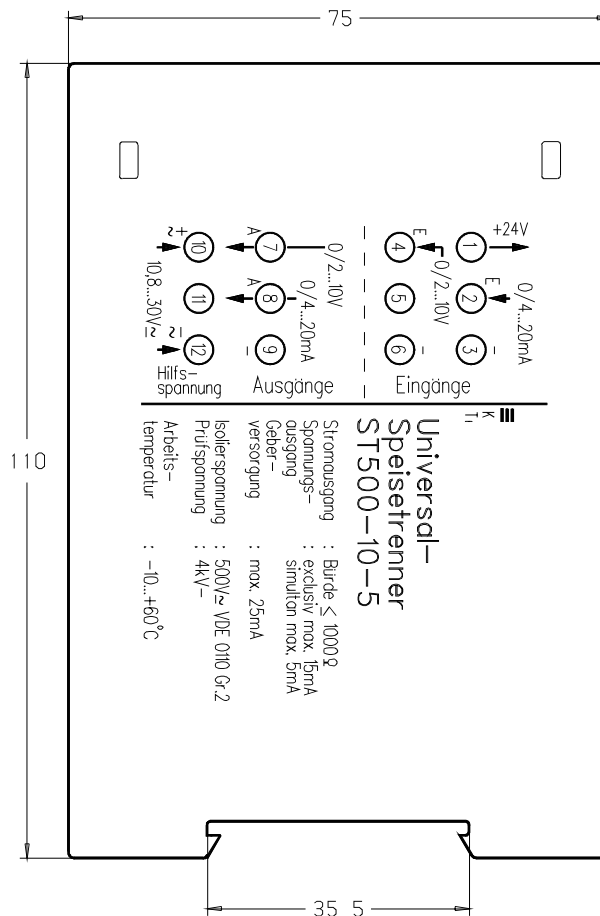
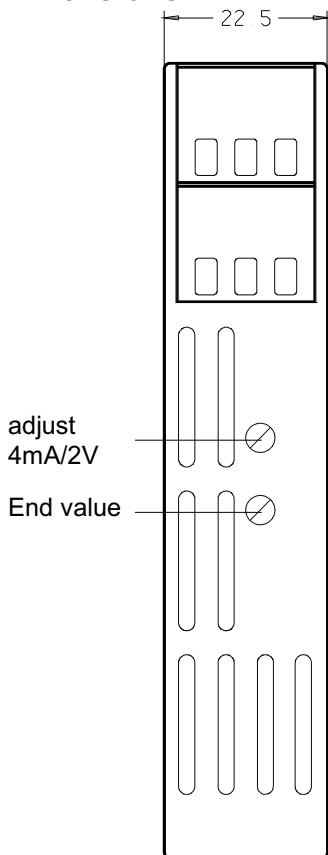
Connection diagram TV500



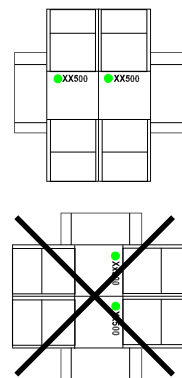
ST500



Dimensions



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



TS35 DIN rail mounting
acc.to DIN 46277 and DIN EN 50022

Order code

1. 2. 3.
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1. Basic device

TV500 signal converter
ST500 signal converter with transmitter supply.

2. Measuring range

10 inputs 0/4...20mA and 0/2...10V DC
 outputs 0/4...20mA and 0/2...10V DC

11 like before, but rise time $t_{90} < 100\mu\text{s}$

3. Supply voltage

0 100...265V AC
5 10.8...30V AC/DC

Ihr kompetenter Ansprechpartner / Your competent contact partner :

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