

Isolating Signal Converter TV500 / ST500

With integr. transmitter supply



Characteristics

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

Technical data

Power supply

Supply voltage : 100...265 V AC or 10.8...30 V AC/DC
Frequency AC : 47...63 Hz
Power consumption: < 3.5 VA
Operating temperature : -10...+60 °C
CE-conformity : EN 61326-1:2013
EN 60664-1:2007

Inputs

Current : 0/4...20 mA selectable, $R_i = 25 \Omega$
overload max. 100 mA
Voltage : 0/2...10 V DC selectable,
 R_i approx. 40 k Ω , overload max. 100 V

Span and start value

4 mA/2 V : adjustable approx. $\pm 5 \%$
Transmitter supply : approx 24 V DC, R_i approx. 150 Ω ,
(only ST500) short-circuit current approx. 35 mA

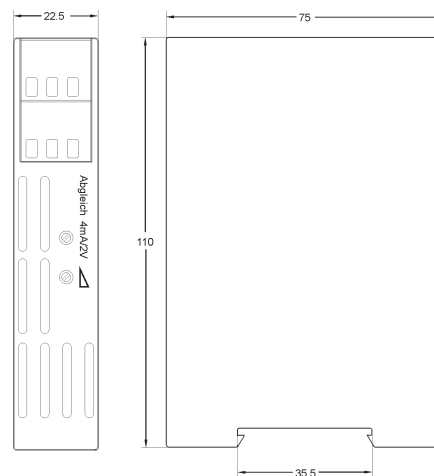
Outputs

Current : 0/4...20 mA selectable,
burden max. 1 k Ω
Voltage : 0/2...10 V selectable,
load max. 15 mA, short-circuit-proof
(parallel with the current output max. 5 mA)
Rise time (T_{90}) : model 10: < 20 ms, max. frequency 18 Hz
model 11: < 100 μ s, max. frequency 1 kHz
Accuracy : $\leq 0.2 \%$
(single range adjustment $\leq 0.1 \%$)

Case

Design : standard case, Makrolon 8020 UL94V-1
acc. to DIN EN 60715
Weight : approx. 200 g
Connection : screw terminals, max. 2.5 mm²
Protection class : case IP30,
terminals IP20 acc. to BGV A3

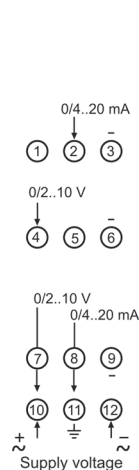
Dimensions



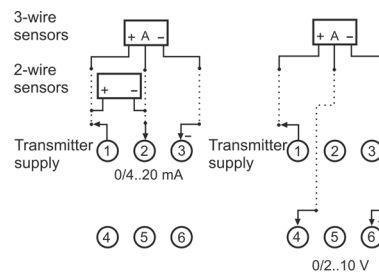
DIN rail mounting TS35

Connection diagram

Signal converter TV500



Power feed signal converter ST500



Ordering code

1. 2. 3.
□ - □ - □

1. Model	
TV500	signal converter
ST500	power feed signal converter
2. Measuring range	
10	inputs 0/4...20 mA and 0/2...10 V
	outputs 0/4...20 mA and 0/2...10 V
11	as 10, but rise time $T_{90} < 100 \mu$ s
3. Supply voltage	
0	100...265 V AC
5	10.8...30 V AC/DC