

Isolating Signal Converter TV500Ex / ST500Ex

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 out of the intrinsically area. The ST500 provides a fully floating isolated transmitter supply.

Technical data

Power supply

Supply voltage : 85..253 V AC/110..125 V DC or
10..30 V AC/DC

Frequency : 40..400 Hz
Power consumption : < 3.5 VA

Operating temperature : -10..+55 °C
CE-conformity : ATEX-directive 2014/34/EU
Standards : EN 60079-0:2006, EN 60079-11:2007
EN 61241-0:2006, EN 61241-11:2006

EMC-directive : 2014/30/EU
Standards : EN 61326-1:2013

Explosion protection

Certification : TÜV 97 ATEX 1150, 2. annex
Approval : II (1) G [Ex ia Ga] IIC,
II (1) D [Ex ia Da] IIIC

Inputs

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

Span and start value

4 mA/2 V : adjustable approx. \pm 20 %
Transmitter supply : approx. 20 V DC, R_i approx. 300 Ω ,
(only ST500Ex) short-circuit current < 27 mA

Outputs

Current : 0/4..20 mA selectable,
burden max. 1 $\text{k}\Omega$
Voltage : 0/2..10 V selectable,
load max. 15 mA, short-circuit-proof
(parallel with current output max. 5 mA)

Rise time (t_{90}) : < 100 ms
Accuracy : 0.25 %

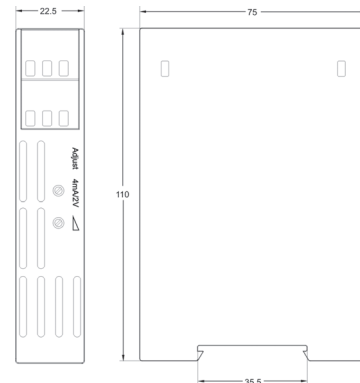
Case : standard case polycarbonate 8020 UL94V-1
acc. to DIN EN 60715:2001-09, TS35

Weight : approx. 200 g
Connection : screw terminals, max. 2.5 mm²
Protection class : case IP30,
terminals IP20 acc. to BGV A3

Mounting area

Mounting in dry, clean and well monitored areas
For more details see user manual.

Dimensions

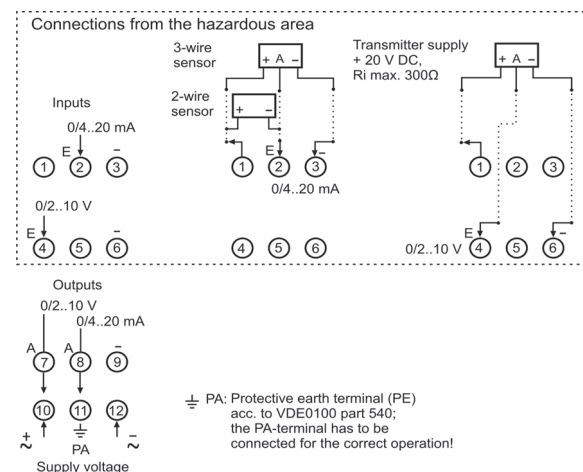


DIN rail mounting TS35

Connection diagram

Signal converter TV500Ex

Power feed signal converter ST500Ex



Ordering code

1. 2. 3.
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1. Model	
TV500Ex	signal converter
ST500Ex	power feed signal converter
2. Measuring range	10 inputs 0/4..20 mA and 0/2..10V outputs 0/4..20 mA and 0/2..10V
3. Supply voltage	0 85..253 V AC 5 10..30 V AC/DC