

Product Information

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 Standards : ATEX-directive 2014/34/EU
 EN 60079-0:2006, EN 60079-11:2007
 EN 61241-0:2006, EN 61241-11:2006
 EMC-directive Standards : 2014/30/EU
 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, Ri 25 kΩ
 overload max. 100 mA
 Voltage : 0/2..10 V DC selectable,
 Ri 40 kΩ, overload max. 100 V

Span and start value

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

Outputs

Current : 0/4..20 mA selectable,
 burden max. 1 kΩ
 Voltage : 0/2..10 V selectable,
 load max. 15 mA, short-circuit-proof
 (parallel with current output max. 5 mA)

Rise time (t₉₀) : < 100 ms
 Accuracy : 0.25 %

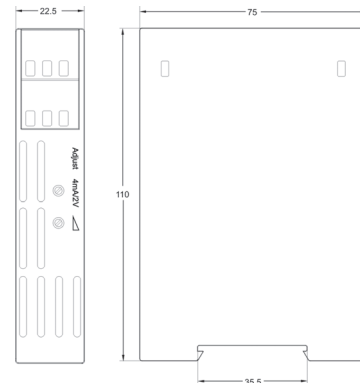
Case : standard case polycarbonate 8020 UL94V-1
 acc. to DIN EN 60715:2001-09, TS35

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

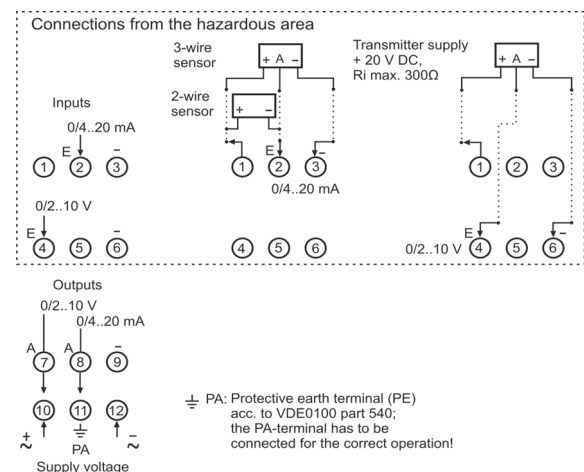


DIN rail mounting TS35

Connection diagram

Signal converter TV500Ex

Power feed signal converter ST500Ex



Ordering code



1. 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