

**Product Information**

**Isolating Signal Converter  
 TV501Ex**

**Intrinsically safe outputs**



**Characteristics**

Isolating signal converter TV501 can be used to isolate and convert 0/4..20 mA and 0/2..10 V signals to the hazardous area. The universal design of the in- and outputs and the wide range of supply voltage limits the devices into 2 models.

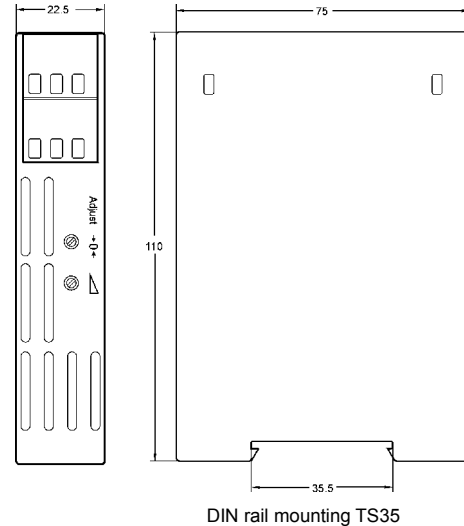
**Technical data**

- Power supply**  
 Supply voltage : 85..253 V AC / 110..125 V DC or 10..30 V AC/DC  
 Frequency AC : 40..400 Hz  
 Power consumption : < 3.5 VA  
 Operating temperature : -10..+55 °C  
 CE-conformity : ATEX directive 94/9/EG  
 EMC directive 2004/108/EG
- Standards**  
 : EN 60079-0:2013,  
 EN 60079-11:2012,  
 EN 61326-1:2004-05
- Inputs**  
 Current : 0/4..20 mA DC, selectable, Ri = 25 Ω, overload max. 100 mA  
 Voltage : 0/2..10 V DC, selectable, Ri ca. 40 kΩ, overload max. 100 V  
 Span : adjustable approx. ± 5 %  
 Zero point : adjustable approx. ± 5 %
- Explosion protection**  
 Certification : TÜV 97 ATEX 1164  
 Approval : ExII (1) G [Ex ia Ga] IIC or II (1) D [Ex ia Da] IIIC
- Outputs**  
 Current : 0/4..20 mA DC, selectable  
 burden ≤ 320 Ω (TV501Ex-...-10)  
 burden ≤ 1 kΩ (TV501Ex-...-20)  
 Voltage : 0/2..10 V DC, selectable,  
 max. 15 mA short-circuit-proof,  
 (parallel with voltage output max. 5 mA)  
 Rise time (T90) : < 20 ms  
 Accuracy : ≤ 0.3 %
- Case**  
 : standard case polycarbonate 8020 UL94V-1  
 DIN rail mounting TS35
- Weight**  
 : approx. 200 g
- Electrical connection**  
 : screw terminals, max. 2.5 mm<sup>2</sup>
- Protection class**  
 : case IP30, terminals IP20  
 acc. to BGV A3

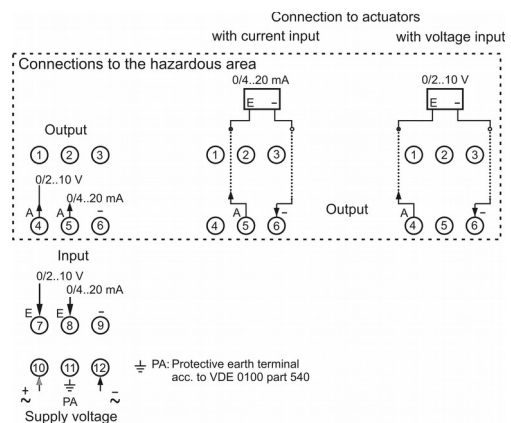
**Mounting area**

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

**Dimensions**



**Connection diagram**



**Ordering code**

TV501Ex -  1. -  2. -  3.

<b>1. Measuring range</b>	
10	inputs 0/4..20 mA and 0/2..10V DC outputs 0/4..20 mA burden 320 Ω, 0/2..10 VDC
20	inputs 0/4..20 mA and 0/2..10V DC outputs 0/4..20 mA burden 1 kΩ, 0/2..10 VDC
<b>2. Supply voltage</b>	
0	85..253 V AC
5	10..30 V AC/DC
<b>3. Options</b>	
00	without option