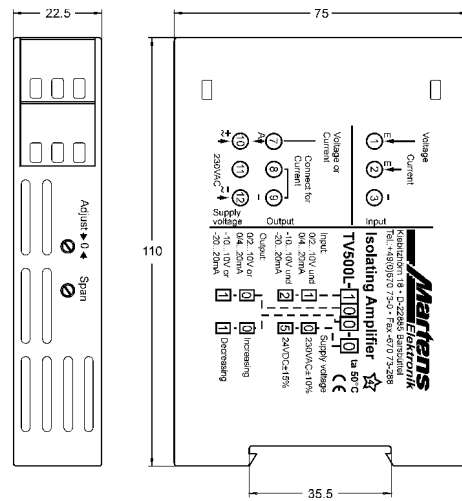


**Product Information**

**Isolating Signal Converter  
 TV500L**



**Dimensions**



DIN rail mounting TS35

**Characteristics**

Isolating signal converter TV500L can be used to isolate and convert unipolar or bipolar field signals into industry standard unipolar 0/4..20 mA and 0/2..10 V DC or bipolar signals for process control systems. The output characteristic curve is programmable for increasing or decreasing performance.

**Technical data**

**Power supply**

Supply voltage : 230 V AC  $\pm$  10 % or 24 V DC  $\pm$  15 %  
 Frequency AC : 47..63 Hz  
 Power consumption : < 3 VA (at 24 V DC, 80 mA)  
 Operating temperature : -10..+50 °C  
 CE-conformity : EN 55022, EN 60555, IEC 61000-4-3/4/5/11/13

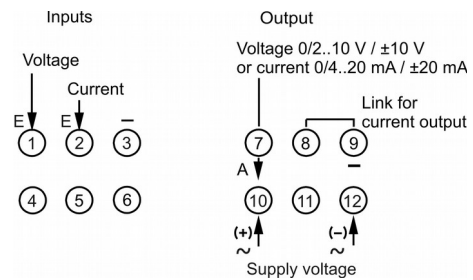
**Inputs**

Current :  $\pm$  20 mA or 0/4..20 mA selectable,  $R_i = 43 \Omega$ , overload max. 100 mA  
 Voltage :  $\pm$  10V or 0/2..10 V selectable,  $R_i = 40 \text{ k}\Omega$ , overload max. 100 V  
 Start value : adjustable  $\pm$  1.5 %  
 End value : adjustable  $\pm$  1.5 %  
 Accuracy : < 0.3 %, (single range adjustment < 0.1 %)

**Output**

Programmable output  
 Voltage  $\rightarrow$  current : link between terminal 8 and 9  
 Current : 0/4..20 mA selectable, burden  $\leq$  400  $\Omega$ ;  $\pm$  20 mA, burden  $\leq$  150  $\Omega$   
 Burden error : < 0.1 % ( $R_L = 0..200 \Omega$ ), < 0.2 % ( $R_L = 0..400 \Omega$ )  
 Voltage : 0/2..10V selectable, load max. 10 mA;  $\pm$  10 V, load max. 5 mA  
 Rise time ( $T_{90}$ ) : < 40 ms  
**Case** : standard case polycarbonate 8020 UL94V-1 acc. to DIN EN 60715:2001-09, 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

**Connection diagram**



**Ordering code**

TV500L -  .  .  .  -

1. Inputs	
1	0/4..20 mA and 0/2..10 V DC
2	$\pm$ 20 mA and $\pm$ 10 V DC
2. Outputs	
0	0/4..20 mA and 0/2..10 V DC
1	$\pm$ 20 mA and $\pm$ 10 V DC
3. Characteristic curve	
0	increasing
1	decreasing (inverted)*
4. Supply voltage	
0	230 V AC $\pm$ 10 %
5	24V DC $\pm$ 15 %

\* please state input- and output signal in clear text