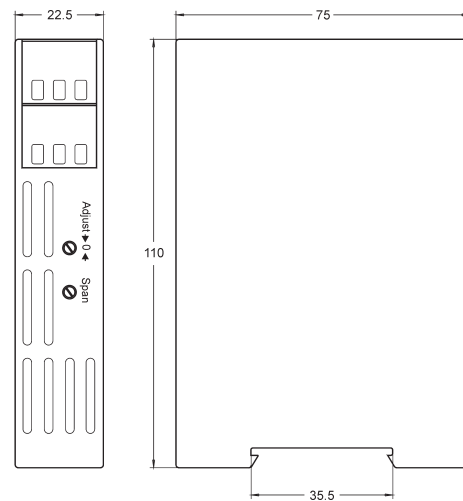


Isolating Signal Converter TV500L



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
 EMC : EN 61326-1:2013; EN 60664-1:2007

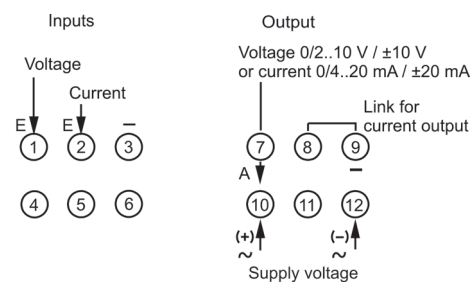
Inputs

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 $\leq 400 \Omega$; $\pm 20 \text{ mA}$, 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; $\pm 10 \text{ V}$, 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 mm²
 Protection class : case IP30, terminals IP20, acc. to BGV A3

Connection diagram



Ordering code

TV500L - 1. 2. 3. 4.

1. Inputs	
1	0/4..20 mA and 0/2..10 V DC
2	$\pm 20 \text{ mA}$ and $\pm 10 \text{ V DC}$
2. Outputs	
0	0/4..20 mA and 0/2..10 V DC
1	$\pm 20 \text{ mA}$ and $\pm 10 \text{ V DC}$
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