

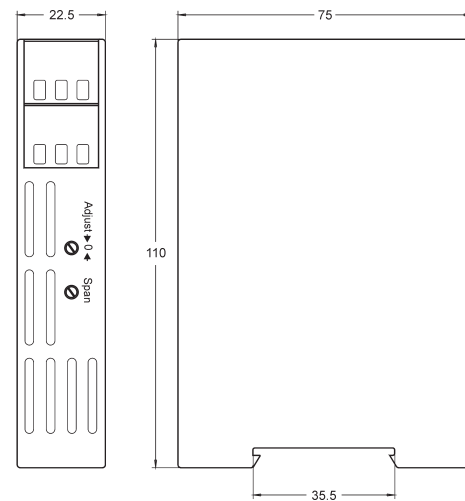
Product Information

Isolating Converters

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 : ± 20 mA or 0/4...20 mA selectable,
 $R_i = 43 \Omega$, overload max. 100 mA
Voltage : ± 10 V 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 $\leq 400 \Omega$;
 ± 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...10 V selectable, load max. 10 mA;
 ± 10 V, load max. 5 mA

Rise time (T_{90}) : < 40 ms

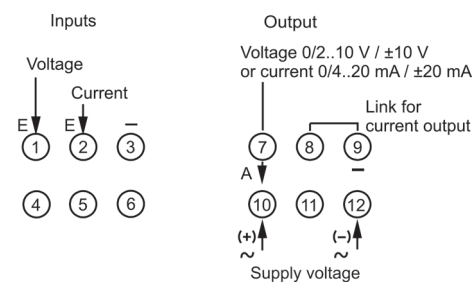
Case : standard case polycarbonate 8020 UL94V-1
acc. to DIN EN 60715:2001-09, TS35

Weight : approx. 200 g

Electrical connection : screw terminals, max. 2.5 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	± 20 mA and ± 10 V DC
2. Outputs	
0	0/4...20 mA and 0/2...10 V DC
1	± 20 mA and ± 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