

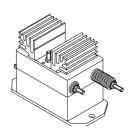
Voltage Transducer LV 100-3500

For the electronic measurement of voltages: DC, AC, pulsed..., with a galvanic isolation between the primary circuit (high voltage) and the secondary circuit (electronic circuit).





$V_{PN} = 3500 \text{ V}$



Electrical data

$egin{array}{c} oldsymbol{V}_{PN} \ oldsymbol{V}_{P} \ oldsymbol{I}_{PN} \ oldsymbol{R}_{M} \end{array}$	Primary nominal r.m.s. voltage Primary voltage, measuring range Primary nominal r.m.s. current Measuring resistance		3500 0 ± 5 2.85 R _{M min}	250 R _{Mmax}	V V mA
	with ± 15 V	@ $\pm 3500 \text{ V}_{max}$ @ $\pm 5250 \text{ V}_{max}$	0 0	170 90	Ω
I _{SN} K _N V _C I _C V _d	Secondary nominal r.m.s Conversion ratio Supply voltage (± 5 %) Current consumption R.m.s. voltage for AC iso		50 3500 V ± 15 10 + I _s 12	/ 50 m <i>A</i>	mA V mA kV

Accuracy - Dynamic performance data

X _G	Overall Accuracy @ V_{PN} , $T_{A} = 25^{\circ}C$ Linearity		± 0.7 < 0.1		% %
	Offset current @ $\mathbf{I}_{P} = 0$, $\mathbf{T}_{A} = 25^{\circ}\mathrm{C}$ Thermal drift of \mathbf{I}_{O} Response time @ 90 % of $\mathbf{V}_{P \mathrm{max}}$	0°C + 70°C	Typ ± 0.2 190	Max ± 0.2 ± 0.3	mA mA μs

General data

T_A	Ambient operating temperature	0+70	°C
T _s	Ambient storage temperature	- 25 + 85	°C
N	Turns ratio	35000 : 2000	
Р	Total primary power loss	10	W
$\mathbf{R}_{_{1}}$	Primary resistance @ T _A = 25°C	1.225	$M\Omega$
R _s	Secondary coil resistance @ T _A = 70°C	60	Ω
m	Mass	850	g
	Standards 1)	EN 50178	

Features

- Closed loop (compensated) voltage transducer using the Hall effect
- Insulated plastic case recognized according to UL 94-V0
- Primary resistor R₁ incorporated into the housing.

Advantages

- Excellent accuracy
- Very good linearity
- Low thermal drift
- High immunity to external interference.

Applications

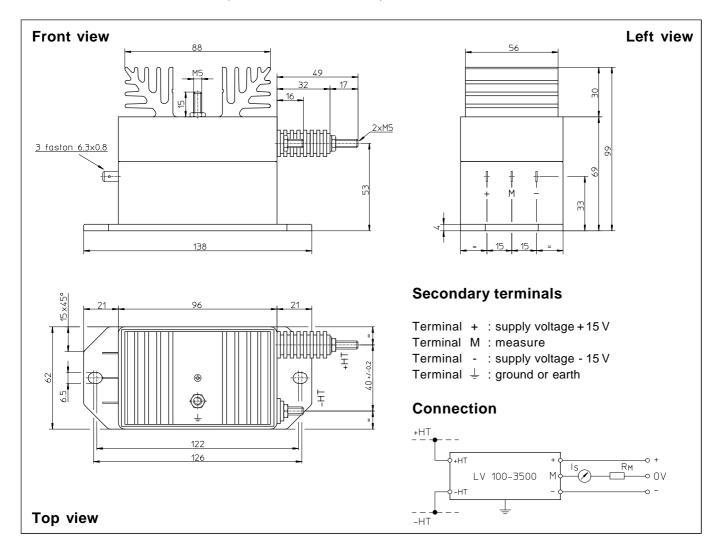
- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications.

Note: 1) A list of corresponding tests is available

981102/2



Dimensions LV 100-3500 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance
- Fastening
- Connection of primary
- Connection of secondary
- Connection to the ground
- Fastening torque
- ± 0.3 mm 2 holes Ø 6.5 mm M5 threaded studs Faston 6.3 x 0.8 mm M5 threaded stud 2.2 Nm or 1.62 Lb. -Ft.

Remarks

- \mathbf{I}_{S} is positive when \mathbf{V}_{P} is applied on terminal +HT.
- The primary circuit of the transducer must be linked to the connections where the voltage has to be measured.
- This is a standard model. For different versions (supply voltages, turns ratios, unidirectional measurements...), please contact us.