

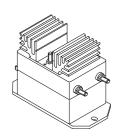
Voltage Transducer LV 100-150

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).





$V_{PN} = 150 V$



Electrical data

\mathbf{V}_{PN}	Primary nominal r.m.s. voltage		150		V
V _P	Primary voltage, measuring range		0 ± 2	25	V
I _{PN}	Primary nominal r.m.s. current		66.67		mΑ
R _M	Measuring resistance		\mathbf{R}_{Mmin}	$\mathbf{R}_{\mathrm{Mmax}}$	
	with ± 15 V	$@ \pm 150 \text{ V}_{max}$	0	170	Ω
		@ ± 225 V max	0	90	Ω
I _{SN}	Secondary nominal r.m.s. current		50		mΑ
K _N	Conversion ratio		150 V /	50 mA	
v _c	Supply voltage (± 5 %)		± 15		V
I _c	Current consumption		10 + I _s		mΑ
$\check{\mathbf{V}}_{d}$	R.m.s. voltage for AC isol	ation test, 50 Hz, 1 mn	6		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 60	Max ± 0.2 ± 0.3	mA mA μs

General data

$T_{_{\rm A}}$	Ambient operating temperature	0 + 70	°C
T _s	Ambient storage temperature	- 25 + 85	°C
N	Turns ratio	1500 : 2000	
Р	Total primary power loss	10	W
$\mathbf{R}_{_{1}}$	Primary resistance @ T _A = 25°C	2.25	$k\Omega$
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

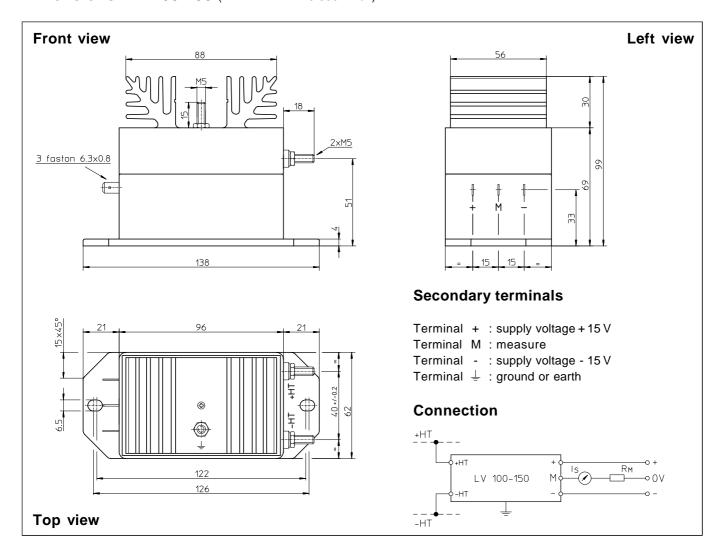
- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- · Battery supplied applications
- Uninterruptible Power Supplies (UPS)
- Power supplies for welding applications.

Note: 1) A list of corresponding tests is available

980709/1



Dimensions LV 100-150 (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.