

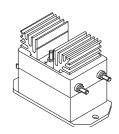
Voltage Transducer LV 100-600

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).





$V_{PN} = 600 V$



Electrical data

$\mathbf{V}_{_{\mathrm{PN}}}$	Primary nominal r.m.s.	voltage	600		V
V _P	Primary voltage, measuring range		0 ± 9	00	V
I _{PN}	Primary nominal r.m.s. current		16.66		mΑ
\mathbf{R}_{M}	Measuring resistance		\mathbf{R}_{Mmin}	\mathbf{R}_{Mma}	x
	with ± 15 V	@ $\pm 600 \text{ V}_{max}$	0	170	Ω
		@ ± 900 V max	0	90	Ω
I _{en}	Secondary nominal r.m.s. current		50		mΑ
I _{sn} K _n	Conversion ratio		600 V / 50 mA		
v c	Supply voltage (± 5 %)		± 15		V
I _c	Current consumption		10 + I _s		mΑ
Λ ^q	R.m.s. voltage for AC isolation test, 50 Hz, 1 mn		6		kV

Accuracy - Dynamic performance data

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

General data

T_A	Ambient operating temperature	0 + 70	°C
T _s	Ambient storage temperature	- 25 + 85	°C
N	Turns ratio	6000 : 2000	
Р	Total primary power loss	10	W
$R_{_1}$	Primary resistance @ T _A = 25°C	36	kΩ
Rs	Secondary coil resistance @ T _A = 70°C	60	Ω
m	Mass	850	g
	Standards	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.

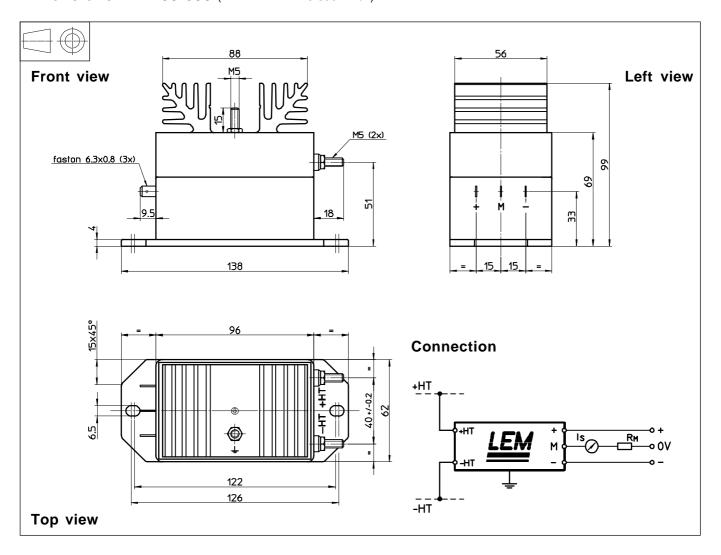
Applications

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

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Dimensions LV 100-600 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance
- Transducer fastening

Fastening torque max

- Connection of primary
- Connection of secondary
- Connection to the ground
- Fastening torque max
- ± 0.3 mm 2 holes Ø 6.5 mm M6 steel screws 5 Nm or 3.69 Lb - Ft. M5 threaded studs Faston 6.3 x 0.8 mm M5 threaded stud 2.2 Nm or 1.62 Lb. -Ft.

Remarks

- \bullet $\mathbf{I}_{_{\mathrm{S}}}$ is positive when $\mathbf{V}_{_{\mathrm{P}}}$ 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.