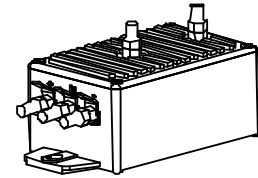


Voltage Transducer AV 100-2000

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).

$$V_{PN} = 2000 \text{ V}$$



Electrical data

V_{PN}	Primary nominal r.m.s. voltage	2000	V
V_{Pmax}	Primary voltage measuring range	$\pm 3000^{1)}$	V
\hat{V}_P	Non-measurable overload	4500 (1s/h)	V_{DC}
R_P	Primary input resistance	17.8M	Ω
R_M	Measuring resistance	R_{Mmin} R_{Mmax}	Ω
	@ $V_C=11.4V$	0 47	Ω
	@ $V_C=22.8V$	0 184	Ω
I_{SN}	Secondary nominal r.m.s. current	50	mA
V_C	Supply voltage ($\pm 5\%$)	DC $\pm 12 \dots 24$	V
I_C	Current consumption	$50+I_S$	mA
V_d	R.m.s. voltage for AC isolation test, 50 Hz, 1 min	6.5	kV
	Max Common mode voltage and	$U_{HT+} + U_{HT-} \leq 4.2 \text{ kV}_{DC}$ $ U_{HT+} - U_{HT-} \leq V_{Pmax}$	
V_e	R.m.s. voltage for partial discharge extinction @ 10pC	2.2	kV

Features

- Insulated plastic case recognized according to UL 94-V0
- Included primary resistor.

Advantages

- Low power
- Excellent accuracy
- Very good linearity
- Low thermal drift
- Low response time
- High bandwidth
- High immunity to external interference
- Low disturbance in common mode.

Accuracy - Dynamic performance data

X_G	Overall Accuracy @ $V_{PN}, T_A = + 25^\circ C$	± 0.7	%
X_G	Overall Accuracy @ $V_{PN}, T_A = - 25 \dots + 70^\circ C$	± 1.5	%
X_G	Overall Accuracy @ $V_{PN}, T_A = - 40 \dots + 85^\circ C$	± 1.7	%
e_L	Linearity @ $T_A = 25^\circ C$	< 0.1	%
I_O	Offset current @ $V_P = 0, T_A = 25^\circ C$	± 0.15	mA
t_r	Response time @ 10 % of V_{PN}	< 12	μs
f	Frequency bandwidth (- 3dB)	DC .. 13	kHz

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.

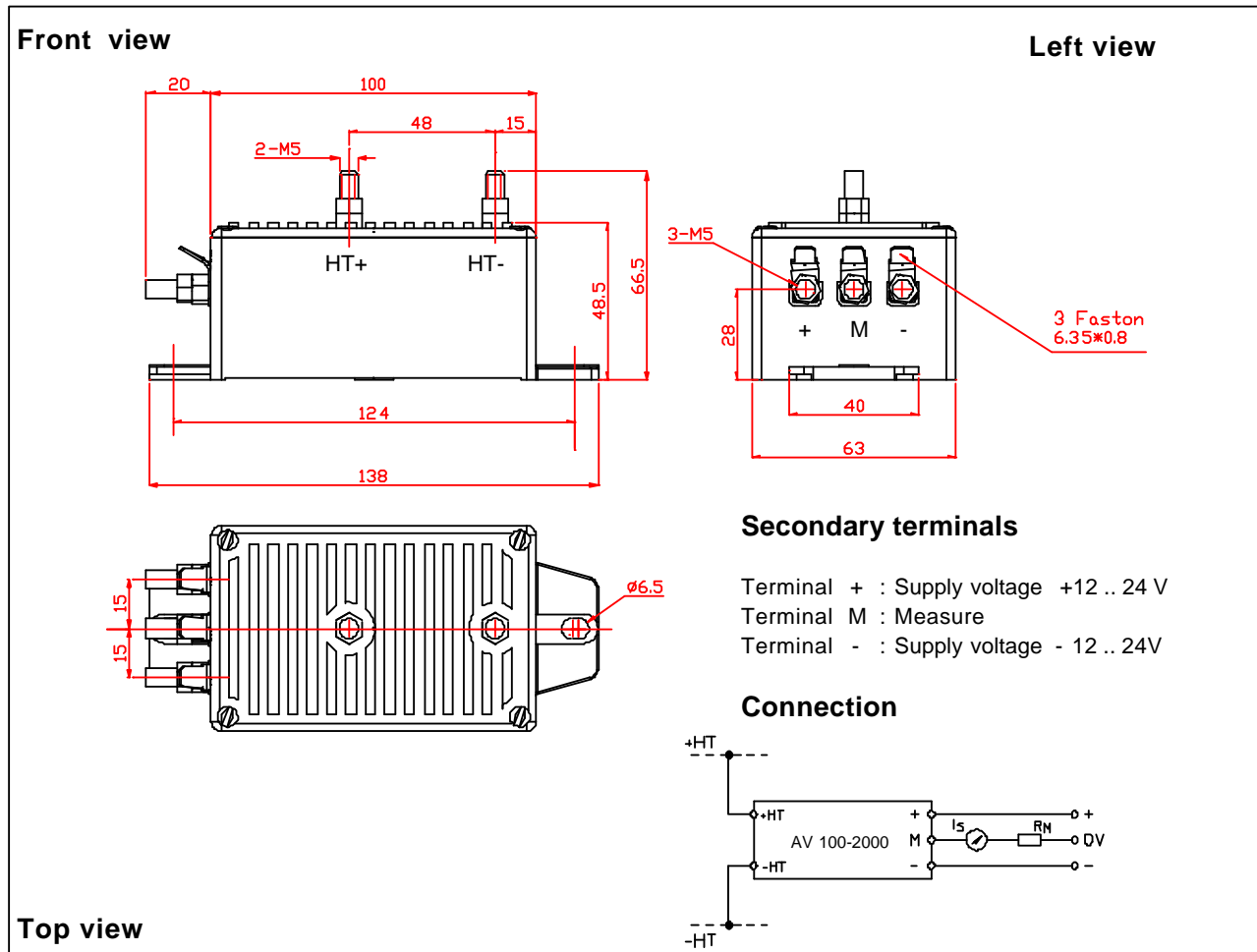
General data

T_A	Ambient operating temperature	- 40 .. + 85	$^\circ C$
T_S	Ambient storage temperature	- 50 .. + 90	$^\circ C$
m	Mass	375	g
	Standards	EN 50155 (01.12.02)	
		EN 50124-1 (01.03.01)	
		NFF16101/2 (01.10.88)	

Note : ¹⁾ Up to 2200 Vpk, 500 ms every 60 minutes & 2600 Vpk, 500 ms, 12 times/year.

030805/2

Dimensions AV 100-2000 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 1 mm
- Transducer fastening 2 holes $\phi 6.5$ mm
Distance between holes 124mm
- Fastening & connection of primary 2 x M5
- Fastening & connection of secondary 3 x M5 or 3 Faston 6.35 x 0.8mm
- Output connections must be made with screened cables
- Recommended fastening torque 2.2 Nm or 1.62 Lb - Ft.

Remarks

- I_s is positive when V_p is applied on terminal +HT.
- This is a standard model. For different versions, please contact us.

LEM reserves the right to carry out modifications on its transducers, in order to improve them, without previous notice.