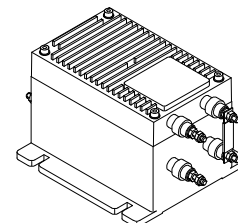


Voltage Transducer LV 200-AW/2/800

$V_{PN} = 800 \text{ V}$

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).



Electrical data

V_{PN}	Primary nominal r.m.s. voltage	800	V		
V_P	Primary voltage, measuring range	0 .. ± 1200	V		
R_M	Measuring resistance	R_{Mmin}	R_{Mmax}		
				with $\pm 15 \text{ V}$	@ $\pm 800 \text{ V}_{max}$
		@ $\pm 1200 \text{ V}_{max}$	0	60	Ω
	with $\pm 24 \text{ V}$	@ $\pm 800 \text{ V}_{max}$	60	220	Ω
	@ $\pm 1200 \text{ V}_{max}$	60	110	Ω	
I_{SN}	Secondary nominal r.m.s. current	80	mA		
K_N	Conversion ratio	800 V / 80 mA			
V_C	Supply voltage ($\pm 5 \%$)	$\pm 15 \dots 24$	V		
I_C	Current consumption	$30 (@ \pm 24 \text{ V}) + I_S$	mA		
V_d	R.m.s. voltage for AC isolation test, 50 Hz, 1 mn	6 ¹⁾	kV		
		1 ²⁾	kV		
V_e	R.m.s. voltage for partial discharges extinction @ 50 pC	2.5	kV		

Features

- Closed loop (compensated) voltage transducer using the Hall effect
- Insulated plastic case recognized according to UL 94-V0
- Accessible electronic circuit
- Shield between primary and secondary circuit
- Primary resistor R_1 incorporated into the housing.

Advantages

- Good accuracy
- Very good linearity
- Low thermal drift
- High immunity to external interference
- Current overload capability.

Accuracy - Dynamic performance data

X_G	Overall Accuracy @ $V_{PN}, T_A = 25^\circ\text{C}$	± 1.0	%
ϵ_L	Linearity	< 0.1	%
I_O	Offset current @ $I_P = 0, T_A = 25^\circ\text{C}$	Typ	Max
			± 0.3
I_{OT}	Thermal drift of I_O	$-25^\circ\text{C} \dots +70^\circ\text{C}$	± 0.3 ± 0.6 mA
t_r	Response time @ 90 % of V_{Pmax}	70	μs

Applications

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

General data

T_A	Ambient operating temperature	$-25 \dots +70$	$^\circ\text{C}$
T_S	Ambient storage temperature	$-40 \dots +85$	$^\circ\text{C}$
N	Turns ratio	20000 : 2500	
P	Total primary power loss	8	W
R_1	Primary resistance @ $T_A = 25^\circ\text{C}$	80	k Ω
R_S	Secondary coil resistance @ $T_A = 70^\circ\text{C}$	40	Ω
m	Mass	2	kg
	Standards ³⁾	EN 50178	

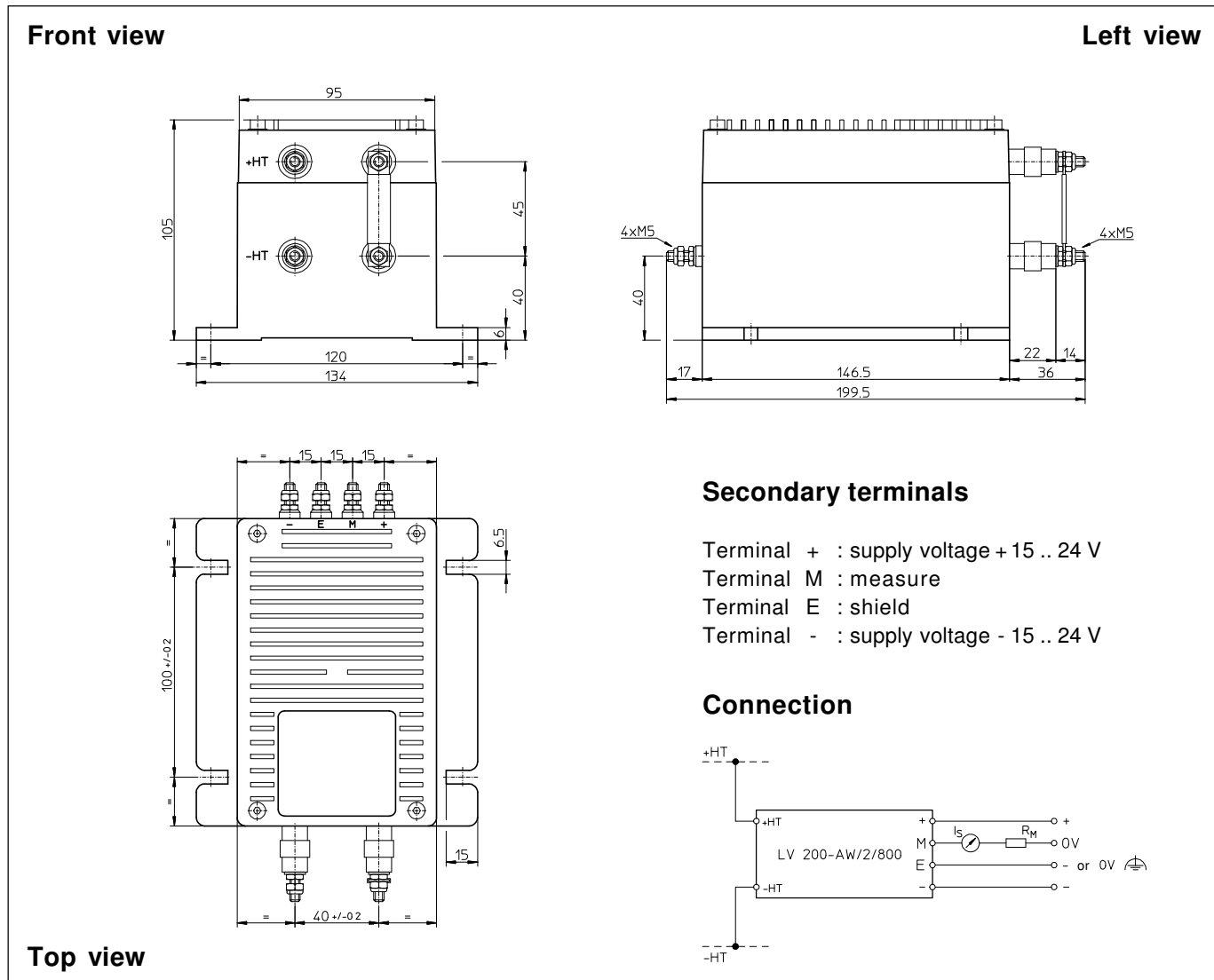
Notes : ¹⁾ Between primary and secondary + shield

²⁾ Between secondary and shield

³⁾ A list of corresponding tests is available

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Dimensions LV 200-AW/2/800 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 0.5 mm
- Fastening 4 holes $\varnothing 6.5$ mm
- Connection of primary M5 threaded studs
- Connection of secondary M5 threaded studs
- Fastening torque 2.2 Nm or 1.62 Lb. -Ft.

Remarks

- I_s is positive when 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.