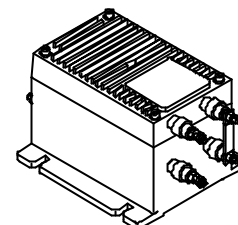


Voltage Transducer LV 200-AW/2/6400

$V_{PN} = 6400 \text{ V}$

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	6400	V			
V_p	Primary voltage, measuring range	0 .. ± 9600	V			
R_M	Measuring resistance	$R_{M \min}$	$R_{M \max}$			
				with $\pm 15 \text{ V}$	@ $\pm 6400 V_{\max}$	0
			@ $\pm 9600 V_{\max}$	0	60	Ω
		with $\pm 24 \text{ V}$	@ $\pm 6400 V_{\max}$	60	220	Ω
	@ $\pm 9600 V_{\max}$	60	110	Ω		
I_{SN}	Secondary nominal r.m.s. current	80	mA			
K_N	Conversion ratio	6400 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	12 ¹⁾	kV			
		1 ²⁾	kV			
V_e	R.m.s. voltage for partial discharges extinction @ 50 pC	4.8	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.

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.

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	mA
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_{PN}	500	μs	

General data

T_A	Ambient operating temperature	- 25 .. + 70	$^\circ\text{C}$
T_S	Ambient storage temperature	- 40 .. + 85	$^\circ\text{C}$
N	Turns ratio	160000 : 2500	
P	Total primary power loss	8	W
R_1	Primary resistance @ $T_A = 25^\circ\text{C}$	5120	k Ω
R_S	Secondary coil resistance @ $T_A = 70^\circ\text{C}$	40	Ω
m	Mass	2	kg
	Standards ³⁾	EN 50178(01.10.97)	

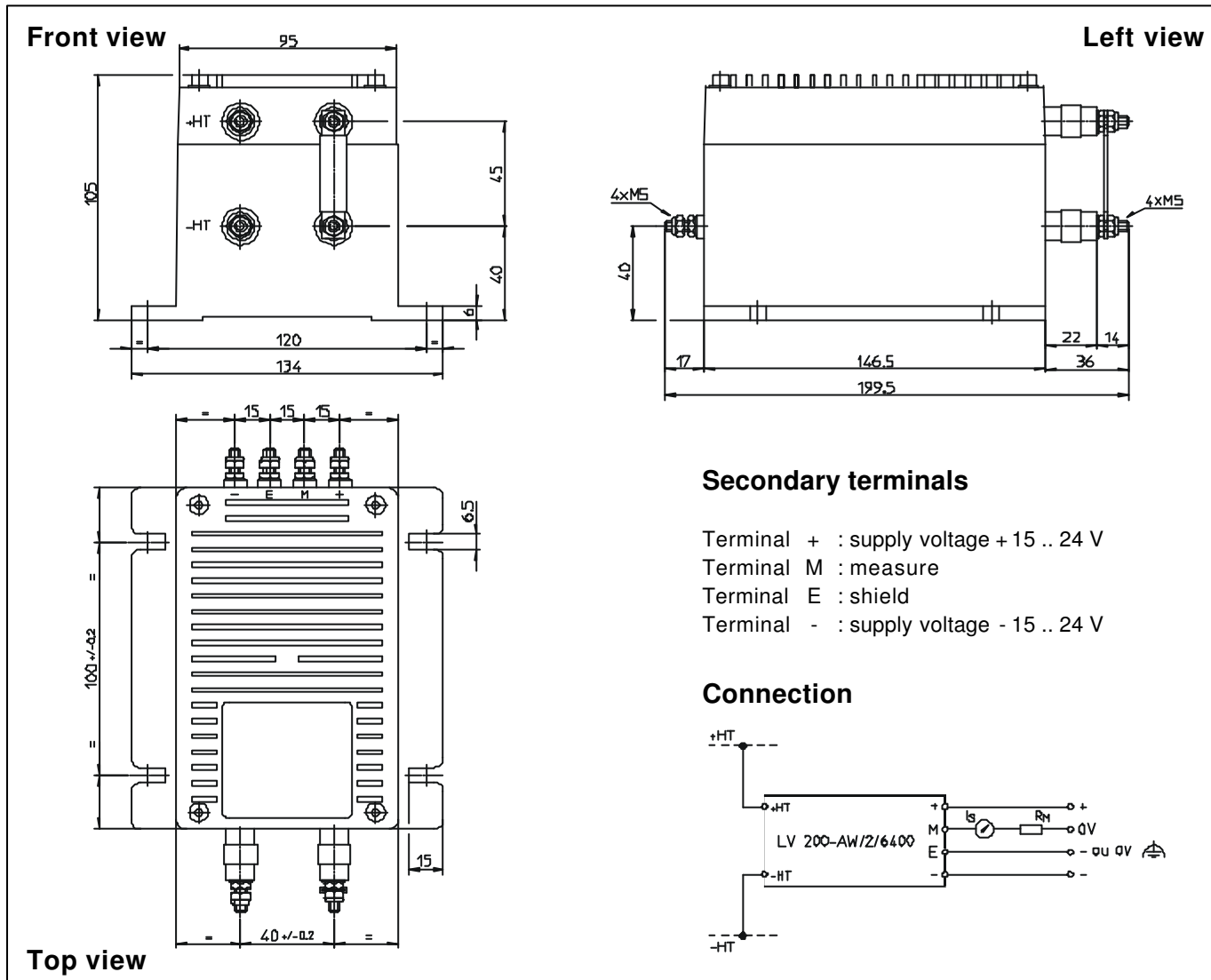
Notes : ¹⁾ Between primary and secondary + shield

²⁾ Between secondary and shield

³⁾ A list of corresponding tests is available.

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Dimensions LV 200-AW/2/6400 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 0.5 mm
- Transducer Fastening 4 holes Ø 6.5 mm
- Connection of primary M5 threaded studs
- Connection of secondary M5 threaded studs
- Recommended 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.