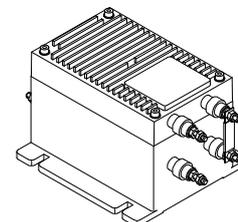


# Voltage Transducer LV 200-AW/2/3200

$V_{PN} = 3200 \text{ V}$

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	3200	V			
$V_P$	Primary voltage, measuring range	0 .. $\pm 4800$	V			
$R_M$	Measuring resistance	$R_{M \min}$	$R_{M \max}$			
				with $\pm 15 \text{ V}$	@ $\pm 3200 \text{ V}_{\max}$	0
			@ $\pm 4800 \text{ V}_{\max}$	0	60	$\Omega$
		with $\pm 24 \text{ V}$	@ $\pm 3200 \text{ V}_{\max}$	60	220	$\Omega$
	@ $\pm 4800 \text{ V}_{\max}$	60	110	$\Omega$		
$I_{SN}$	Secondary nominal r.m.s. current	80	mA			
$K_N$	Conversion ratio	3200 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 <sup>1)</sup>	kV			
		1 <sup>2)</sup>	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 @ $V_{PN}, T_A = 25^\circ\text{C}$	$\pm 1.0$	%	
$\epsilon_L$	Linearity	< 0.1	%	
$I_O$	Offset current @ $I_P = 0, T_A = 25^\circ\text{C}$	Typ	Max	
			$\pm 0.3$	mA
$I_{OT}$	Thermal drift of $I_O$ - $25^\circ\text{C} \dots +70^\circ\text{C}$	$\pm 0.3$	$\pm 0.6$	mA
$t_r$	Response time @ 90 % of $V_{P \max}$	200	$\mu\text{s}$	

## 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	80000 : 2500	
$P$	Total primary power loss	8	W
$R_1$	Primary resistance @ $T_A = 25^\circ\text{C}$	1280	k $\Omega$
$R_S$	Secondary coil resistance @ $T_A = 70^\circ\text{C}$	40	$\Omega$
$m$	Mass	2	kg
	Standards <sup>3)</sup>	EN 50178	

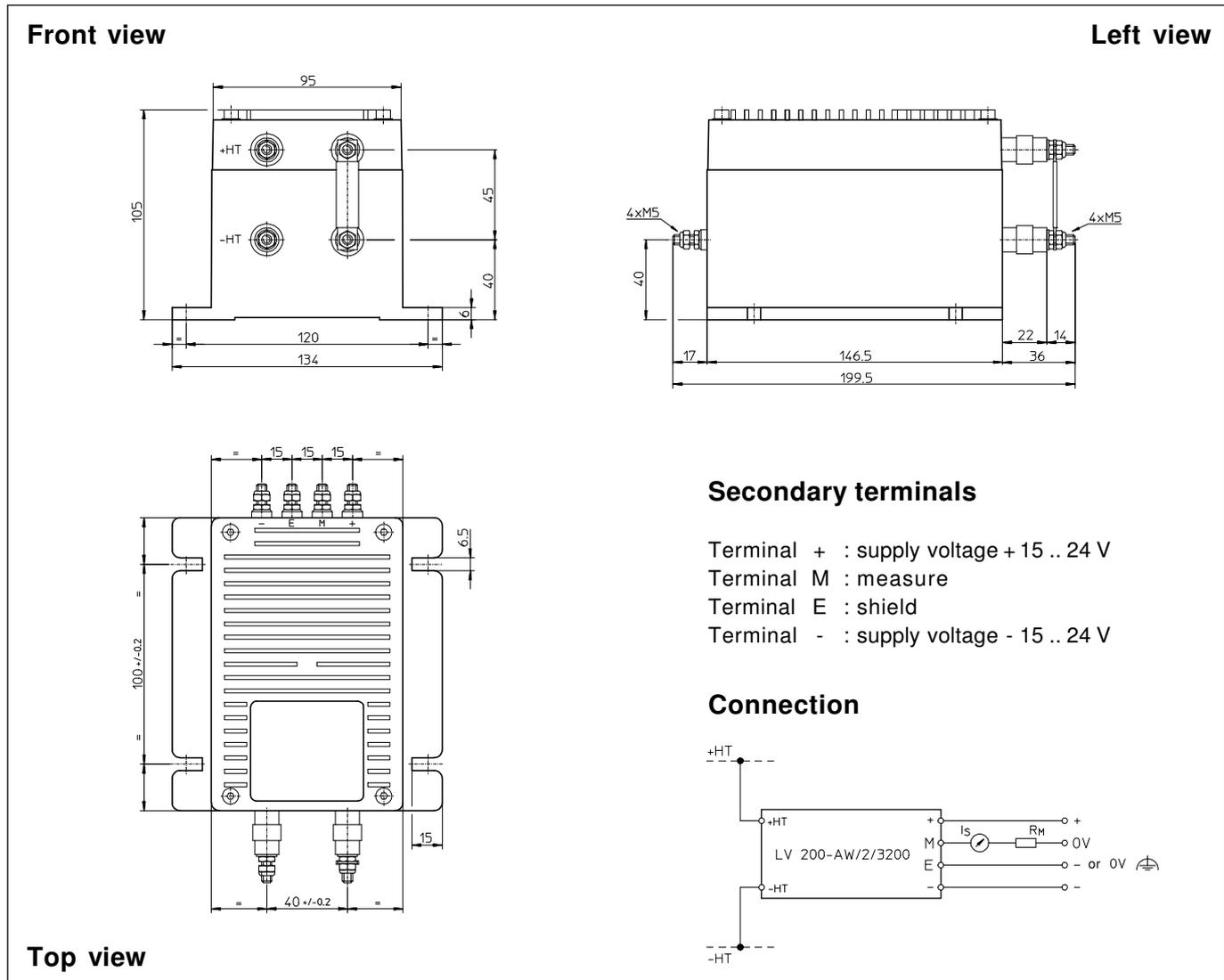
Notes : <sup>1)</sup> Between primary and secondary + shield

<sup>2)</sup> Between secondary and shield

<sup>3)</sup> A list of corresponding tests is available

980710/2

## Dimensions LV 200-AW/2/3200 (in mm. 1 mm = 0.0394 inch)



## Mechanical characteristics

- |                           |                              |
|---------------------------|------------------------------|
| • General tolerance       | $\pm 0.5$ 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.