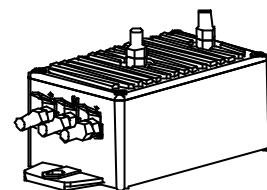


# Voltage Transducer AV 100-1000

$V_{PN} = 1000 \text{ V}$

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	1000	V		
$V_{Pmax}$	Primary voltage measuring range	$\pm 1500$	V		
$\hat{V}_P$	Not measurable overload	3000 (1s/h)	$V_{DC}$		
$R_P$	Primary input resistance	11.9M	$\Omega$		
$R_M$	Measuring resistance	$R_{Mmin}$	$R_{Mmax}$		
		@ $V_C = 11.4V$	0	47	$\Omega$
		@ $V_C = 22.8V$	0	184	$\Omega$
$I_{SN}$	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	5.5	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		

## Accuracy - Dynamic performance data

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

## 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 (01.08.01)	
		EN 50124-1 (01.03.01)	
		NFF16101/2 (01.10.88)	

## Features

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

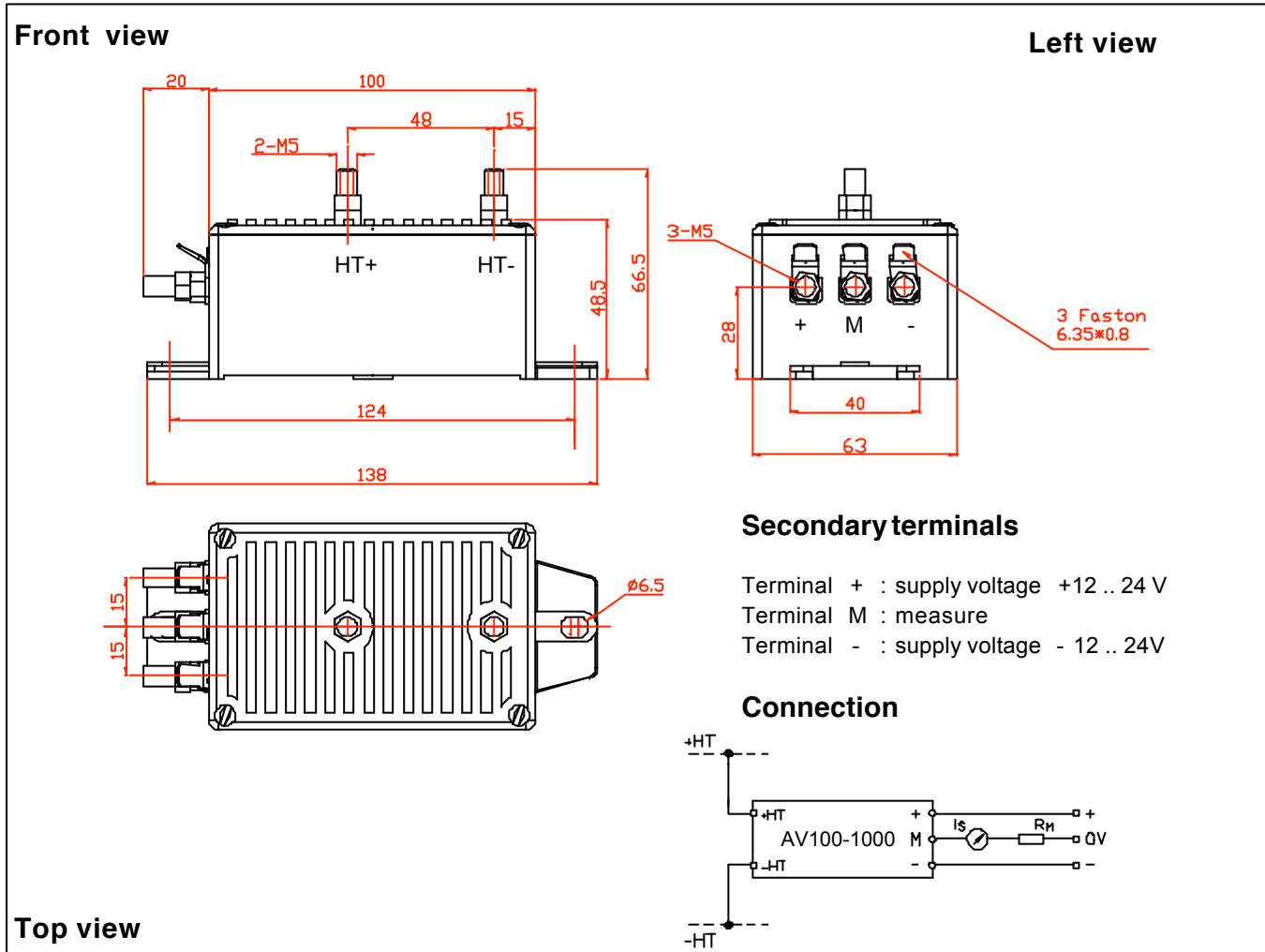
## Advantages

- 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.

## 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.

## Dimensions AV 100-1000 (in mm. 1 mm = 0.0394 inch)



### Mechanical characteristics

- General tolerance  $\pm 1$  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 0.8 mm
- 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.