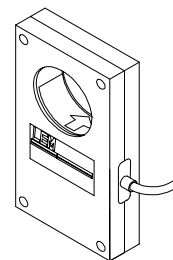


# Current Transducer HA 200 to 500-SRU

$I_{PN} = 200 \dots 500 \text{ A}$

For the electronic measurement of DC, AC and pulsed currents, with a galvanic isolation between the primary (high power) circuit and the secondary (electronic) circuit.



## Electrical data

Type	Primary nominal DC or AC peak current $I_{PN}$	Primary current measuring range $I_p$
HA 200-SRU	200 A	0 .. $\pm 200$ A
HA 300-SRU	300 A	0 .. $\pm 300$ A
HA 400-SRU	400 A	0 .. $\pm 400$ A
HA 500-SRU	500 A	0 .. $\pm 500$ A

$\hat{I}_P$	Overload capacity (Ampere Turns)	30000	A
$V_{OUT}$	Analogue output voltage @ $\pm I_{PN}$	+ 10	V
$R_L$	Load resistance	>1	k $\Omega$
$V_C$	Supply voltage ( $\pm 5\%$ )	$\pm 15$	V
$I_C$	Current consumption (max)	25	mA
$V_b$	Rms rated voltage <sup>1)</sup>	50	V

## Accuracy - Dynamic performance data

<b>X</b>	Accuracy <sup>2)</sup> @ $I_{PN}, T_A = 25^\circ\text{C}$ , @ $\pm 15 \text{ V}$	$\pm 1$	%
<b><math>\epsilon_L</math></b>	Linearity <sup>2)</sup>	$\pm 0.5$	%
<b><math>V_{OE}</math></b>	Electrical offset voltage @ $I_p = 0, T_A = 25^\circ\text{C}$	Max $\pm 25$	mV
<b><math>V_{OM}</math></b>	Residual offset voltage @ $I_p = 0, T_A = 25^\circ\text{C}$ after an overload of $3 \times I_{PN}$	< 12.5	mV
<b><math>V_{OT}</math></b>	Thermal drift of offset voltage $T_A = 0 \dots +60^\circ\text{C}$	$\pm 5$	mV/ $^\circ\text{C}$
<b><math>TCE_G</math></b>	Thermal drift of gain $T_A = 0 \dots +60^\circ\text{C}$	$\pm 0.05$	%/ $^\circ\text{C}$
<b><math>t_{av}</math></b>	Averaging time constant	100	ms
<b><math>K_{CF}</math></b>	Crest factor for stated accuracy	6	
<b>f</b>	Frequency bandwidth (-1 dB) <sup>3)</sup>	DC and 0.015 .. 25	kHz

## General data

<b><math>T_A</math></b>	Ambient operating temperature	0 .. +60	$^\circ\text{C}$
<b><math>T_S</math></b>	Ambient storage temperature	-10 .. +70	$^\circ\text{C}$
<b>m</b>	Mass	170	g

## Features

- Open loop transducer using Hall Effect
- Panel mounting
- Insulated plastic case to UL 94-HB
- True Rms output.

## Advantages

- Very good linearity
- Very good accuracy
- Low temperature drift
- Wide frequency bandwidth
- Very low insertion losses
- High immunity to external interference
- Current overload capability
- Low power consumption
- Wide dynamic range 200 to 500 A in one package.

## Applications

- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptable Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.

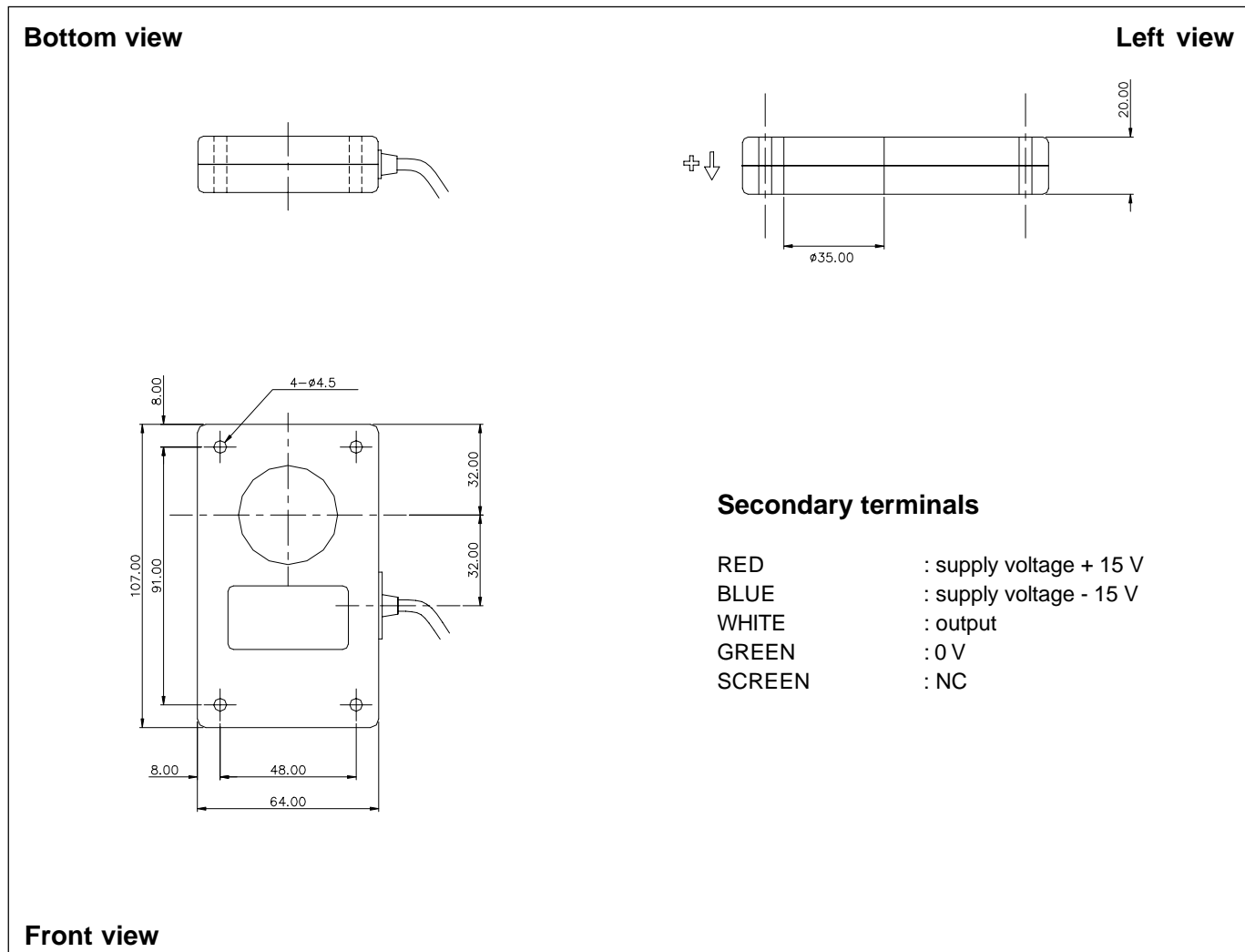
**Notes :** <sup>1)</sup> For use on SELV systems or with insulated conductors on higher rated systems

<sup>2)</sup> Excludes the electrical offset

<sup>3)</sup> Refer to derating curves in the technical file to avoid excessive core heating at high frequency

HA2/500RU980828/2

## Dimensions HA 200 to 500-SRU (in mm. 1 mm = 0.0394 inch)



### Mechanical characteristics

- General tolerance  $\pm 0.5$  mm
- Primary through-hole  $\varnothing 35$  mm
- Connection of secondary Via 4 core screened PVC cable 1.5 m in length
- Enclosure Moulded ABS plastic

### Remarks

- $V_{OUT}$  is positive when  $I_p$  flows in the direction of the arrow.
- Temperature of the primary conductor should not exceed 90°C.
- This is a standard model. For different versions (supply voltages, secondary connections, unidirectional measurements, operating temperatures, etc.) please contact us.