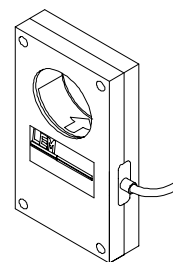


Current Transducer HA 200 to 500-SU

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

For the electronic measurement of unipolar 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-SU	200 A	0 .. + 200 A
HA 300-SU	300 A	0 .. + 300 A
HA 400-SU	400 A	0 .. + 400 A
HA 500-SU	500 A	0 .. + 500 A

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

Accuracy - Dynamic performance data

X	Accuracy ²⁾ @ $I_{PN}, T_A = 25^\circ\text{C}$, @ $\pm 15 \text{ V}$	± 1	%
ϵ_L	Linearity ²⁾	± 0.5	%
V_{OE}	Electrical offset voltage @ $I_p = 0, T_A = 25^\circ\text{C}$	Max ± 25	mV
V_{OM}	Residual offset voltage @ $I_p = 0, T_A = 25^\circ\text{C}$ after an overload of $3 \times I_{PN}$	< 12.5	mV
V_{OT}	Thermal drift of offset voltage $T_A = 0 \dots + 60^\circ\text{C}$	± 5	mV/ $^\circ\text{C}$
TCE_G	Thermal drift of gain $T_A = 0 \dots + 60^\circ\text{C}$	± 0.05	%/ $^\circ\text{C}$
t_r	Response time @ 90 % of I_p	< 7	μs
di/dt	di/dt accurately followed	> 50	A/ μs
f	Frequency bandwidth (- 3 dB) ³⁾	DC .. 50	kHz

General data

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

Features

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

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.

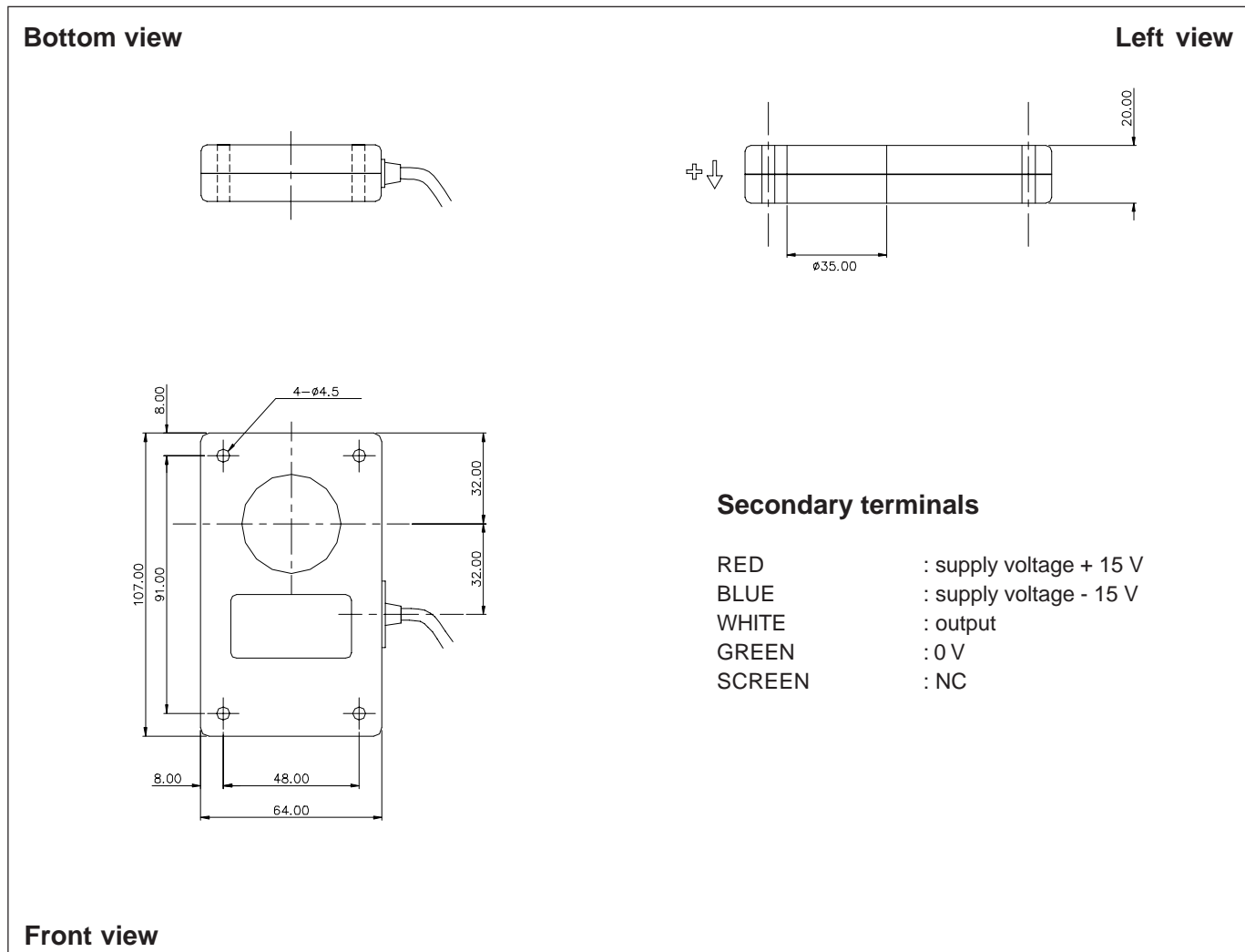
Notes : ¹⁾ For use on SELV systems or with insulated conductors on higher rated systems

²⁾ Excludes the electrical offset

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

HA2/500U980828/1

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



Mechanical characteristics

- General tolerance ± 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.