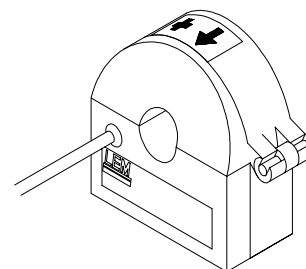


Current Transducer HT 200 to 500-SRID

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

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
HT 200-SRID	200 A	0 .. ± 200 A
HT 300-SRID	300 A	0 .. ± 300 A
HT 400-SRID	400 A	0 .. ± 400 A
HT 500-SRID	500 A	0 .. ± 500 A

\hat{I}_P	Overload capacity (Ampere Turns)	30000	A
I_{OUT}	Analogue output current @ $I_p = 0$	4	mA
I_{OUT}	Analogue output current @ $\pm I_{PN}$	20	mA
$R_{M \max}$	Maximum measuring resistance	430	Ω
V_C	Supply voltage ($\pm 5\%$)	± 15	V
I_C	Current consumption (max) ¹⁾	40	mA
V_b	Rms rated voltage ²⁾	50	V

Accuracy - Dynamic performance data

X	Accuracy ³⁾ @ I_{PN} , $T_A = 25^\circ\text{C}$, @ ± 15 V	± 1	%
ϵ_L	Linearity ³⁾	± 0.5	%
I_{OE}	Electrical offset current @ $I_p = 0$, $T_A = 25^\circ\text{C}$	Max ± 0.08	mA
I_{OM}	Residual offset current @ $I_p = 0$ after an overload of $3 \times I_{PN}$	$< \pm 0.025$	mA
I_{OT}	Thermal drift of offset current $T_A = 0 \dots +70^\circ\text{C}$	± 0.014	mA/ $^\circ\text{C}$
TCE_G	Thermal drift of gain $T_A = 0 \dots +70^\circ\text{C}$	± 0.05	%/ $^\circ\text{C}$
t_{av}	Averaging time constant	100	ms
K_{CF}	Crest factor for stated accuracy	6	
f	Frequency bandwidth (-1 dB) ⁴⁾	DC and 0.015 .. 25	kHz

General data

T_A	Ambient operating temperature	0 .. +70	$^\circ\text{C}$
T_S	Ambient storage temperature	-10 .. +85	$^\circ\text{C}$
m	Mass	160	g

Notes : ¹⁾ Including I_{OUT}

²⁾ For use on SELV systems or with insulated conductors on higher rated systems

³⁾ Excludes the electrical offset

⁴⁾ Refer to derating curves in the technical file to avoid excessive core heating at high frequency

Features

- Open loop transducer using Hall Effect
- Panel mounting
- Split core design for easy installation
- Insulated plastic case to UL 94-HB
- True Rms output.

Advantages

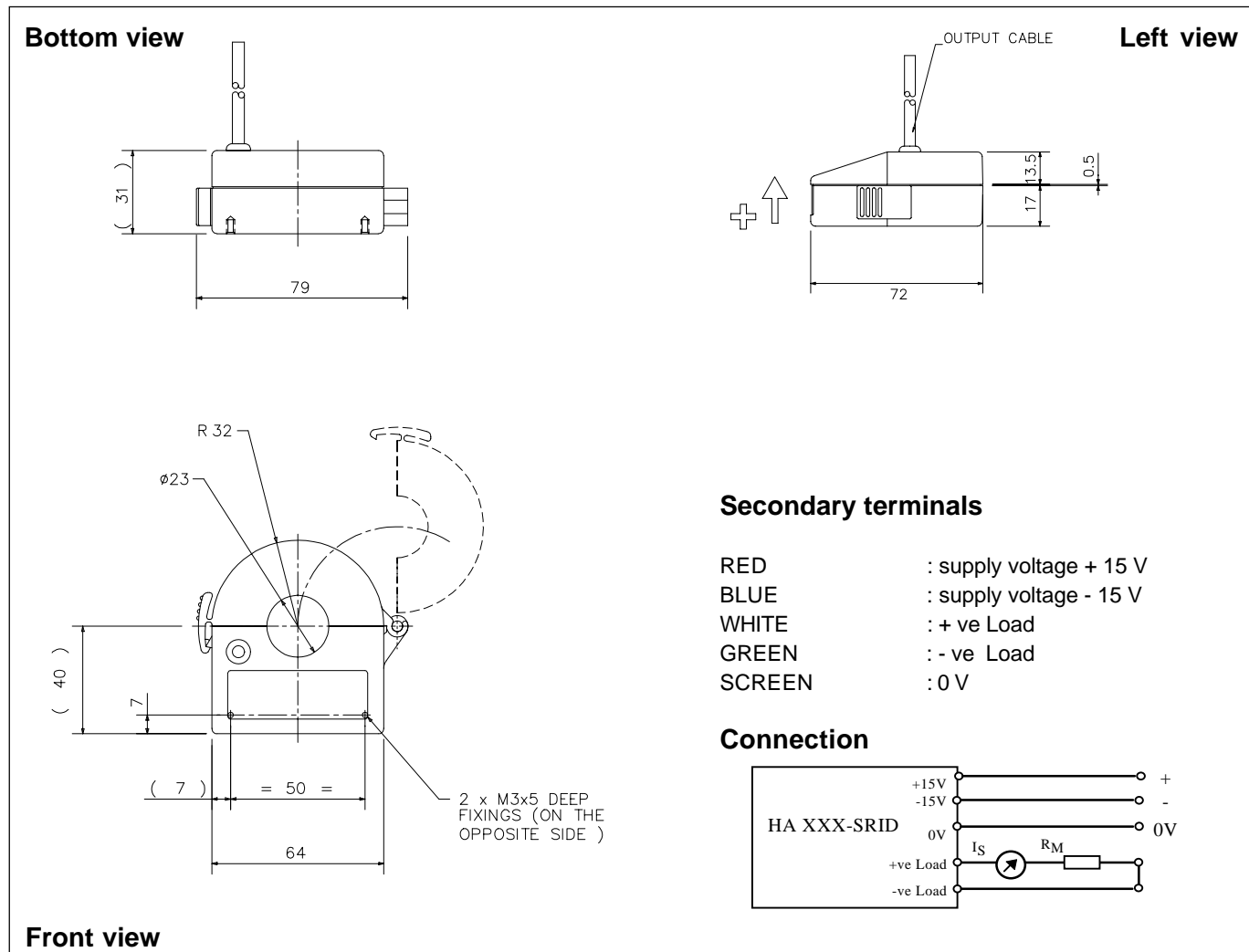
- Very good linearity
- Very good accuracy
- Low temperature drift
- Wide frequency bandwidth
- Very low insertion losses
- High immunity to external interference
- Current overload capability
- Low power consumption
- Wide dynamic range 200 to 500 A in one package.

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.

HT2/500RI990719/3

Dimensions HT 200 to 500-SRID (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 0.5 mm
- Primary through-hole $\phi 23$ mm
- Connection of secondary Via 4 core screened PVC cable 1.5 m in length
- Enclosure Moulded ABS plastic

Remarks

- I_{OUT} is positive when I_p flows in the direction of the arrow.
- When generating a voltage by insertion of R_M , the developed voltage will be floating with respect to zero volts. The output terminals must therefore not be grounded.
- 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.