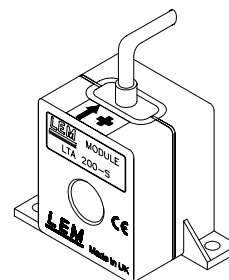


Current Transducer LTA 200-S/SP2

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.



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



Electrical data

I_{PN}	Primary nominal rms current	200	A
I_P	Primary current, measuring range	0 .. ± 300	A
R_M	Measuring resistance @ $T_A = 70^\circ\text{C}$	$R_{M \min}$ 7.5 $R_{M \max}$ 42	Ω
I_{SN}	Secondary nominal rms current	100	mA
K_N	Conversion ratio	1:2000	
V_C	Supply voltage ($\pm 5\%$)	± 15	V
I_C	Current consumption (@ $\pm 15 \text{ V}$)	$15 + I_S$	mA
V_b	Rms. rated voltage ¹⁾	500	V
V_d	Rms voltage for AC isolation test, 50 Hz, 1 mn	3	kV

Accuracy - Dynamic performance data

X	Accuracy ²⁾ @ I_{PN} , @ $T_A = 25^\circ\text{C}$, @ $\pm 15 \text{ V}$	± 0.8	%
ϵ_L	Linearity ²⁾	± 0.1	%
I_{OE}	Electrical offset current @ $T_A = 25^\circ\text{C}$	Max ± 0.3	mA
I_{OM}	Residual offset current @ $I_P = 0$, after an overload of $3 \times I_{PN}$	± 0.4	mA
I_{OT}	Thermal drift of offset current $T_A = 0 \dots 70^\circ\text{C}$	± 0.4	mA
t_r	Response time @ 90 % of I_P	< 1	μs
di/dt	di/dt accurately followed	> 50	A/ μs
f	Frequency bandwidth (-1dB)	DC .. 100	kHz

General data

T_A	Ambient operating temperature	0 .. +70	$^\circ\text{C}$
T_S	Ambient storage temperature	-25 .. +85	$^\circ\text{C}$
R_S	Secondary coil resistance @ 70°C	35	Ω
m	Mass	95	g
	Standards	EN50178 (1994)	
	Safety	EN50082-2 (1992)	
	EMC	EN50081-1 (1992)	
	Deviation in output when tested to EN 61000-4-6	< 10	% of I_{PN}
	Deviation in output when tested to EN 61000-4-4	< 5	% of I_{PN}

Features

- Closed loop (compensated) current transducer using Hall Effect
- Panel mounting
- Insulated plastic case recognized according to UL 94-V0.

Advantages

- Very good linearity
- Excellent accuracy
- Low temperature drift
- Optimized response time
- Wide frequency bandwidth
- No insertion losses
- High immunity to external interference
- Current overload capability.

Applications

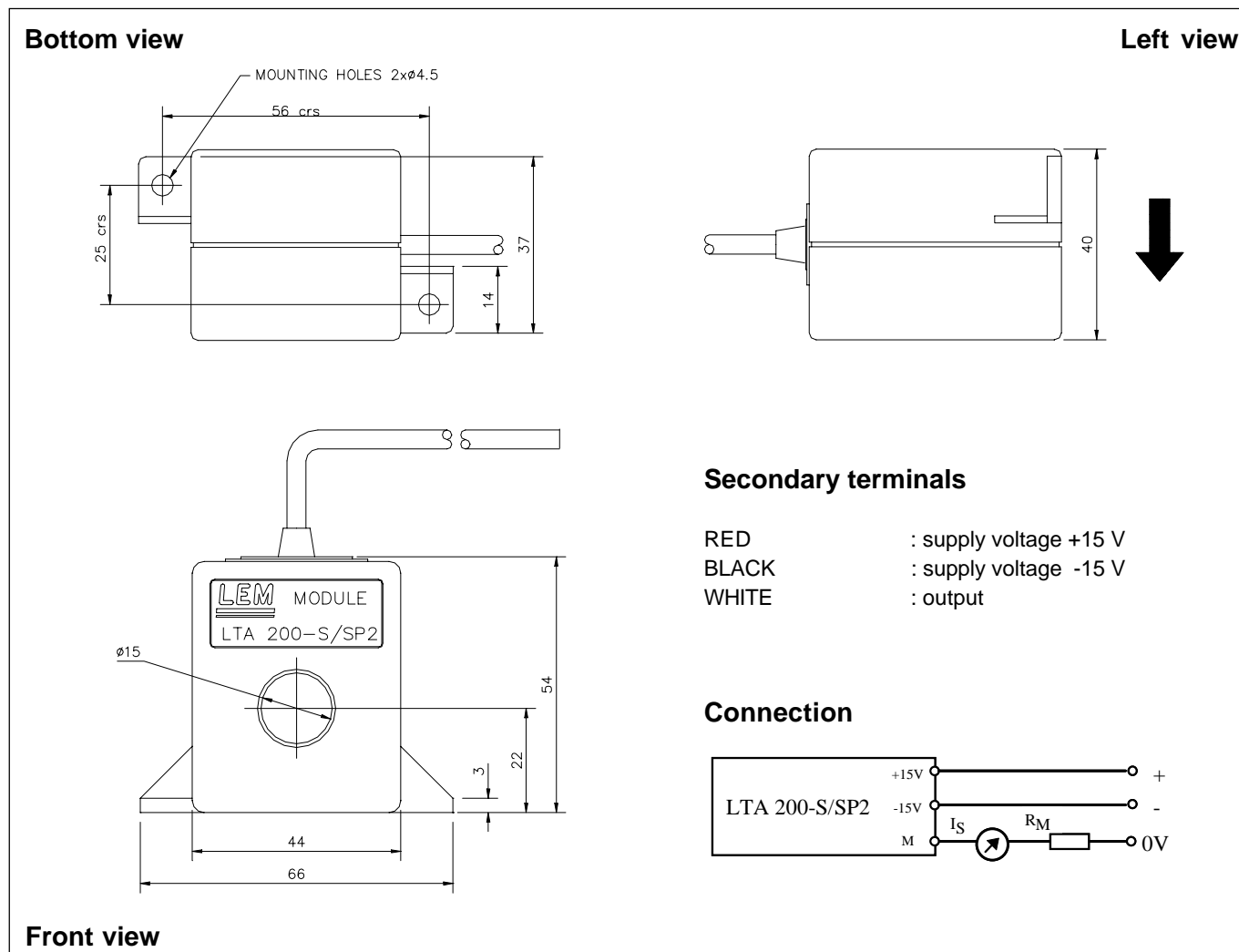
- AC variable speed drives and servo motor drives
- Static converters for DC motor drives
- Battery supplied applications
- Uninterruptable Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications

Notes : ¹⁾ Over Voltage Category III, Pollution Degree 2

²⁾ Excludes the electrical offset.

LTA202980902/1

Dimensions LTA 200-S/SP2 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 0.5 mm
- Primary through-hole $\varnothing 15$ mm
- Connection of secondary 3 core screened cable 500 mm long

Remarks

- I_s 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, turns ratios, unidirectional measurements...), please contact us.
- Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.