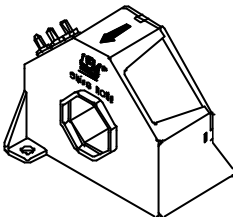
Current Transducer LA 305-S/SP6

I_{PN} = 300 A

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



Electrical data

I_{PN}	Primary nominal r.m.s. current				300			A
I_P	Primary current, measuring range				0 .. ± 800			A
R_M	Measuring resistance @		T_A = 70°C		T_A = 85°C			
			$R_{M\,min}$	$R_{M\,max}$	$R_{M\,min}$	$R_{M\,max}$		
	with ± 15 V	@ ± 300 A $_{max}$	0	91	0	86		Ω
		@ ± 500 A $_{max}$	0	25	0	20		Ω
	with ± 24 V	@ ± 300 A $_{max}$	15	200	20	195		Ω
		@ ± 800 A $_{max}$	15	30	20	25		Ω
I_{SN}	Secondary nominal r.m.s. current				75			mA
K_N	Conversion ratio				1 : 4000			
V_C	Supply voltage (± 5 %)				± 15 .. 24			V
I_C	Current consumption				20 (@ ± 15 V) + I_S			mA
V_b	R.m.s. rated voltage [1],	safe separation			1750			V
		basic isolation			3500			V

Accuracy - Dynamic performance data

X_G	Overall accuracy @ I_{PN}, T_A = 25°C		± 0.8		%
ε_L	Linearity		< 0.1		%
			Typ	Max	
I_O	Offset current @ I_P = 0, T_A = 25°C			± 0.15	mA
I_{OM}	Residual current [2] @ I_P = 0, after an overload of 3 x I_{PN}			± 0.25	mA
I_{OT}	Thermal drift of I_O	- 25°C .. + 85°C	± 0.08	± 0.25	mA
t_{ra}	Reaction time @ 10 % of I_{PN}		< 500		ns
t_r	Response time [3] @ 90 % of I_{PN}		< 1		µs
di/dt	di/dt accurately followed		> 100		A/µs
f	Frequency bandwidth (- 3 dB)		DC .. 100		kHz

General data

T_A	Ambient operating temperature		- 25 .. + 85	°C
T_S	Ambient storage temperature		- 40 .. + 90	°C
R_S	Secondary coil resistance @	T_A = 70°C	80	Ω
		T_A = 85°C	85	Ω
m	Mass		260	g
	Standards [4]		EN 50155	

Notes : [1] Pollution class 2. With a non insulated primary bar which fills the through-hole
[2] The result of the coercive field of the magnetic circuit
[3] With a di/dt of 100 A/µs
[4] A list of corresponding tests is available.

Features

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

Special features

- I_P = 0 .. ± 800 A
- K_N = 1 : 4000
- V_C = ± 15 .. 24 (± 5 %) V
- Connection to secondary circuit on 3 M4 threaded studs
- Potted
- Railway equipment.

Advantages

- Excellent accuracy
- Very good linearity
- 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
- Uninterruptible Power Supplies (UPS)
- Switched Mode Power Supplies (SMPS)
- Power supplies for welding applications.

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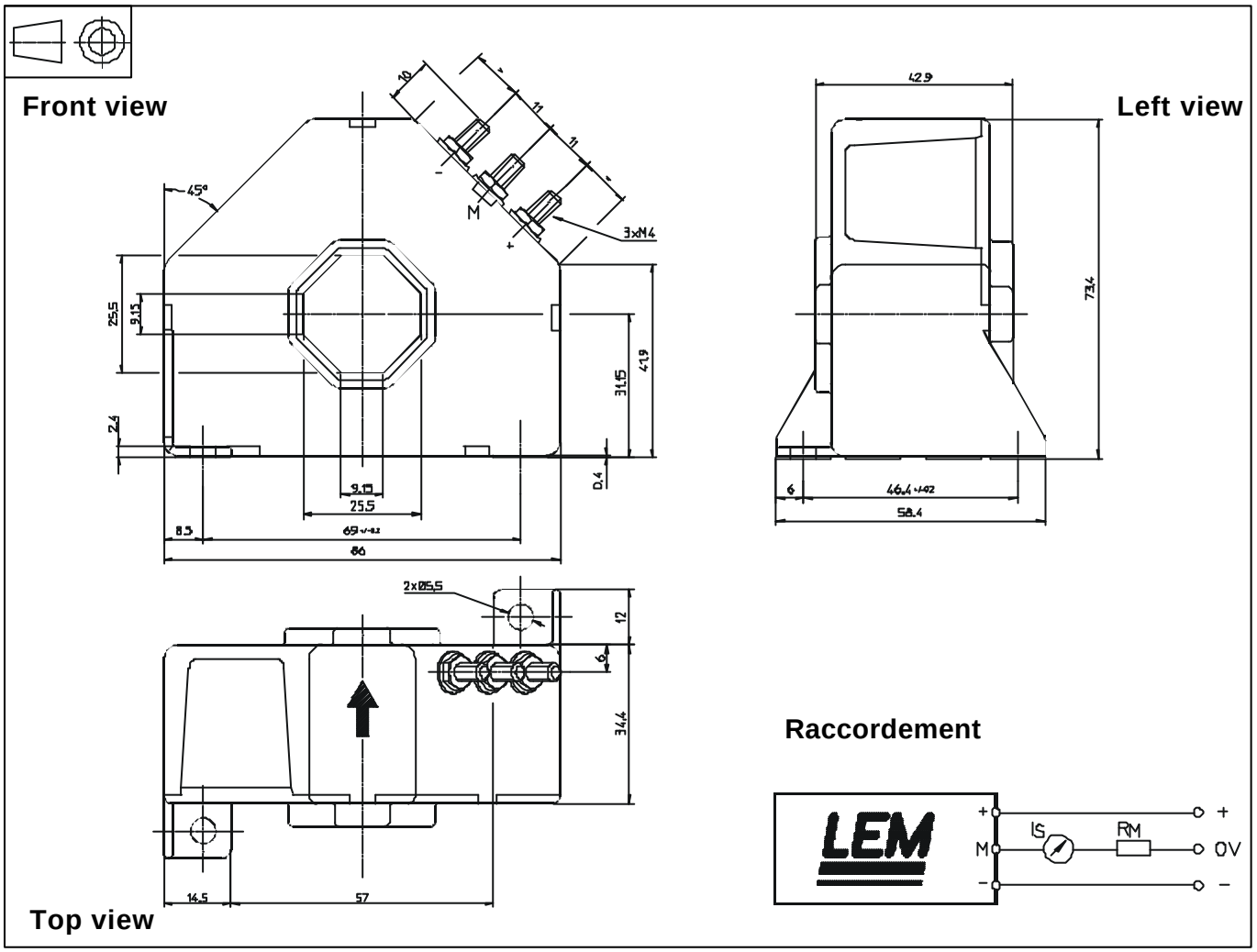
Dimensions LA 305-S/SP6 (in mm. 1 mm = 0.0394 inch)



Mechanical characteristics

• General tolerance	± 0.5 mm
• Transducer fastening	2 holes ∅ 5.5 mm 2 M5 steel screws
Fastening torque, max.	4 Nm or 2.95 Lb. - Ft.
• Primary through-hole	25.5 x 25.5 mm
• Connection to secondary	M4 threaded studs
Fastening torque	1.2 Nm or .88 Lb - Ft

Remarks

- I_S is positive when I_P flows in the direction of the arrow.
- Temperature of the primary conductor should not exceed 100°C.
- Dynamic performances (di/dt and response time) are best with a single bar completely filling the primary hole.

单击下面可查看定价，库存，交付和生命周期等信息

>>LEM(莱姆)