Current Transducer LA 205-S

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**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$I_{PN}$</td>
<td>200 A</td>
</tr>
<tr>
<td>$I_p$</td>
<td>0 .. ± 300 A</td>
</tr>
<tr>
<td>$I_{P_{max}}$</td>
<td>600 A</td>
</tr>
<tr>
<td>$R_M$</td>
<td>@ $T_A = 70^\circ$C: 0</td>
</tr>
<tr>
<td>$R_M$</td>
<td>with ± 12 V:</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>$I_{SN}$</td>
<td>100 mA</td>
</tr>
<tr>
<td>$K_N$</td>
<td>1 : 2000</td>
</tr>
<tr>
<td>$V_C$</td>
<td>± 12 .. 15 V</td>
</tr>
<tr>
<td>$I_C$</td>
<td>20 mA @ ± 15 V + $I_g$ mA</td>
</tr>
<tr>
<td>$V_s$</td>
<td>1625 V</td>
</tr>
<tr>
<td>$R_s$</td>
<td>@ $T_A = 70^\circ$C: 35</td>
</tr>
<tr>
<td>$m$</td>
<td>110 g</td>
</tr>
</tbody>
</table>

**Features**

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

**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.

**Notes:**

1. 3 mn/hour @ $V_C = ± 15 V$, $R_M = 5$ Ω
2. Pollution class nr 2. With a non insulated primary bar which fills the through-hole
3. The result of the coercive field of the magnetic circuit
**Connection**

- **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.
  - This is a standard model. For different versions (supply voltages, turns ratios, unidirectional measurements...), please contact us.

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**Mechanical characteristics**

- General tolerance: ± 0.5 mm
- Fastening: 2 holes Ø 5.5 mm
- Primary through-hole: 23 x 18 mm
- Connection of secondary: Molex 5046-04/AG

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**Dimensions LA 205-S** (in mm. 1 mm = 0.0394 inch)

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**LEM** reserves the right to carry out modifications on its transducers, in order to improve them, without previous notice.