Current Transducer LT 1000-TI

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>1000 A</td>
</tr>
<tr>
<td>$I_p$</td>
<td>0...±1500 A</td>
</tr>
<tr>
<td>$R_M$</td>
<td>$R_{M\min}$: 0, $R_{M\max}$: 50 Ω</td>
</tr>
<tr>
<td>$I_{SN}$</td>
<td>200 mA</td>
</tr>
<tr>
<td>$K_N$</td>
<td>1:5000</td>
</tr>
<tr>
<td>$V_C$</td>
<td>±15 V</td>
</tr>
<tr>
<td>$I_C$</td>
<td>$25 + I_S$ mA</td>
</tr>
<tr>
<td>$V_d$</td>
<td>R.m.s. voltage for AC isolation test, 50 Hz, 1 mn</td>
</tr>
</tbody>
</table>

Accuracy - Dynamic performance data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$X_g$</td>
<td>±0.3 %</td>
</tr>
<tr>
<td>$E_L$</td>
<td>&lt;0.1 %</td>
</tr>
<tr>
<td>$I_O$</td>
<td>Typ: ±0.4 mA, Max: ±0.3 mA</td>
</tr>
<tr>
<td>$I_{DT}$</td>
<td>Thermal drift of $I_O$, 0°C ± 70°C</td>
</tr>
<tr>
<td>$t_f$</td>
<td>Response time @ 90 % of $I_{PN}$, &lt;1 µs</td>
</tr>
<tr>
<td>di/dt</td>
<td>di/dt accurately followed, &gt;50 A/µs</td>
</tr>
<tr>
<td>$f$</td>
<td>Frequency bandwidth (~1 dB), DC...100 kHz</td>
</tr>
</tbody>
</table>

General data

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>$T_A$</td>
<td>Ambient operating temperature, 0°C ± 70°C</td>
</tr>
<tr>
<td>$T_S$</td>
<td>Ambient storage temperature, -25°C...+85°C</td>
</tr>
<tr>
<td>$R_S$</td>
<td>Secondary coil resistance @ $T_A = 70°C$, 40 Ω</td>
</tr>
<tr>
<td>$m$</td>
<td>Mass, 2 kg</td>
</tr>
<tr>
<td>Standards</td>
<td>EN 50178: 1997</td>
</tr>
</tbody>
</table>

Note: 1) With a di/dt of 100 A/µs.
**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.
- This is a standard model. For different versions (supply voltages, turns ratios, unidirectional measurements...), please contact us.

**Mechanical characteristics**

- General tolerance: ± 0.5 mm
- Transducer fastening: 4 slots $\varnothing$ 7 mm
  
  **Recommended fastening torque**: 4.7 Nm or 3.32 Lb. -Ft. or by the primary bar
- Connection of primary: 2 holes $\varnothing$ 13 mm
  
  **Recommended fastening torque**: 24.5 Nm or 18.07 Lb. -Ft.
- Connection of secondary: Faston 6.3 x 0.8 mm

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