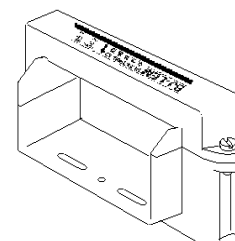


Current transducers HOP 500-SB/SP1 & HOP 800 to 2000-SB

$I_{PN} = 500 \dots 2000 \text{ A}$

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



Electrical Data

| Primary nominal R.m.s or DC current | Primary current measuring range | Type | |
|--|---------------------------------|-------------------|------------|
| I_{PN} (A) | I_p (A) | | |
| 500 | ± 1000 | HOP 500-SB/SP1 | |
| 800 | ± 1600 | HOP 800-SB | |
| 1000 | ± 2000 | HOP 1000-SB | |
| 1500 | ± 3000 | HOP 1500-SB | |
| 2000 | ± 3000 | HOP 2000-SB | |
| I_{OC} Overload capacity | | 30000 | At |
| V_{OUT} Analog output voltage @ $\pm I_{PN}$ | | ± 4 | V |
| R_L Load resistance | | >10 | K Ω |
| V_c Supply voltage ($\pm 5\%$) | | $\pm 12 \dots 15$ | V |
| I_c Current consumption (max) | | 25 | mA |
| V_d R.m.s. voltage for AC isolation test, 50Hz, 1 mn | | 3 | kV |

Features

- Open loop Hall effect transducer
- Busbar mounting and panel mounting
- Insulated plastic case recognized according to UL 94-V0.

Advantages

- Low power consumption
- Split core easy for mounting
- High isolation between the primary and the secondary circuits
- Through-hole, no insertion losses.

Accuracy- Dynamic Performance Data

| | | |
|--|----------------------------------|------------------|
| X Accuracy ¹⁾ @ I_{PN} , @ $\pm 12 \dots 15 \text{ V} (\pm 5\%)$, $T_A = 25^\circ\text{C}$ | $\leq \pm 2$ | % |
| e_L Linearity error ¹⁾ | $\leq \pm 1$ | % |
| V_{OE} Electrical offset voltage @ $I_p = 0$, $T_A = 25^\circ\text{C}$ | Typ : ± 10 Max : ± 20 | mV |
| V_{OM} Residual offset voltage @ $I_p = 0$ after an overload of $3 \times I_{PN}$ | Typ : ± 10 Max : ± 20 | mV |
| V_{α} Thermal drift of electrical offset voltage, $T_A = -10 \dots +70^\circ\text{C}$ | Typ : ± 10 Max : ± 20 | mV |
| TCE_G Thermal drift of the gain, $T_A = -10 \dots +70^\circ\text{C}$ | Typ : ± 10 Max : ± 20 | mV |
| t_r Response time @ 90 % of I_{PN} | < 10 | μs |
| di/dt di/dt accurately followed | 50 | A/ μs |
| f Frequency bandwidth (-1dB) | DC .. 10 | KHz |

General Data

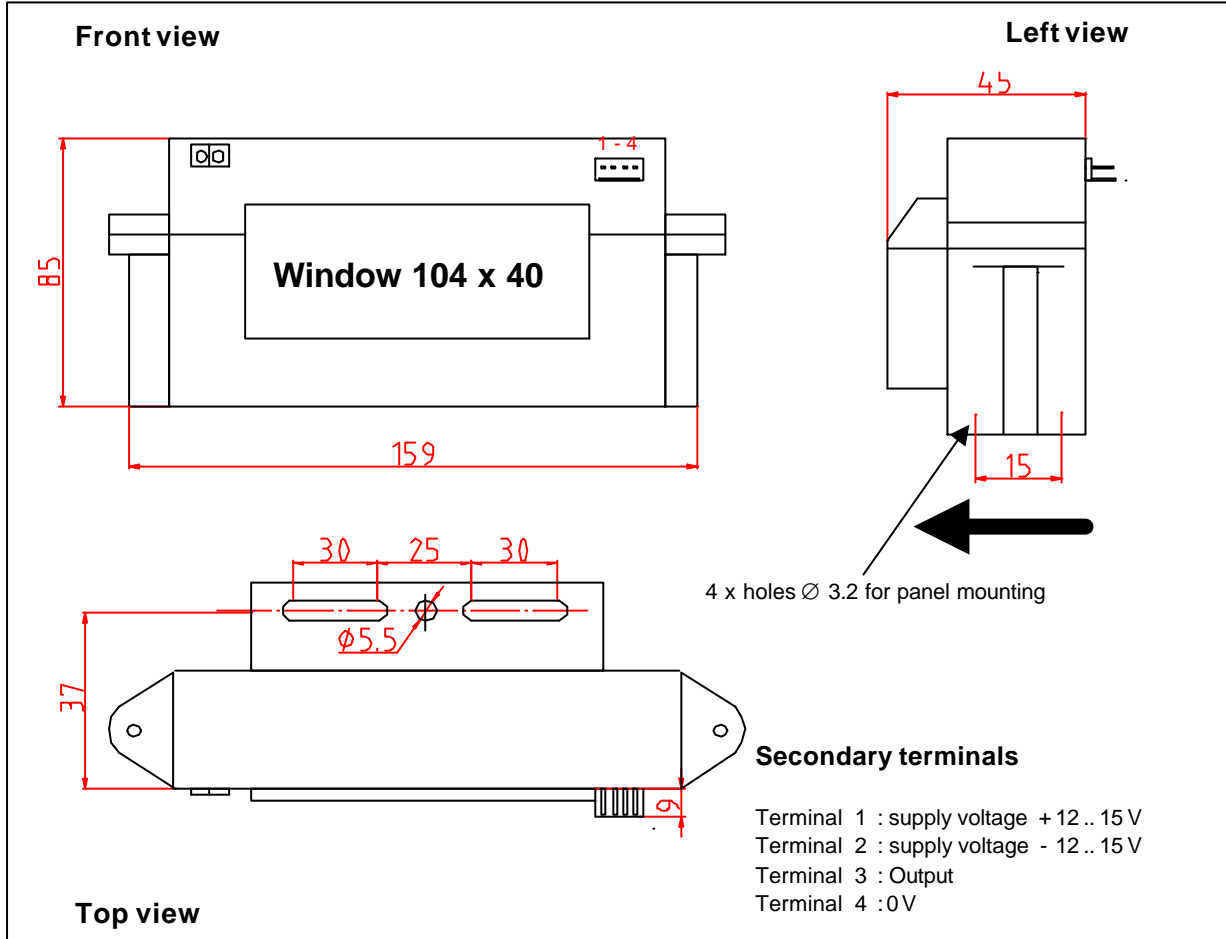
| | | |
|-------------------------------------|------------|------------------|
| T_A Ambient operating temperature | -10 .. +70 | $^\circ\text{C}$ |
| T_S Ambient storage temperature | -25 .. +85 | $^\circ\text{C}$ |
| m Mass | 590 | g |
| Standard | EN 50178 | |

Note : ¹⁾ Excludes the electrical offset.

BJ-LEM

040122/5

Dimensions HOP 500-SB/SP1 & HOP 800 to 2000-SB (in mm, 1 mm = 0.0394 inch)



Mechanical characteristics

- General tolerance ± 1 mm
- Primary aperture 104 x 40 mm
- Busbar fastening 1 hole \varnothing 5.5 mm and 2 slots 5.5 x 30 mm
- Panel mounting 4 holes \varnothing 3.2 mm
- Distance between holes axes 15 x 150 mm
- Secondary connection MOLEX 5045-04 AG
 "Mating connector provided with the transducer"

Remarks

- V_{OUT} is positive when I_p flows in the direction of the arrow.
- The return busbar and primary conductor elbow must be located at least at 2.5 x window length more for away from the transducer case.
- The temperature of the primary busbar can not exceed 90°C.
- Dynamic performances are the best with a primary busbar completely filling the primary aperture.
- This is a standard model. For different versions (supply voltages, different outputs, unidirectional measurements...), please contact us.