AC/DC Current transducers
HCT-LB series

Email: info@grupopremo.com
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Premo presents HCT-LB series AC/DC current transducer, a new design based on the Hall Effect principle. HCT-LB family has good stability in high currents and a highly insulated primary and secondary.

CE

Features

- Open loop Hall Effect sensor.
- Bipolar power supply.
- High accuracy.
- High linearity.

1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current HCT-50LB HCT-100LB	I_{PN}		 50 100		 A A
Measuring range HCT-50LB HCT-100LB	I_P	 -150 -200		 150 200	 A A
Rated output	V_O		4		V
Supply voltage (±5 %)	V_{CC}		 ±15		 V
Current consumption (measured at I_P = 0 A)	I_{CC}	 ±15			 mA

2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at I_{PN})		 ±1			 %
Linearity (measured at full scale @ V_{CC} = ±15 V, R_B = 15 Ω)	ε_{LLR}			 1	 %
Offset voltage	V_{OS}	±25		±30	mV
Offset voltage drift (starting at -40 °C)	KV_{OS}			 ±0.5	 mV/°C
Magnetic offset voltage (after 3 * I_{PN})	V_{OM}			 ±20	 mV
Response time	T_R			3	µs
di/dt		50			A/µs

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3. Isolation parameters

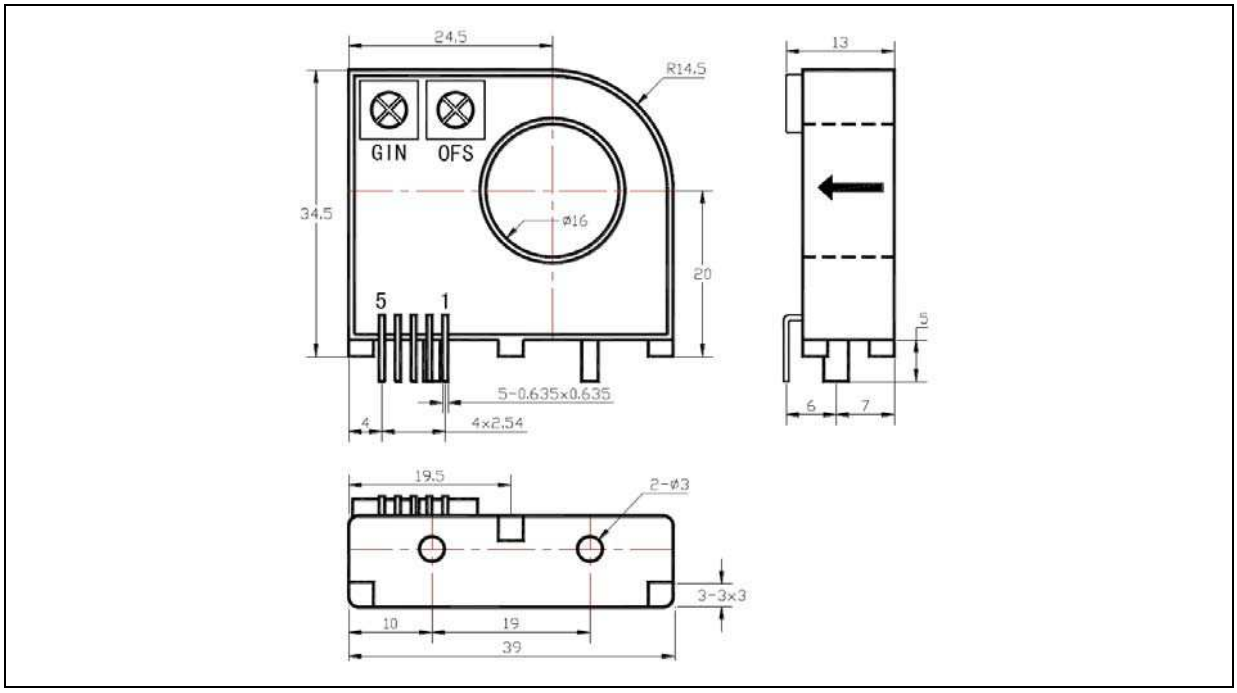
	Symbol	Min	Typ	Max	Unit
Galvanic isolation (50 Hz, 1 min)	V_I		2.5		kV

4. General parameters

	Symbol	Min	Typ	Max	Unit
Operating temperature	T_A	-40		85	°C
Storage temperature	T_S	-55		125	°C
Mass	m		24		g

5. Dimensions

HCT-LB series



Pin description

Pin	Value
1	$+V_{CC}$
2	$-V_{CC}$
3	Output
4	Ground
5	NC

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Mechanical notes

1. All dimensions are in mm.
2. General tolerances are ±0.5 mm.
3. All dimensions and mechanical fixations could be changed upon user needs or PREMO transducer development.

6. Marking

Marking notes

1. Component is marked on the top side.
2. Arrow indicates direction of positive currents.
3. xx indicates the corresponding HCT-LB model.