AC/DC Current transducers
HCT-LP series

Email: info@grupopremo.com
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Premo presents HCT-LP series AC/DC current transducer. HCT-LP has been designed based on the Hall Effect principle. HCT-LP series has good stability in high currents and provides a high insulation between primary and secondary. HCT-LP is suited for a great variety of applications.

Features

- Closed loop Hall Effect sensor.
- Bipolar power supply.
- High currents measurement.

CE

1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current HCT-100LP HCT-200LP	I_{PN}		 100 200		 A A
Measuring range HCT-100LP HCT-200LP	I_P	 -300 -600		 300 600	 A A
Secondary nominal current HCT-100LP HCT-200LP	I_S		 50 100		 mA mA
Supply voltage (±5 %)	V_{CC}	 ±12		 ±18	 V
Turns ratio			1:2000		
Current consumption (V_{CC} = ±12 V)	I_{CC}		 25 + I_S		 mA
Compensation winding resistance	R_C		45		Ω

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2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at I_{PN})		±0.5			%
Linearity (measured at full scale @ V_{CC} = ±15 V, R_B = 15 Ω)	ε_{LLR}			0.1	%
Offset current	I_{OS}			±0.2	mA
Offset current drift (starting at -40 °C)	KI_{OS}			±0.5	mA/°C
Response time	T_R			1	µs
Bandwidth (-3 dB)	F_C	0		200	kHz

3. Isolation parameters

	Symbol	Min	Typ	Max	Unit
Galvanic isolation (50 Hz, 1 min)	V_I		3		kV

4. General parameters

	Symbol	Min	Typ	Max	Unit
Operating temperature	T_A	-40		85	°C
Storage temperature	T_S	-40		125	°C
Mass	m		20		g

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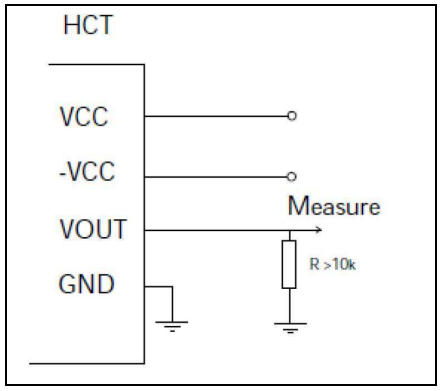
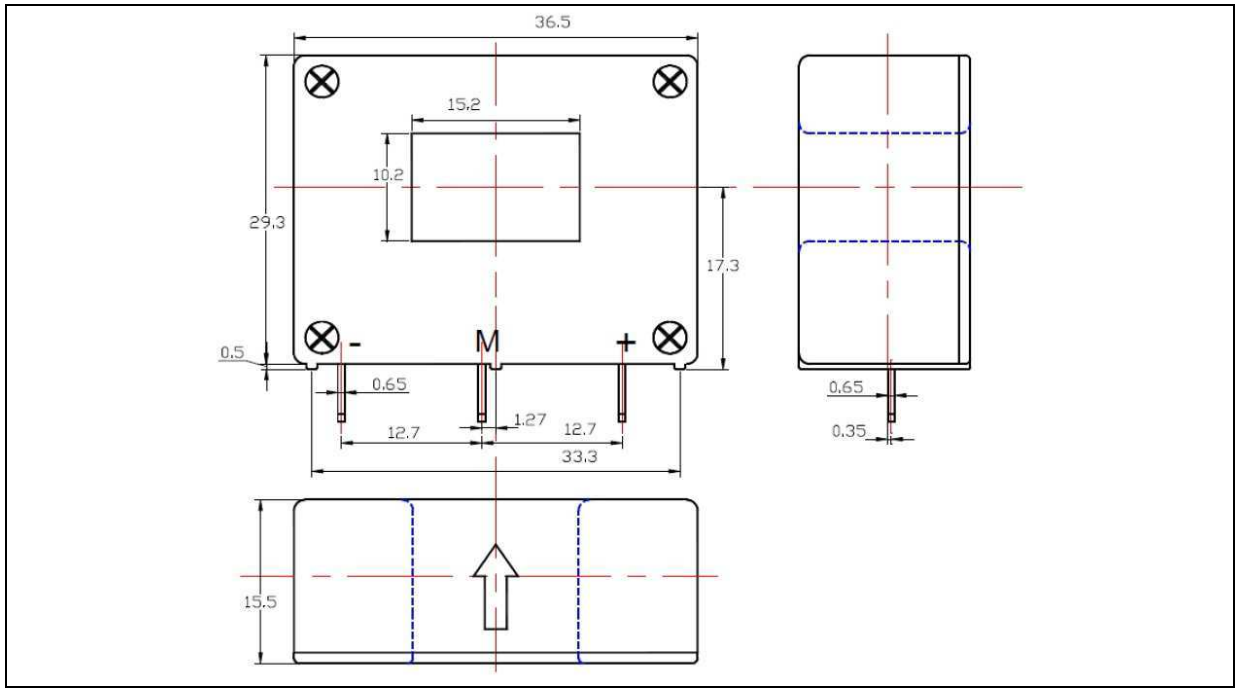
5. Electrical connection



Connector type: PTH.

6. Dimensions

HCT-LP series



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Pin description

Pin	Value
1	$+V_{CC}$
2	Ground
3	Output 1
4	Output 2
5	2.5 V
6	Primary input current (+)
7	Primary input current (-)
8	Primary input current (+)
9	Primary input current (-)

Primary pins size

Model	Size	Unit
HCT-10LP	Ø 1	mm
HCT-30LP	1.5x1.5	mm

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.