AC/DC Current transducers
HCT-BRR5 series

Email: info@grupopremo.com
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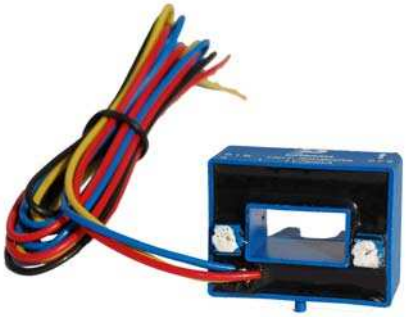
Premo presents HCT-BRR5 series AC/DC current transducer, a new design based on the Hall Effect principle. HCT-BRR5 series has good stability in high currents and a highly insulated primary and secondary.



Features

- Open loop Hall Effect sensor.
- Unipolar power supply.
- High accuracy and linearity.
- Isolated plastic case recognized according to UL94-V0.
- EN60947-1:2004, EN60950-1:2001, EN-50178:1998 compliant.

1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current	I_{PN}				
HCT-50BRR5			50		A
HCT-100BRR5			100		A
HCT-200BRR5			200		A
HCT-300BRR5			300		A
HCT-400BRR5			400		A
HCT-500BRR5			500		A
HCT-600BRR5			600		A
Measuring range	I_P				
HCT-50BRR5		-100		100	A
HCT-100BRR5		-200		200	A
HCT-200BRR5		-400		400	A
HCT-300BRR5		-600		600	A
HCT-400BRR5		-800		800	A
HCT-500BRR5, HCT-600BRR5		-900		900	A
Reference voltage	V_O		2.5		V
Output voltage	V_S	1.5		3.5	V
Supply voltage (±5 %)	V_{CC}		5		V
Current consumption (at I_{PN} = 0 A)	I_{CC}				mA

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2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at I_{PN})		 ±1			 %
Linearity (measured at full scale)	ε_{LLR}			 1	 %
Offset voltage	V_{OS}			±10	mV
Offset voltage drift HCT-50BRR5 HCT-BRR5 family	KV_{OS}			 ±0.3 ±0.2	 mV/°C mV/°C
Magnetic offset voltage (measured after a load of I_{PN}) HCT-50BRR5 HCT-BRR5 family	V_{OM}			 ±15 ±12	 mV mV
Rated output voltage drift HCT-50BRR5 HCT-BRR5 family				 ±0.6 ±0.4	 mV mV
Response time	T_R			3	µs

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	-55		125	°C

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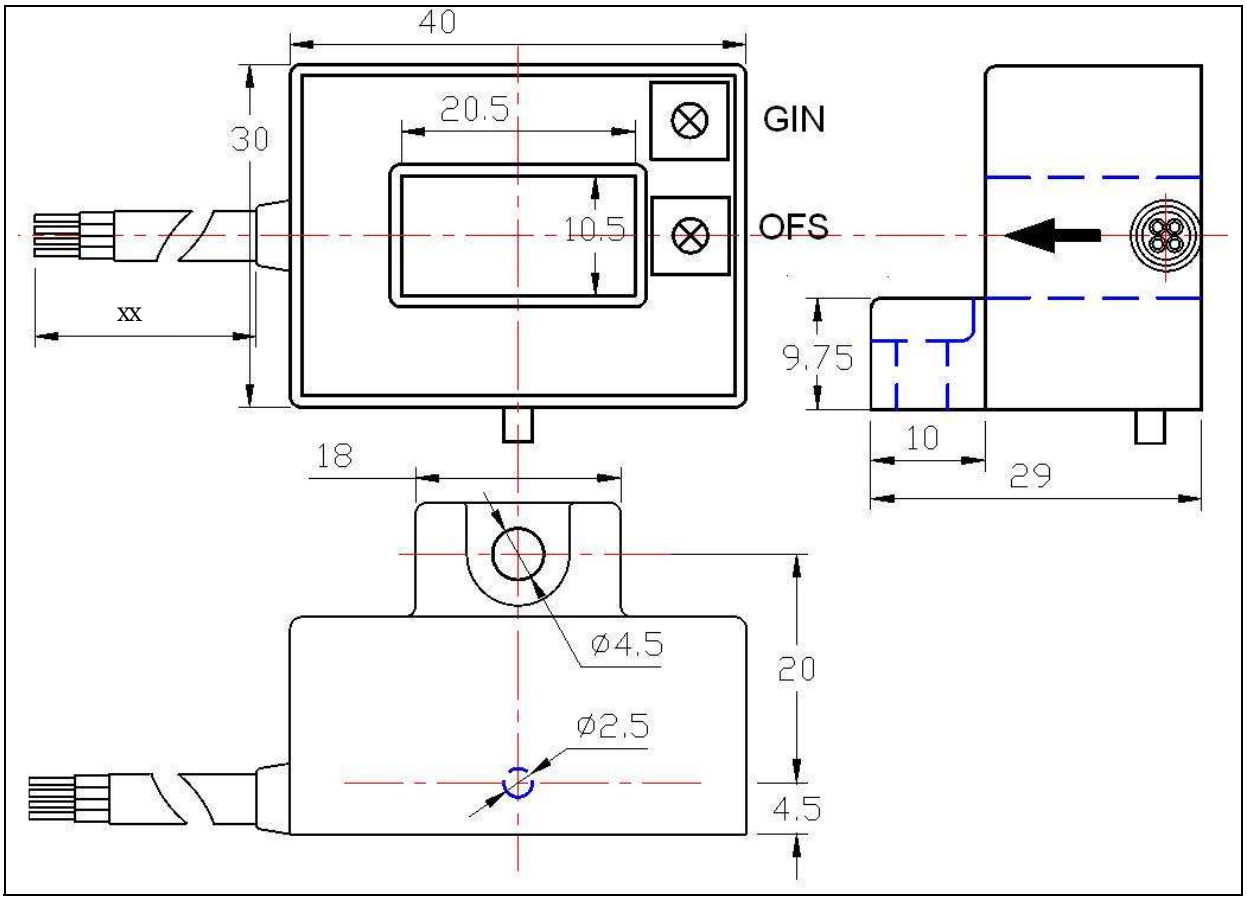
5. Dimensions

HCT-BRR5 series



Pin description

Pin	Value
Red	$+V_{CC}$
Yellow	Ground
Blue	Output
Black	V_R

Mechanical notes

1. All dimensions are in mm.
2. General tolerances according to ISO 2768-c.
3. All dimensions and mechanical fixations could be changed upon user needs or PREMO transducer development.

Output connection remarks

1. Flying wires with no connector.

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2. Wire length: Could be adjusted upon customer's needs.
3. Output wires are UL approved 600 V_{RMS}.
4. Wire output diameter: Ø 1.3 mm.

6. Marking

Marking notes
1. Component is marked on top side.
2. Arrow indicates direction of positive currents.

7. Ordering information

Ordering code: HCT-ZZZBRR5-XXY	
ZZZ	Primary nominal current
XX	Wire length (in cm)
Y	No letter: Wire is leaved without terminal. C: Wire is terminated with a connector.
Codification example: HCT-300BRR5-25C means a 300 A nominal current HCT terminated with a 25 cm wire with Molex connector.	