

Premo presents HCT-BSR5 series AC/DC current transducer, a new design based on the Hall Effect principle. HCT-BSR5 series has good stability in very high currents and a highly insulated primary and secondary.



## Features

- Open loop Hall Effect sensor.
- Unipolar power supply.
- High currents measurement.
- High precision.
- High linearity.
- Isolated plastic case recognized according to UL94-V0.
- EN60947:2004, IEC60950-1:2001, EN50178:1998 compliant.

## 1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current	$I_{PN}$				
HCT-50BSR5			50		A
HCT-100BSR5			100		A
HCT-200BSR5			200		A
HCT-300BSR5			300		A
HCT-400BSR5			400		A
HCT-500BSR5 HCT-600BSR5			500 600		A A
Measuring range	$I_p$				
HCT-50BSR5		-100		100	A
HCT-100BSR5		-200		200	A
HCT-200BSR5		-400		400	A
HCT-300BSR5		-600		600	A
HCT-400BSR5 HCT-500BSR5, HCT-600BSR5		-800 -900		800 900	A A
Reference voltage	$V_O$		2.5		V
Rated output	V		1		V
Supply voltage ( $\pm 5\%$ )	$V_{CC}$			5	V



## AC/DC Current transducers HCT-BSR5 series

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### 2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (at $I_{PN}$ )		$\pm 1$			%
Linearity (measured at full scale)	$\epsilon_{LLR}$			1	%
Offset voltage	$V_{OS}$	-10		10	mV
Offset voltage drift HCT-50BSR5 HCT-BSR5 family	$KV_{OS}$			$\pm 0.3$ $\pm 0.2$	mV/°C mV/°C
Rated output drift HCT-50BSR5 HCT-BSR5 family				$\pm 0.6$ $\pm 0.4$	mV/°C mV/°C
Magnetic offset voltage HCT-50BSR5 HCT-BSR5 family	$V_{OM}$		$\pm 15$ $\pm 12$		mV mV
Response time	$T_R$			3	$\mu s$

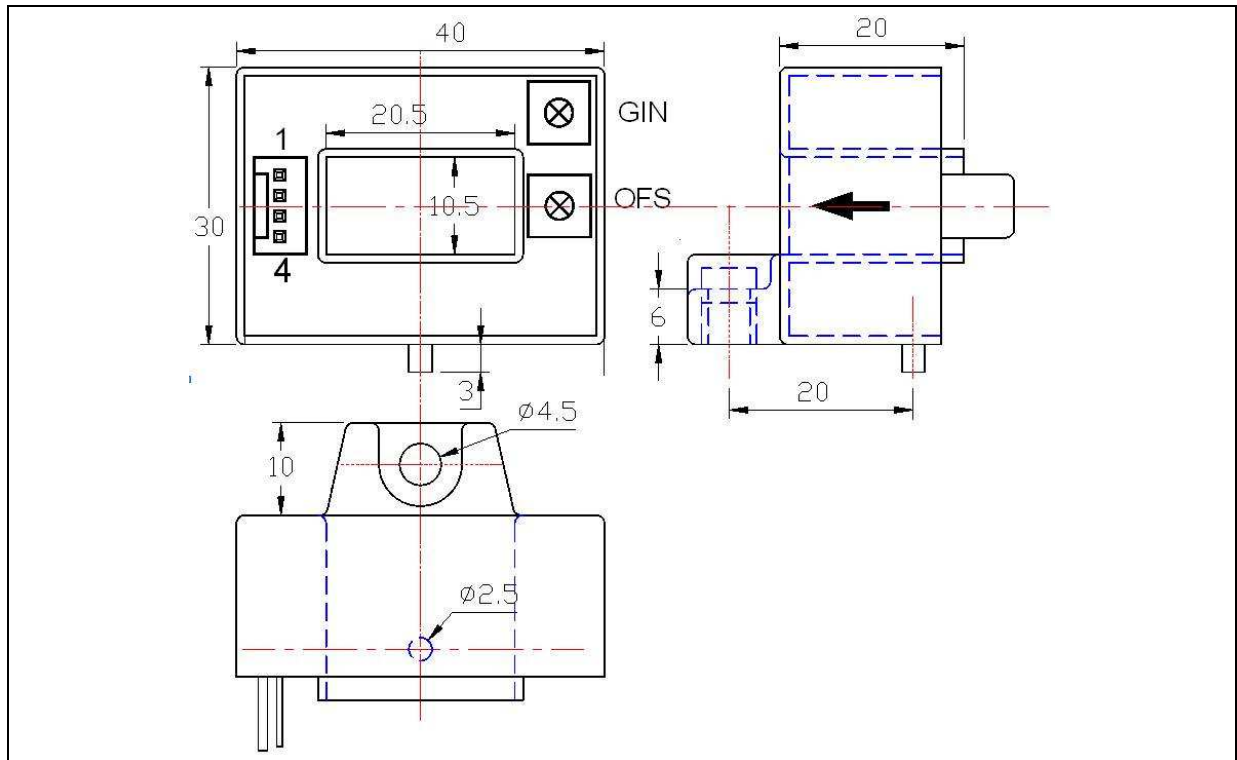
### 3. Isolation parameters

	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		125	°C
Storage temperature	$T_S$	-55		125	°C

## 5. Dimensions



### Pin description

Pin	Value
1	+V <sub>CC</sub>
2	GND
3	Output
4	V <sub>R</sub>

### Mechanical notes

1. All dimensions are in mm.
2. General tolerances according ISO 2768-c.
3. All dimensions and mechanical fixations could be changed upon user needs or PREMO transducer development.
4. Arrow indicates direction of positive currents.