

Premo presents HCT-AP series AC/DC current transducer. HCT-AP was designed based on the Hall Effect principle. HCT-AP series has good stability in high currents and provides galvanic insulation between primary and secondary.



## Features

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

## 1. Electrical parameters

	Symbol	Min	Typ	Max	Unit	
Nominal current	$I_{PN}$					
HCT-025AP			25		A	
HCT-050AP				50		A
HCT-100AP				100		A
HCT-200AP				200		A
Measuring range	$I_p$					
HCT-025AP		-75		75	A	
HCT-050AP		-150		150	A	
HCT-100AP		-300		300	A	
HCT-200AP		-600		600	A	
Rated output (at $I_{PN}$ )	$I_s$					
HCT-025AP			25		mA	
HCT-050AP				50	mA	
HCT-100AP				125	mA	
HCT-200AP				100	mA	
Supply voltage ( $\pm 5\%$ )	$V_{CC}$	$\pm 12$		$\pm 18$	V	
Current consumption (measured at $I_p = 0$ A)	$I_{CC}$	20			mA	
Turns ratio	$N_s$					
HCT-025AP, HCT-050AP HCT-100AP, HCT-200AP				1:1000 1:2000		
Secondary coil resistance						
HCT-025AP, HCT-100AP, HCT-200AP			45		$\Omega$	
HCT-050AP			30		$\Omega$	



## AC/DC Current transducers HCT-AP series

Email: [info@grupopremo.com](mailto:info@grupopremo.com)  
Web: <http://www.grupopremo.com>

### 2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at full scale)		±0.5			%
Linearity (measured at full range)	$\epsilon_{LLR}$			0.1	%
Offset current	$I_{OS}$			±0.2	mA
Offset current drift (starting at -40 °C)	$KI_{OS}$			±5	µA/°C
Response time	$T_R$			1	µs
di/dt		100			A/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

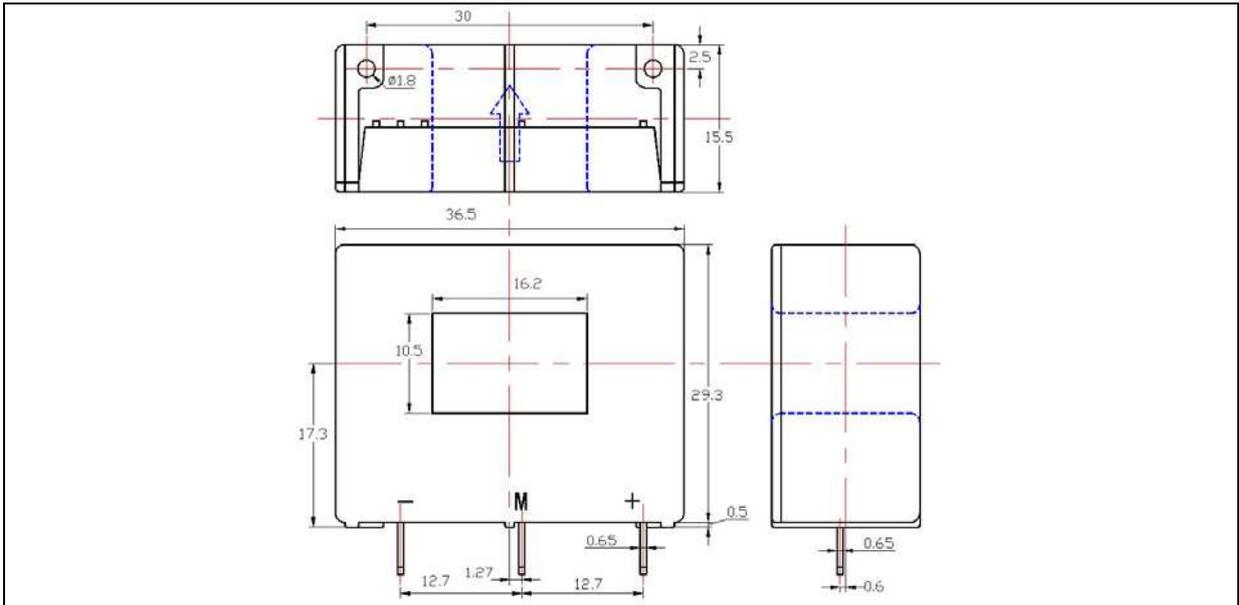
### 4. General parameters

	Symbol	Min	Typ	Max	Unit
Operating temperature	$T_A$	-40		85 <sup>1)</sup>	°C
Storage temperature	$T_S$	-40		125	°C

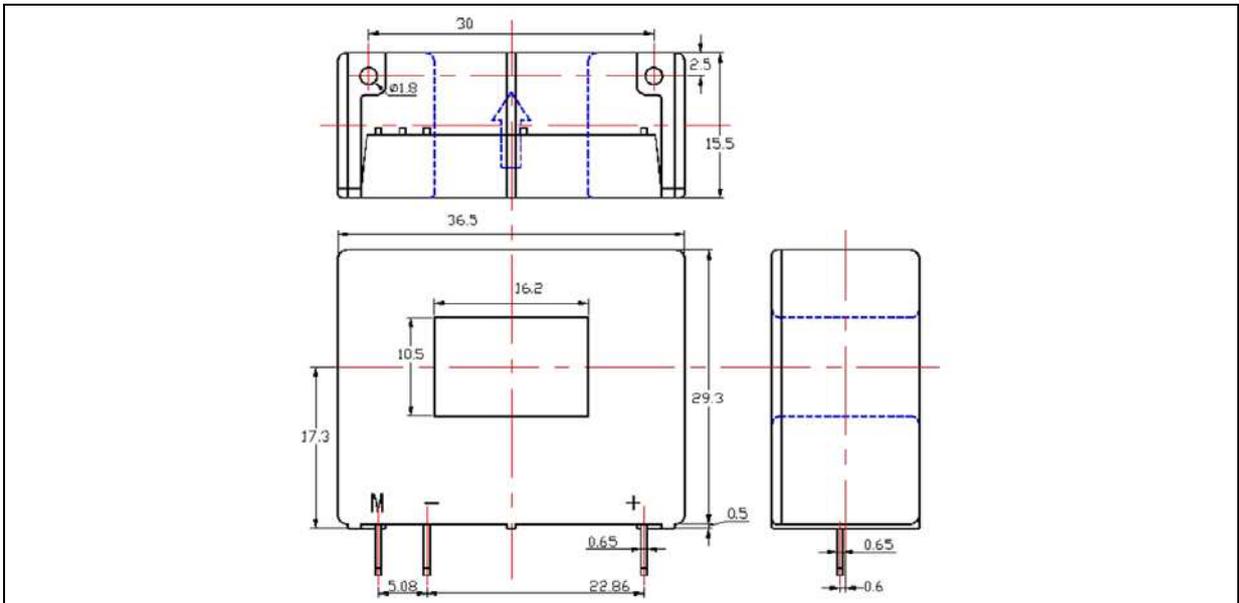
<sup>1)</sup>Primary conductor temperature: 120°C max.

## 5. Dimensions

### HCT-200AP



### HCT-AP series



### Pin description

Pin	Value
+	+V <sub>CC</sub>
-	-V <sub>CC</sub>
M	Output

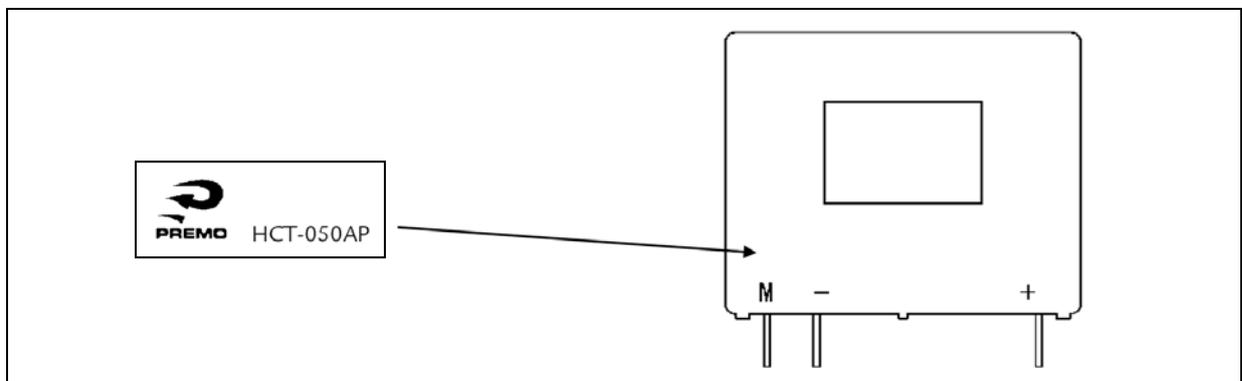
### Mounting description

	Type
Mounting	M2. 5x6. 0

### Mechanical notes

1. All dimensions are in mm.
2. General tolerances are  $\pm 0.5$  mm.
3. All dimensions and mechanical fixations could be changed upon user needs or PREMO transducer development.
4. Arrow indicates direction of positive currents.

## 6. Marking



HCT-050AP marking sample

### Marking notes

1. Component is marked on the front side.