

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



## Features

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

## 1. Electrical parameters

	Symbol	Min	Typ	Max	Unit
Nominal current HCT-1000K HCT-1200K	$I_{PN}$		1000 1200		A A
Measuring range HCT-1000K HCT-1200K	$I_p$	-2000 -2400		2000 2400	A A
Rated output	$V_O$		4		V
Supply voltage ( $\pm 5\%$ )	$V_{CC}$		$\pm 15$		V
Current consumption	$I_{CC}$	$\pm 15$			mA

## 2. Performance parameters

	Symbol	Min	Typ	Max	Unit
Accuracy (measured at $I_{PN}$ )		$\pm 1$			%
Linearity (measured at full scale)	$\epsilon_{LLR}$			1	%
Offset voltage	$V_{OS}$			$\pm 20$	mV
Offset voltage drift (starting at $-40\text{ }^\circ\text{C}$ )	$KV_{OS}$			$\pm 0.5$	mV/ $^\circ\text{C}$
Magnetic offset voltage (after $3 * I_{PN}$ )	$V_{OM}$			$\pm 30$	mV
Response time	$T_R$			7	$\mu\text{s}$
di/dt		50			A/ $\mu\text{s}$

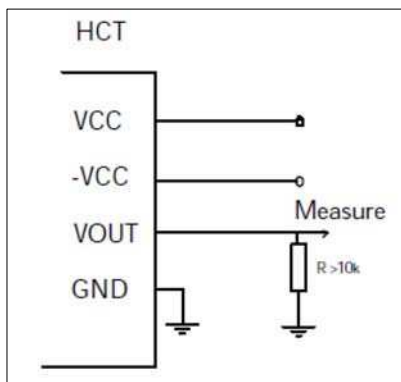
### 3. Isolation parameters

	Symbol	Min	Typ	Max	Unit
Galvanic isolation (50 Hz, 1 min)	$V_i$		6		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		405		g

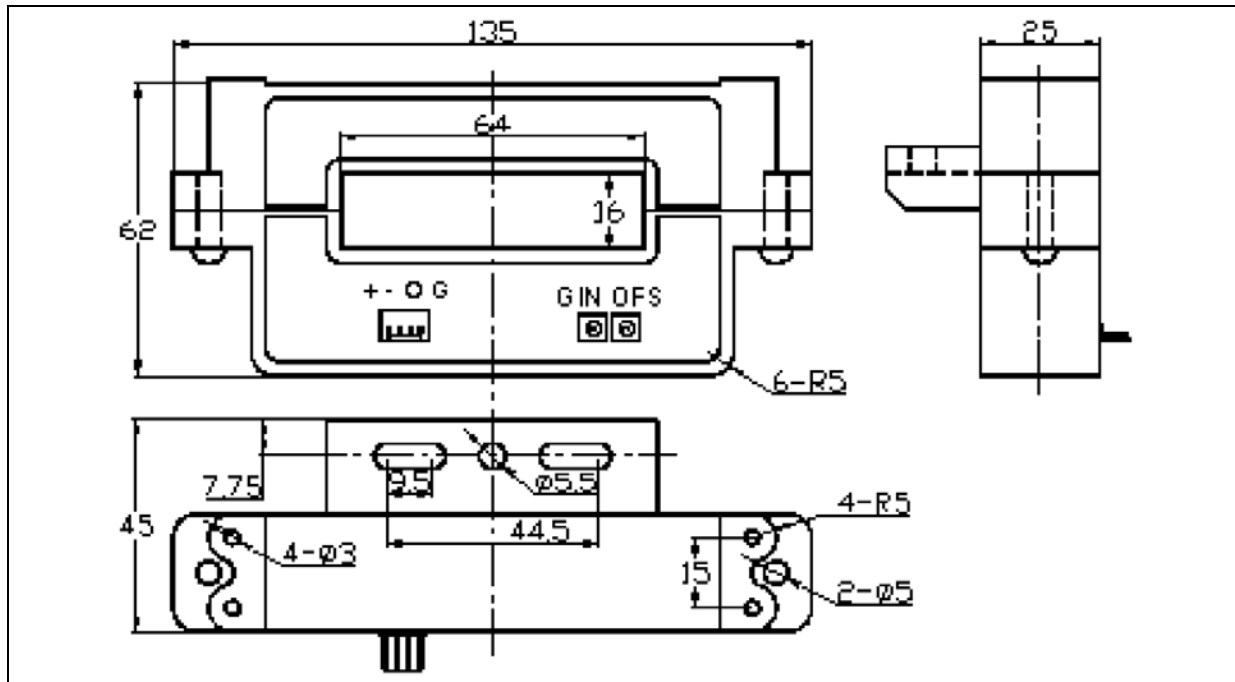
### 5. Electrical connection



*Recommended connection schematics*

## 6. Dimensions

*HCT-K series*



*Pin description*

Pin	Value
+	+V <sub>CC</sub>
-	-V <sub>CC</sub>
O	Output
G	Ground

*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.