

HCT Series

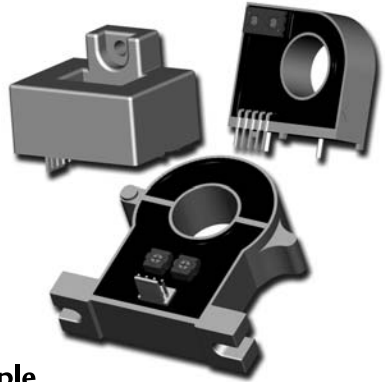
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Current Transformers & Sensors

Features

Models Based on Open loop Principle:

- Nominal Current I_{PN} of 50,100 and 200 A on DC and AC signals.
- Supply Voltage de $\pm 15V (\pm 5\%)$.
- Output Voltage of $4V \pm 1\%$ at 50A
- Frequency Bandwidth, 0 to 50kHz.
- Response Time: $< 5 \mu s$
- di/dt accurately followed, $> 50A/\mu s$
- Operating Temperature: $-25^\circ C$ to $85^\circ C$
- Storage Temperature: $-40^\circ C$ to $100^\circ C$.
- Insulated Plastic Case according with UL 94-V0.



Models Based in the Closed-Loop Principle

- Nominal Current I_{PN} of 50 and 100A in DC and AC Signals.
- Supply Voltage from $\pm 12V$ to $\pm 15V (\pm 5\%)$.
- Frequency Bandwidth, from 0 to 200kHz.
- Response Time: $< 1 \mu s$
- di/dt accurately followed, $> 200A/\mu s$
- Operating Temperature: $-25^\circ C$ to $85^\circ C$
- Storage Temperature: $-40^\circ C$ to $100^\circ C$.
- Insulated Plastic Case according with UL 94-V0.

Product List

Part Number	I_{PMax} (Arms)	CC (mA)	V_0 (mV)	Linearity $\epsilon_L(\%)$	Accuracy (%)	V_{OH} (mV)	Thermal Drift of V_0 (mV/ $^\circ C$)	Thermal Drift of V_{OUT} (mV/ $^\circ C$)	V_{ISOL} (kV/50 Hz/1 min)	Freq. Range (kHz)
HCT50-SPLT-OL	100	$\leq \pm 18$	$< \pm 20$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 0.5$	$\leq \pm 0.04$	2.5	DC - 50
HCT50-CIRC-OL	100	$\leq \pm 20$	$< \pm 30$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 1$	$\leq \pm 0.03$	2.5	DC - 50
HCT50-REC1-OL	150	$\leq \pm 20$	$< \pm 30$	$\leq \pm 0.5$	$\pm 1\%$	$\leq \pm 20$	$\leq \pm 0.5$	$\leq \pm 0.04$	3	DC - 50
HCT100-SPLT-OL	200	$\leq \pm 18$	$< \pm 20$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 0.5$	$\leq \pm 0.04$	2.5	DC - 50
HCT100-CIRC-OL	200	$\leq \pm 20$	$< \pm 30$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 0.5$	$\leq \pm 0.04$	2.5	DC - 50
HCT100-REC1-OL	300	$\leq \pm 20$	$< \pm 30$	$\leq \pm 0.5$	$\pm 1\%$	$\leq \pm 20$	$\leq \pm 0.5$	$\leq \pm 0.04$	3	DC - 50
HCT200-SPLT-OL	400	$\leq \pm 18$	$< \pm 20$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 0.5$	$\leq \pm 0.04$	2.5	DC - 50
HCT200-CIRC-OL	400	$\leq \pm 20$	$< \pm 30$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 25$	$\leq \pm 1$	$\leq \pm 0.03$	3	DC - 50
HCT200-REC1-OL	600	$\leq \pm 20$	$< \pm 30$	$\leq \pm 0.5$	$\pm 1\%$	$\leq \pm 20$	$\leq \pm 0.5$	$\leq \pm 0.04$	2.5	DC - 50
HCT200-REC2-OL	400	$\leq \pm 15$	$< \pm 20$	$\leq \pm 1$	$\pm 1\%$	$\leq \pm 20$	$\leq \pm 0.5$	$\leq \pm 0.03$	2.5	DC - 25

Part Number	I_{PMax} (Arms)	I_{SMax} (mArms)	CC (mA)	(K_M)	I_0 (mA)	Linearity $\epsilon_L(\%)$	Accuracy (%)	I_{OH} (mA)	Thermal Drift I_0 (mA/ $^\circ C$)	V_{ISOL} (kV/50 Hz/1 min)
HCT50-REC2-CL	± 70	± 50	10 + Is	1 to 1000	$< \pm 0.2$	± 0.1	± 0.65	± 0.3	± 0.6	2.5
HCT100-REC2-CL	± 150	± 50	10 + Is	1 to 2000	$< \pm 0.1$	± 0.1	± 0.45	$\pm 0,15$	± 0.5	2.5

Voltage and Current offsets measured at $25^\circ C$

Hysteresis Excursion: $\pm 3I_{PN} > 0$

Linearity Excursion: From 0 to $\pm I_{PN}$

Accuracy and Current Consumption measured with $\pm 15V$ voltage supply at $25^\circ C$

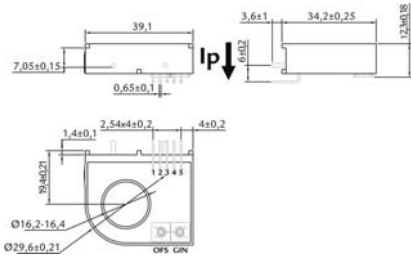
NOTE: This models can be requested with closed principle OL/CL, Open Loop / Close

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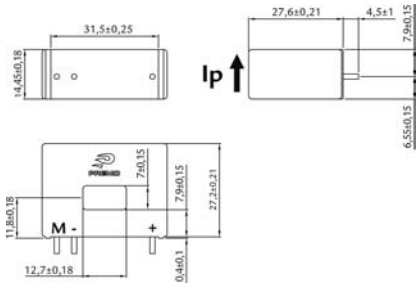
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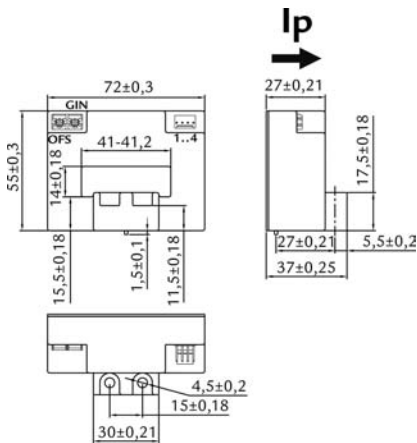
Dimensions (in mm)



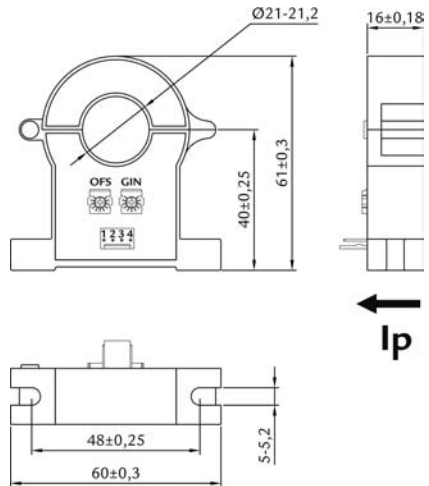
CIRC-OL version



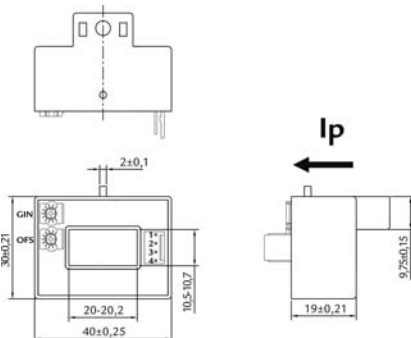
REC2-CL version



REC2-OL version



SPLT-OL version



REC1-OL version

Secondary terminals

TERMINAL 1	+15V
TERMINAL 2	-15V
TERMINAL 3	OUTPUT
TERMINAL 4	GND
TERMINAL 5	NC

**Only for REC2-CL version
Secondary terminals**

TERMINAL +	+12...15V
TERMINAL -	-12...15V
TERMINAL M	MEASURE

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