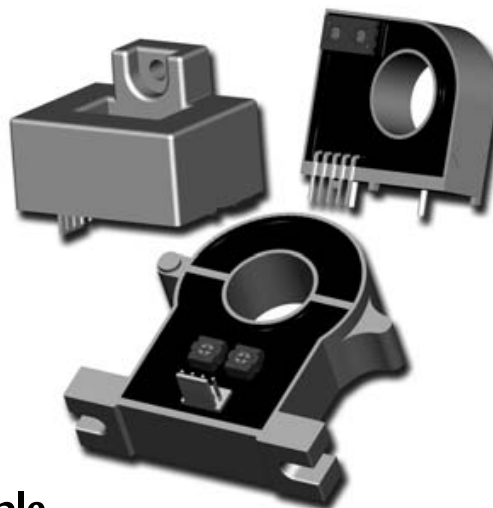


HCT Series

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 | $10 + I_s$ | 1 to 1000 | $< \pm 0.2$ | ± 0.1 | ± 0.65 | ± 0.3 | ± 0.6 | 2.5 |
| HCT100-REC2-CL | ± 150 | ± 50 | $10 + I_s$ | 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: $\pm 3I_{PN} > 0$

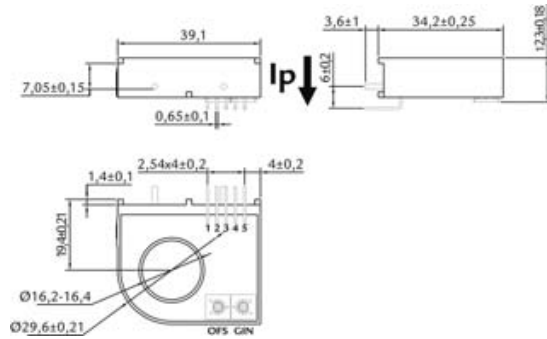
Linearity Excursion: From 0 to $\pm I_{PN}$

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

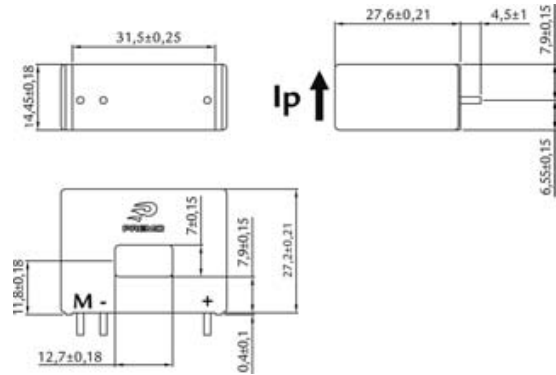
NOTE: This models can be requested with closed principle OL/CL, Open Loop / Close Loop principle

HCT Series

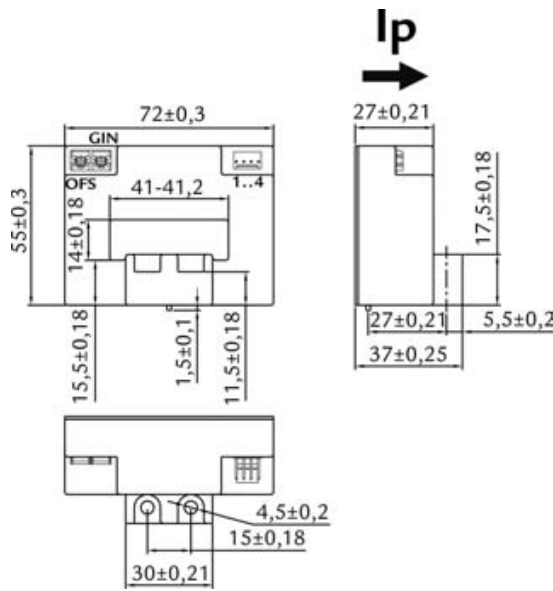
Dimensions (in mm)



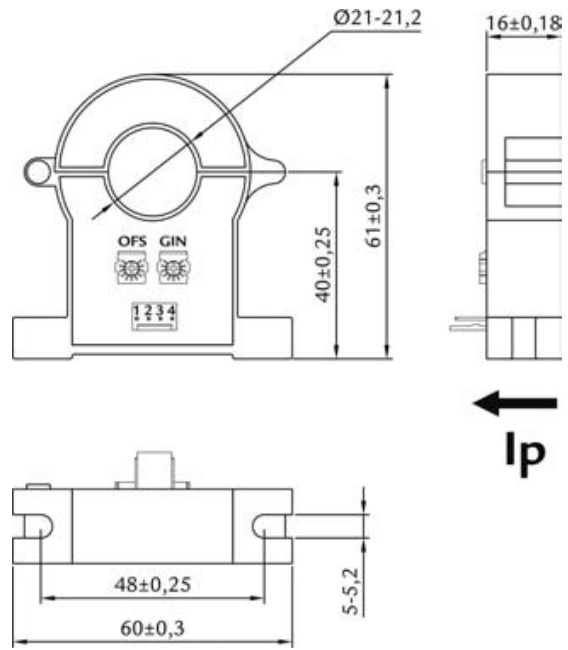
CIRC-OL version



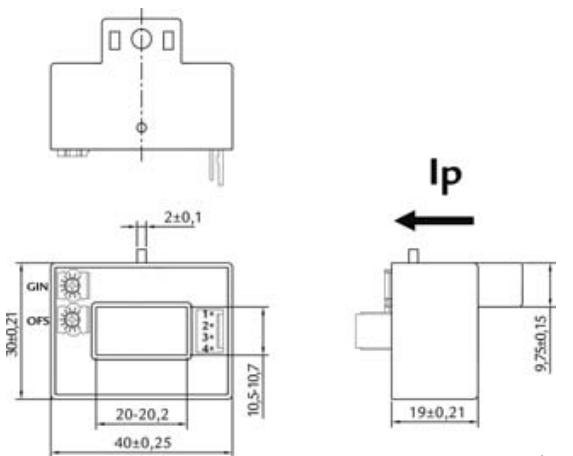
REC2-CL version



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 |