

Features

- DC, AC Hall Effect Current Transducers
- Open Loop and Closed Loop operation Modes
- Wide range of primary current measurement s, from 5 A up to 1200 A RMS.
- Wide range of frequencies Band Width, Typically from 0 up to 50,100 and 200 kHz.
- Useful to measure Current spikes, overshoots and ringing effects.
- Bipolar and Unipolar Power Supply
- Different ways for connection, PTH or standard connector
- Output voltage signals typically for Open Loop Ones, Current signal outputs for closed loop ones
- Customized outputs Possibilities
- UL94V-0 material
- RoHS compliant



Application

- General Industrial applications for current Monitoring
- Current measure on input stage batteries inverters
- UPS Applications (Uninterruptible Power Supplies)
- General using in Switched Power Supplies, for digital control systems

General Electrical specifications. Closed Loop Devices

Code	Family	Nominal Current (A RMS)	Measuring Current (A DC)	Secondary Output Signal	Supply Voltage (V)	Accuracy (See Note 1)	Linearity (See Note 2)	Mounting	Isolation (V AC 50Hz)
HCT-25A05	A05	25	±50	± 25 mA	±15	±0.5%	0,20%	PCB	2500
HCT-35A05	A05	35	±70	± 35 mA	±15	±0.5%	0,20%	PCB	2500
HCT-100LP	LP	100	±300	± 50 mA	±12-18	±0.5%	0,10%	PCB	3000
HCT-200LP	LP	200	±600	± 100 mA	±12-18	±0.5%	0,10%	PCB	3000
HCT-50AP	AP	50	± 150	± 50mA	± 12-18	± 0,5%	0,10%	PCB	3000
HCT-100AP	AP	100	± 300	± 50mA	± 12-18	±0,5%	0,10%	PCB	3000
HCT-200AP	AP	200	± 600	±100mA	± 12-18	±0,5%	0,10%	PCB	3000
HCT-300LTP	LTP	300	±900	± 150 mA	±12-18	±0.5%	0,10%	Connector	6000
HCT-10PX5	PX5	10	±22	3.5V@+Inom / 1.5V@-Inom	5	±0.5%	0,10%	PCB	3000
HCT-30PX5	PX5	30	±66	3.5V@+Inom / 1.5V@-Inom	5	±0.5%	0,10%	PCB	3000
HCT-1000SH	SH	1000	±3000	± 200 mA	±15-24	±0.1%	0,10%	Connector	4000
HCT-2000LF	LF	2000	±5000	± 400 mA	±15-24	±0.2%	0,10%	Connector	4000

Notes

(1) Accuracy levels at Nominal current, measured at room temperature over a 1 Ohm, non-inductive precision burden resistor (for all the model except PX5 ones).

(2) Typical linearity response, measuring from 10% to 100% of nominal current

(3) Individual data sheet for each transducer available on Premo Website.

All data are related to room temperature, 25°C ± 2 °C.

General Electrical specifications. Open Loop Devices

Code	Nominal Current (A RMS)	Measuring Current (A DC)	Secondary Output Signal	Supply Voltage (V)	Accuracy (See Note 1)	Linearity (See Note 2)	Mounting	Isolation (V AC 50Hz)
HCT-100BP1	100	±300	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-200BP1	200	±600	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-600BP1	600	±1000	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-100BP2	100	±300	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-200BP2	200	±600	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-600BP2	600	±1000	± 4 V	±15	±1%	< 1 %	PCB	2500
HCT-50BP5	50	±100	3.5V@+Inom / 1.5V@-Inom	5	±1%	< 1 %	PCB	3000
HCT-100BP5	100	±200	3.5V@+Inom / 1.5V@-Inom	5	±1%	< 1 %	PCB	3000
HCT-500F	500	±1200	± 4 V	±15	±1%	< 1 %	Connector	5000
HCT-800F	800	±1600	± 4 V	±15	±1%	< 1 %	Connector	5000
HCT-1000F	1000	±2000	± 4 V	±15	±1%	< 1 %	Connector	5000
HCT-100N	100	±300	± 4 V	±15	±1%	< 1 %	Connector	3000
HCT-300N	300	±900	± 4 V	±15	±1%	< 1 %	Connector	3000
HCT-1000K	1000	±2000	± 4 V	±15	±1%	< 1 %	Connector	6000
HCT-1200K	1200	±2500	± 4 V	±15	±1%	< 1 %	Connector	6000
HCT-50LB	50	±150	± 4 V	±15	±1%	< 1 %	Connector	2500
HCT-100LB	100	±200	± 4 V	±15	±1%	< 1 %	Connector	2500

Notes

(1) Accuracy levels at Nominal current, measured at room temperature over a 10 kOhm burden resistor .

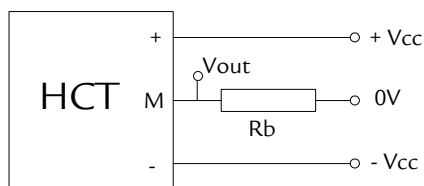
(2) Typical linearity response, measuring from 10% to 100% of nominal current

(3) Individual data sheet for each transducer available on Premo Website.

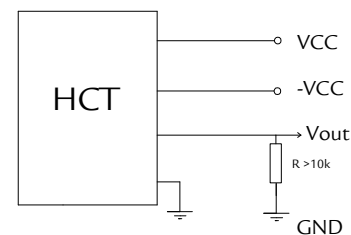
All data are related to room temperature 25°C ± 2 °C.

Recommended installation Diagrams.

Closed Loop Devices



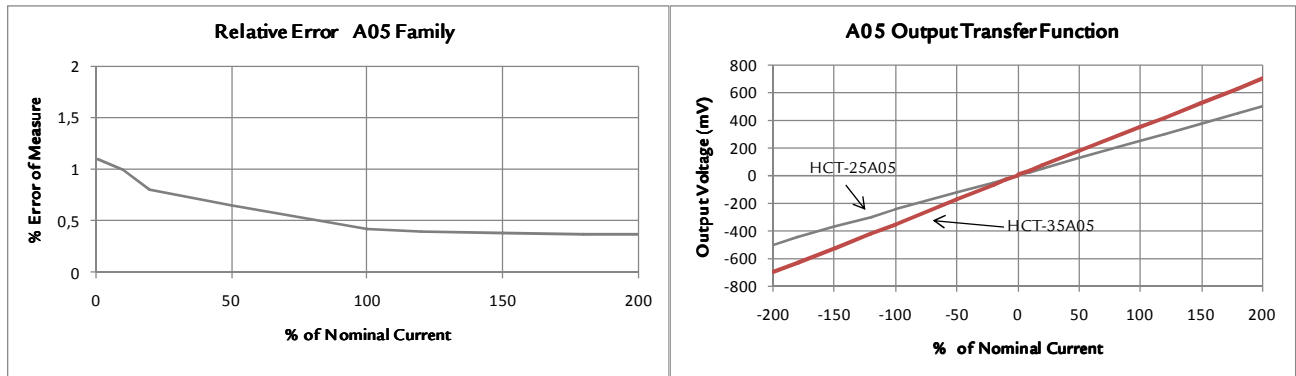
Open Loop Devices



Typical Accuracy Vs Primary Current Range and Output transfer function.

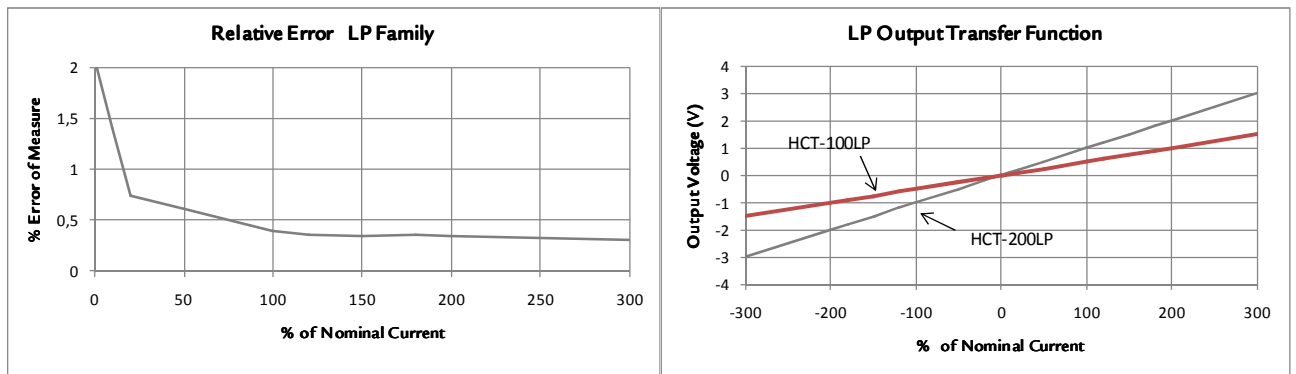
In the graphs showed as per below accuracy levels reached with each family are presented. The curves present the typical average values. Ideal transfer function input current vs output signals are presented as well.

A05 FAMILY



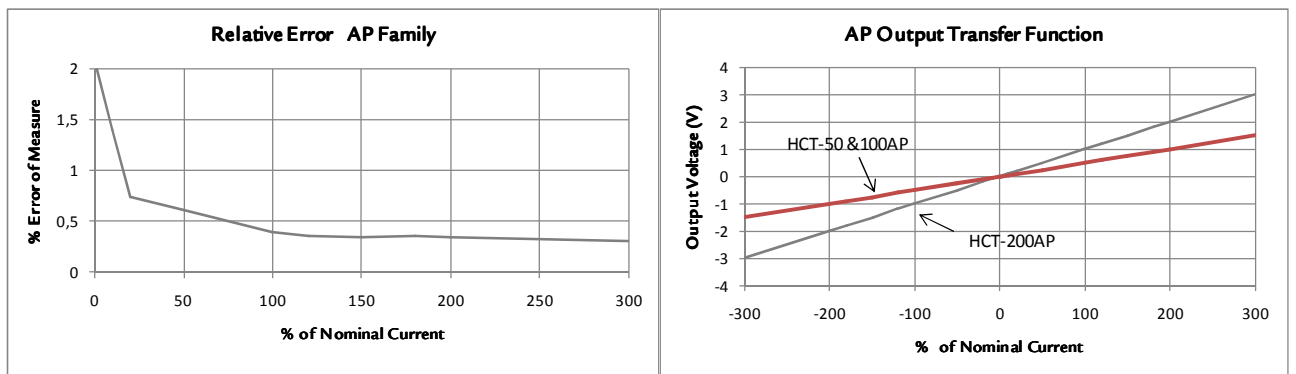
Data at 25°C. Burden resistor used 10 Ohm ± 0.2 %. Vcc ± 15V

LP FAMILY



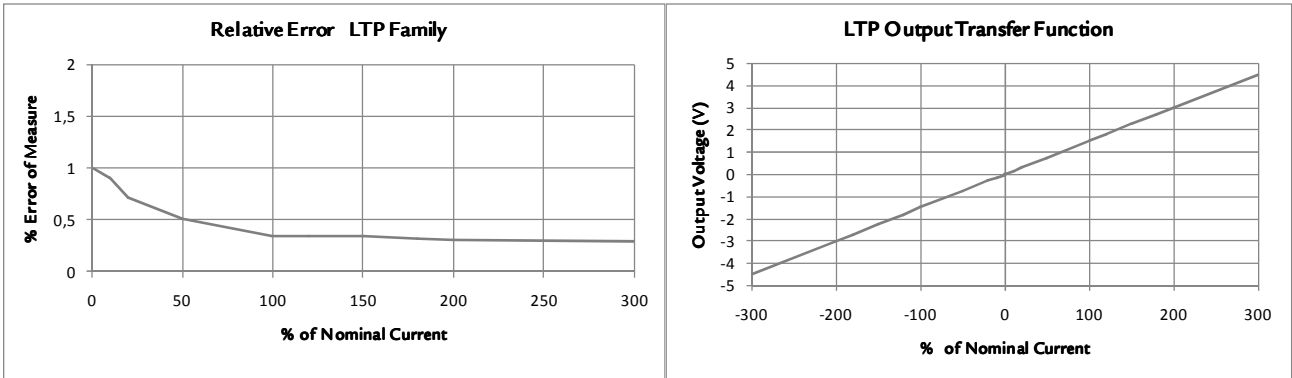
Data at 25°C. Burden resistor used 10 Ohm ± 0.2 %. Vcc ± 15V

AP FAMILY



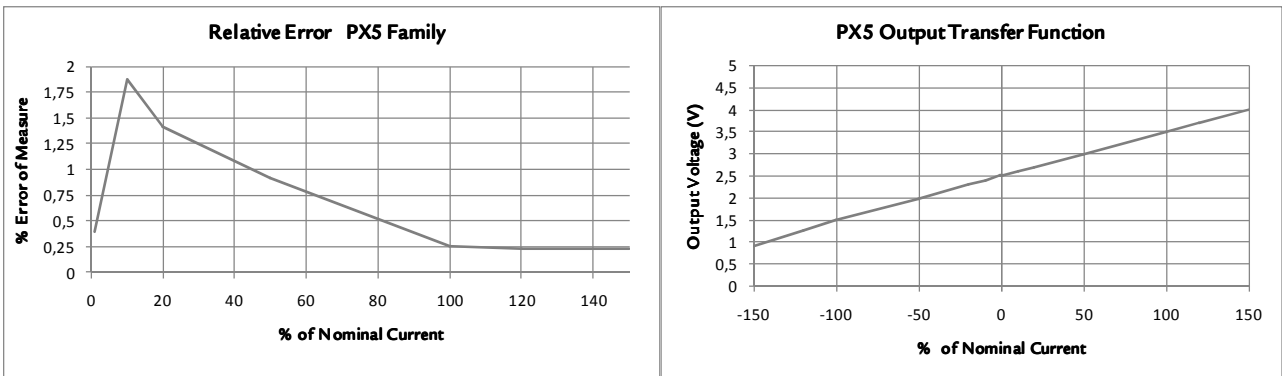
Data at 25°C. Burden resistor used 10 Ohm ± 0.2 %. Vcc ± 15V

LTP FAMILY



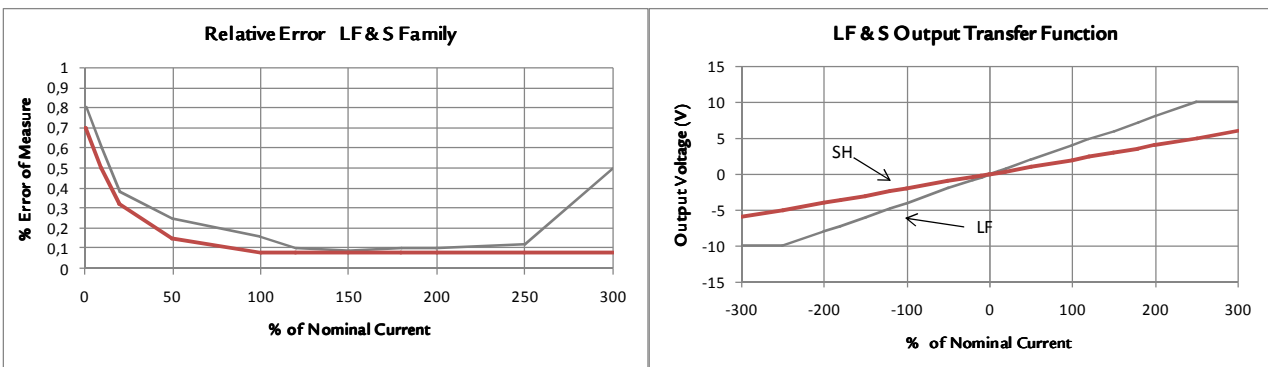
Data at 25°C. Burden resistor used 10 Ohm ± 0.2 %. Vcc ± 15V

PX5 FAMILY



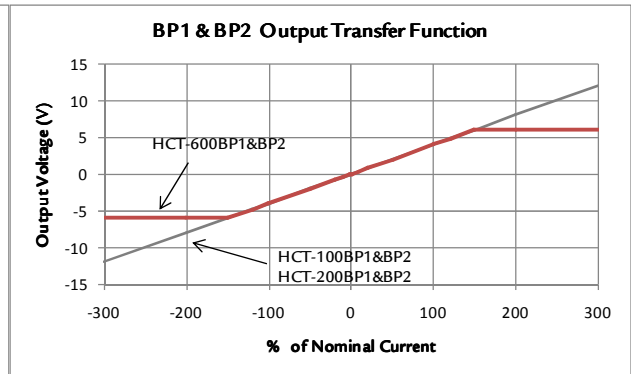
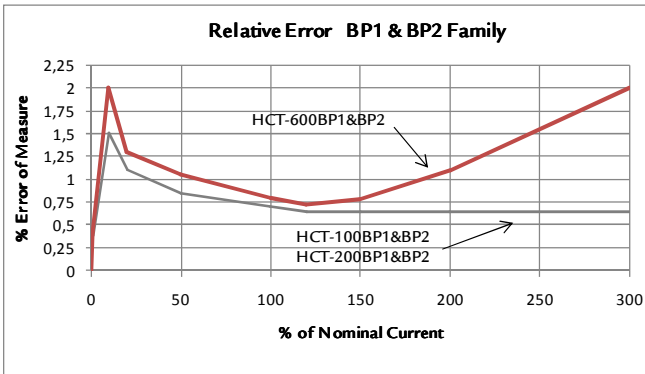
Data at 25°C. Vcc = 5 V

LF & SH FAMILY



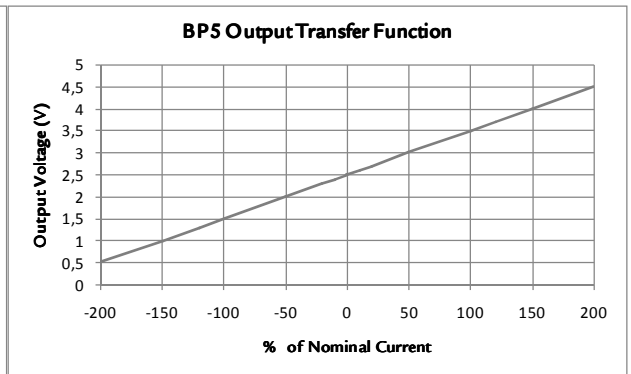
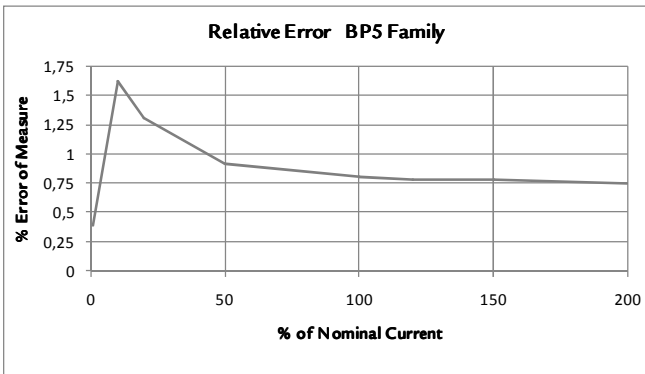
Data at 25°C. Burden Resistor 10 Ohm ± 0.2% Vcc = ± 24 V

BP1 & BP2 FAMILY



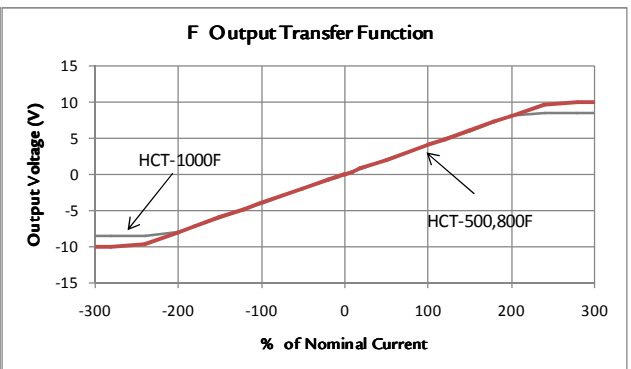
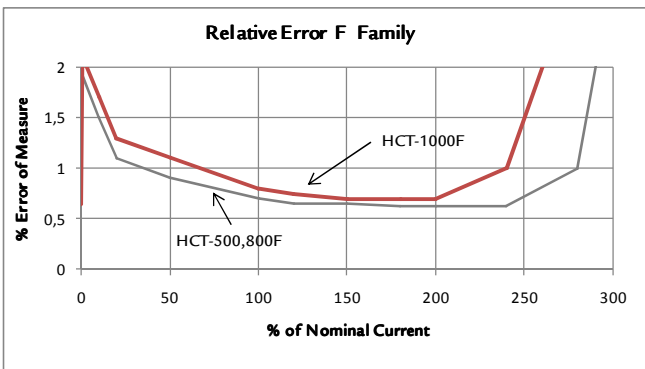
Data at 25°C. R load 10 kOhm \pm 5 % $V_{cc} = \pm 15$ V

BP5 FAMILY



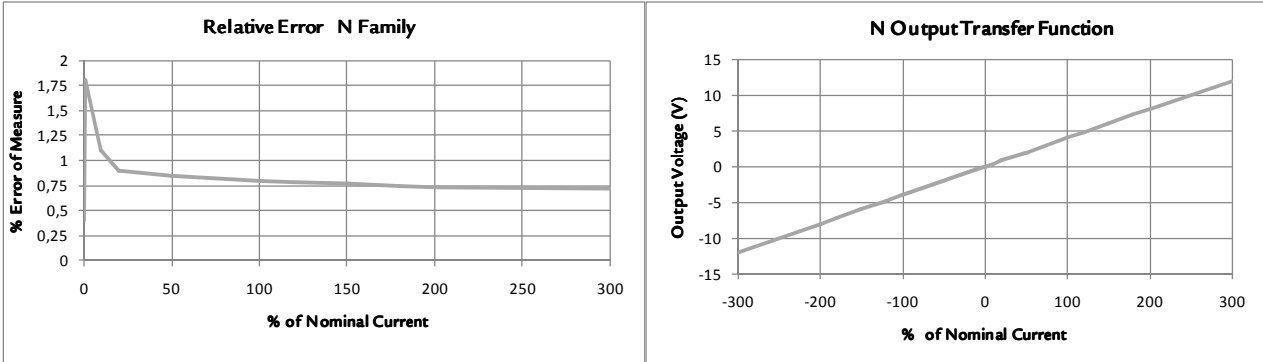
Data at 25°C. R load 10 kOhm \pm 5 % $V_{cc} = \pm 15$ V

F FAMILY



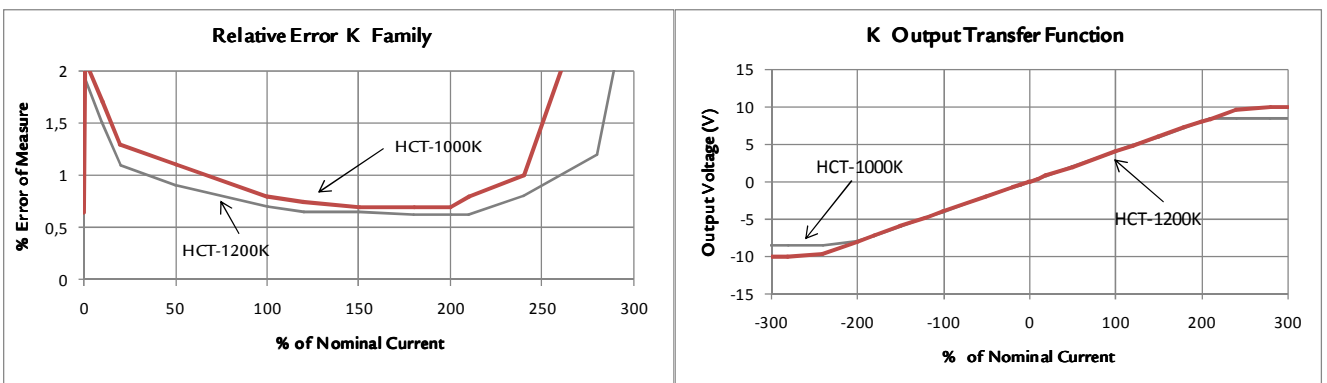
Data at 25°C. R load 10 kOhm \pm 5 % $V_{cc} = \pm 15$ V

N FAMILY



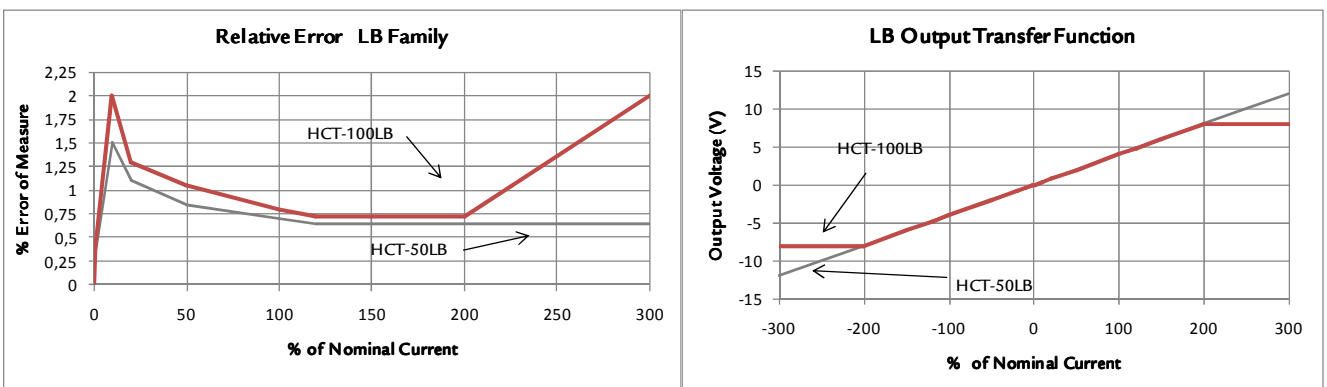
Data at 25°C. R load 10 kOhm ± 5 % Vcc = ± 15 V

K FAMILY



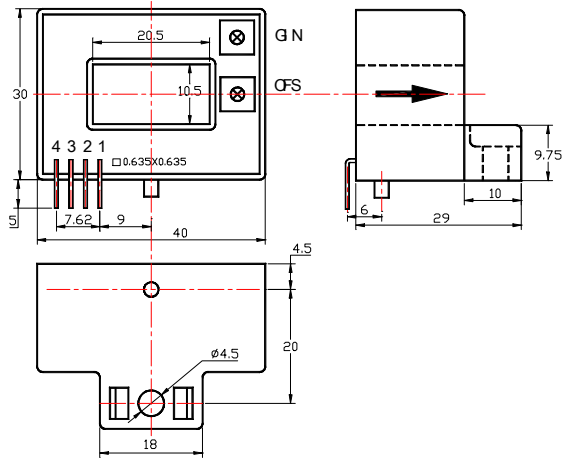
Data at 25°C. R load 10 kOhm ± 5 % Vcc = ± 15 V

LB FAMILY

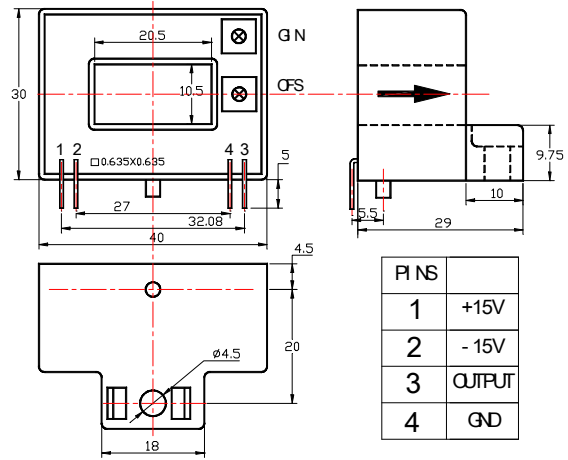


Data at 25°C. R load 10 kOhm ± 5 % Vcc = ± 15 V

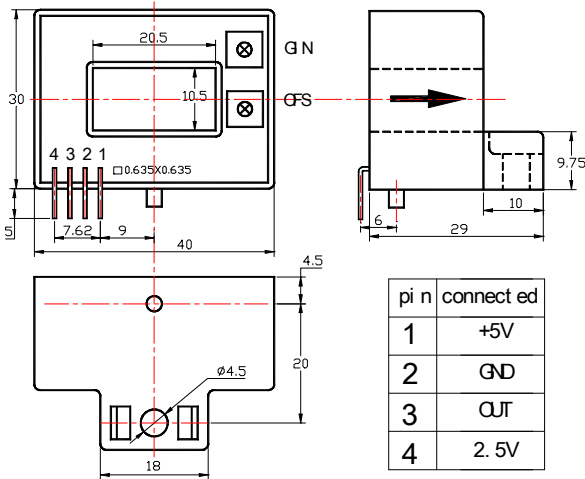
BP2



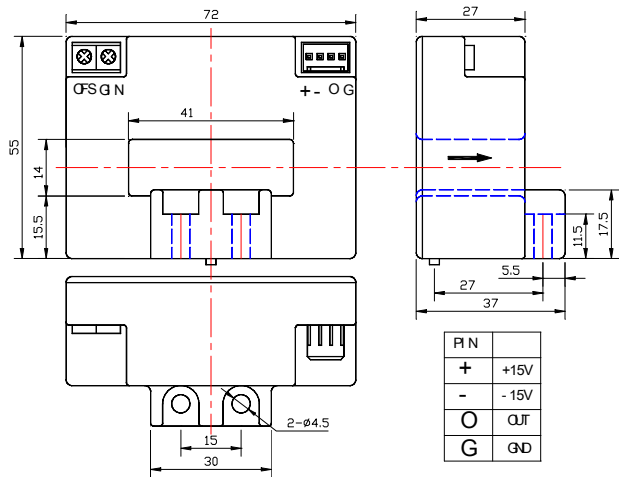
BP1



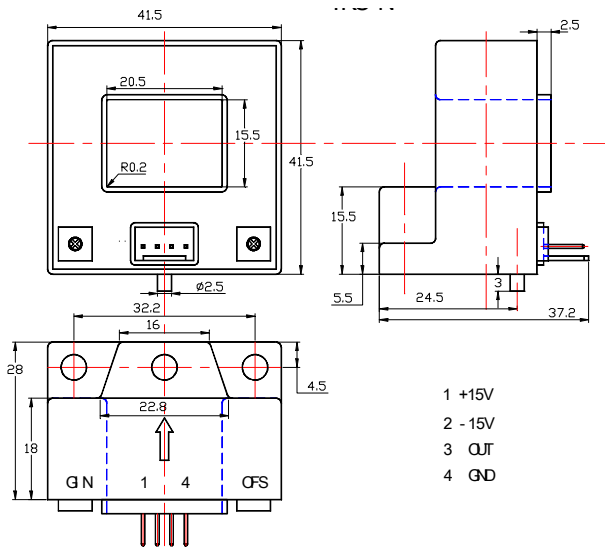
BP5



F



N



K

