

CT6833, CT6833-01 CT6834, CT6834-01

NEW

Product warranty period: 1 years
Guaranteed accuracy period: 1 year

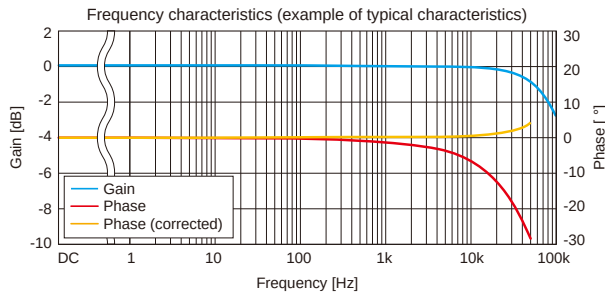
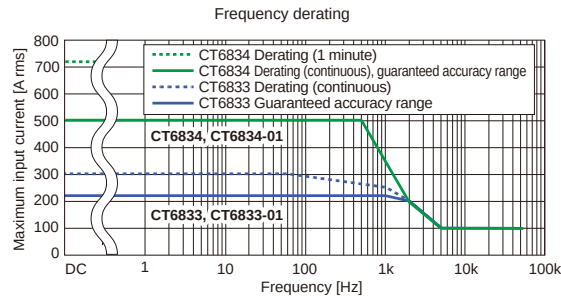
Rated current	CT6833, CT6833-01: AC/DC 200 A, CT6834, CT6834-01: AC/DC 500 A
Frequency band	DC to 50 kHz
Diameter of measurable conductors	Max. ϕ 20 mm (0.79 in.)

Accuracy

Frequency	Amplitude $\pm$ (% of reading + % of full scale)	Phase
DC	$\pm 0.07\% \pm 0.01\%^*$	-
DC < f < 16 Hz	$\pm 0.15\% \pm 0.01\%$	$\pm 0.1^\circ$
16 Hz $\leq$ f $\leq$ 66 Hz	$\pm 0.07\% \pm 0.007\%$	$\pm 0.1^\circ$
66 Hz < f $\leq$ 100 Hz	$\pm 0.07\% \pm 0.007\%$	$\pm 0.15^\circ$
100 Hz < f $\leq$ 500 Hz	$\pm 0.1\% \pm 0.01\%$	$\pm (1.5 \times f)^\circ$
500 Hz < f $\leq$ 1 kHz	$\pm 0.25\% \pm 0.02\%$	$\pm (1.5 \times f)^\circ$
1 kHz < f $\leq$ 20 kHz	$\pm (0.25\% \times f) \pm 0.02\%$	$\pm (1.5 \times f)^\circ$

Combined accuracy with HIOKI power analyzer PW8001, PW6001, PW4001 and PW3390 is specified (DC, 45 Hz $\leq$ f $\leq$ 66 Hz). For details of combined accuracy, refer to the instruction manual.
*DC accuracy after adjusting the offset voltage to ± 0.5 mV or less.
- The values above are when the input is a sine wave or DC, the measurement instrument's input resistance is 1 M Ω $\pm$ 10%, voltage to ground 0 V, no external magnetic fields and the conductor is in the center of the sensor opening.
- Amplitude accuracy and phase accuracy are defined 110% of full scale or less and within the derating curve. DC < f < 10 Hz is a design value. Add $\pm 0.01\%$ of reading to the amplitude accuracy for input from 100% of full scale to 110% of full scale. (CT6833, CT6833-01 only)
- Amplitude accuracy and phase accuracy are rated current value or less and within the derating curve. DC < f < 10 Hz is a design value. (CT6834, CT6834-01 only)

Temperature and humidity range for guaranteed accuracy	23°C $\pm$ 5°C (73.4°F $\pm$ 41°F), 80% RH or less
Effect of temperature	In ranges from -40°C to 18°C (-40°F to 64°F) and 28°C to 85°C (82°F to 185°F) Amplitude sensitivity: ± 4 ppm of reading / °C Offset voltage: ± 3 ppmof full scale / °C
Effect of conductor position	DC: $\pm 0.03\%$ of reading or less 50 Hz, 60 Hz: $\pm 0.04\%$ of reading or less 1 kHz: $\pm 0.1\%$ of reading or less 10 kHz: $\pm 1\%$ of reading or less
Linearity error	± 10 ppm typical
Amplitude error	10 Hz - 100 Hz: ± 50 ppm typical 100 Hz - 500 Hz: $\pm 0.04\%$ typical 500 Hz - 1 kHz: $\pm 0.08\%$ typical 1 kHz - 20 kHz: $\pm (0.1 \times f)$ typical



Output voltage	CT6833, CT6833-01: 10 mV/A CT6834, CT6834-01: 4 mV/A
Measurable conductors	Insulated conductor
Operating temperature and humidity range	Sensor, cable: -40°C to 85°C (-40°F to 185°F), 80% RH or less (no condensation) Relay box: -25°C to 50°C (-13°F to 122°F), 80% RH or less (no condensation)
Storage temperature and humidity range	-25°C to 50°C (-13°F to 122°F), 80% RH or less (no condensation) (sensor and relay box)
Standards	Safety: EN 61010, EMC: EN 61326
Cable length	CT6833: approx. 5 m (16.40 ft.) including relay box CT6833-01: approx. 10 m (32.81 ft.) including relay box
Dimensions	Sensor: approx. 149W $\times$ 46H $\times$ 16.5D mm (approx. 5.87W $\times$ 1.81H $\times$ 0.65D in.) Relay box: approx. 126W $\times$ 57H $\times$ 20.5D mm (approx. 4.96W $\times$ 2.24H $\times$ 0.81D in.)
Weight	CT6833, CT6834: approx. 500 g (17.64 oz.)

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Product warranty period: 3 years
Guaranteed accuracy period: 1 year

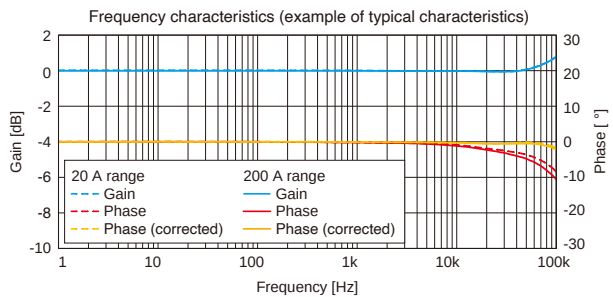
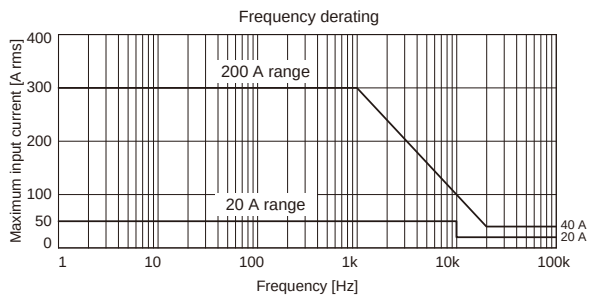
Rated current	20 A AC, 200 A AC (2 ranges)
Frequency band	1 Hz to 100 kHz
Diameter of measurable conductors	ϕ 46 mm or less

Accuracy

Frequency	Amplitude $\pm$ (% of reading + % of full scale)	Phase
1 Hz $\leq$ f < 5 Hz	$\pm 2.0\% \pm 0.10\%$	-
5 Hz $\leq$ f < 10 Hz	$\pm 1.0\% \pm 0.05\%$	$\pm 1.0^\circ$
10 Hz $\leq$ f < 45 Hz	$\pm 0.5\% \pm 0.02\%$	$\pm 0.5^\circ$
45 Hz $\leq$ f $\leq$ 66 Hz	$\pm 0.3\% \pm 0.01\%$	$\pm 0.2^\circ$
66 Hz < f $\leq$ 500 Hz	$\pm 0.5\% \pm 0.02\%$	$\pm 0.5^\circ$
500 Hz < f $\leq$ 1 kHz	$\pm 0.5\% \pm 0.02\%$	$\pm 1.0^\circ$
1 kHz < f $\leq$ 5 kHz	$\pm 1.0\% \pm 0.05\%$	$\pm 2.0^\circ$
5 kHz < f $\leq$ 10 kHz	$\pm 2.5\% \pm 0.10\%$	$\pm 3.0^\circ$
10 kHz < f $\leq$ 20 kHz	$\pm 5\% \pm 0.1\%$	$\pm 5.0^\circ$
20 kHz < f $\leq$ 50 kHz	$\pm 5\% \pm 0.1\%$	$\pm 15.0^\circ$
50 kHz < f $\leq$ 100 kHz	$\pm 30\% \pm 0.1\%$	-

Accuracy is specified by the following conditions:
• Less than or equal to the rated current of each current range
• Within derating range of each current range
The accuracy values above are for within the rated current for each range and inside of derating range. (The values are the values by design: amplitude at under 5 Hz and phase at under 10 Hz)

Temperature and humidity range for guaranteed accuracy	23°C $\pm$ 5°C (73°F $\pm$ 9°F), 80% RH or less
Effect of temperature	Amplitude sensitivity: $\pm 0.03\%$ of reading / °C



Output voltage	20 A range: 100 mV/A (= 2 V / 20 A) 200 A range: 10 mV/A (= 2 V / 200 A)
Operating temperature and humidity range	0°C to 50°C (32°F to 122°F), 80% RH or less (no condensation)
Storage temperature and humidity range	-10°C to 60°C (14°F to 140°F), 80% RH or less (no condensation)
Maximum rated voltage to ground	600 V AC CAT III (50/60 Hz) Anticipated transient overvoltage: 6000 V
Standards	Safety: EN 61010, EMC: EN 61326 Class A
Cable length	3 m (9.84 ft.)
Dimensions	78 mm (3.07 in.) W $\times$ 188 mm (7.40 in.) H $\times$ 35 mm (1.38 in.) D (excluding protruding parts and cables)
Weight	Approx. 450 g (15.9 oz.)