

RoHS compliant



FEATURES

- Clamp-on type (split core design)
Easy installation to distribution panels
- Compact size and wide measuring range
- Outstanding output linearity at all current ranges
- Direct interface
- Overvoltage protection (zener diode)
- UL94 V-0 flame rating

APPLICATIONS

- To measure or monitor current or power consumption in smart energy systems such as:
 - HEMS (Home Energy Management System)
 - BEMS (Building Energy Management System)
 - Various power monitoring systems

PART NUMBER DESIGNATION

C - CT		- 6	
Series Name		Hole Diameter	
		6: ϕ 6 mm	10: ϕ 10 mm
		16: ϕ 16 mm	24: ϕ 24 mm

LIST OF MODEL NUMBER

Part Number	Rated Primary Current	Max. Input Current	Output characteristic Example	Size and Weight
C-CT-6	AC 0.1 ~ 30 A (50/60 Hz)	AC 50 Arms continuous	AC 100 mV $\pm$ 1 % (AC30 A RL=10 Ω 50/60 Hz)	19.3×26.4×31 mm, Approx. 20 gs
C-CT-10	AC 0.1 ~ 60 A (50/60 Hz)	AC 100 Arms continuous	AC 200 mV $\pm$ 1 % (AC60 A RL=10 Ω 50/60 Hz)	26.4×25.5×43.3 mm, Approx. 40 gs
C-CT-16	AC 0.1 ~ 100 A (50/60 Hz)	AC 200 Arms continuous	AC 333 mV $\pm$ 1 % (AC100 A RL=10 Ω 50/60 Hz)	32.5×30.5×46.2 mm, Approx. 75 gs
C-CT-24	AC 0.1 ~ 200 A (50/60 Hz)	AC 300 Arms continuous	AC 666 mV $\pm$ 1 % (AC200 A RL=10 Ω 50/60 Hz)	48.4×35.5×69.6 mm, Approx. 170 gs

SPECIFICATIONS

Part Number	C-CT-6	C-CT-10	C-CT-16	C-CT-24
Rated Primary Current	AC 0.1 ~ 30 A (50/60 Hz)	AC 0.1 ~ 60 A (50/60 Hz)	AC 0.1 ~ 100 A (50/60 Hz)	AC 0.1 ~ 200 A (50/60 Hz)
Max. Input Current	AC 50 Arms continuous	AC 100 Arms continuous	AC 200 Arms continuous	AC 300 Arms continuous
Output characteristic Example	AC 100 mV±1 % (AC30 A RL=10 Ω 50/60 Hz)	AC 200 mV±1 % (AC60 A RL=10 Ω 50/60 Hz)	AC 333.3 mV±1 % (AC100 A RL=10 Ω 50/60 Hz)	AC 666.6 mV±1 % (AC200 A RL=10 Ω 50/60 Hz)
Phase Accuracy	+2.5°±0.5° (AC30 A RL=10 Ω 50 Hz) +2.1°±0.5° (AC30 A RL=10 Ω 60 Hz)	+1.6°±0.5° (AC60 A RL=10 Ω 50 Hz) +1.3°±0.5° (AC60 A RL=10 Ω 60 Hz)	+0.9°±0.5° (AC100 A RL=10 Ω 50/60 Hz)	+0.3°±0.5° (AC200 A RL=10 Ω 50/60 Hz)
Hole Diameter	φ 6 mm	φ 10 mm	φ 16 mm	φ 24 mm
Nominal Current Ratio	3000 : 1			
Applicable Frequency	10 Hz~5 kHz			
Max. Circuit Voltage	Less than AC600 V (for insulated cable)			
Withstanding Voltage	AC 2200 V/1 minute (between output terminal and outer case)			
Insulation Resistance	More than 50 MΩ by 500 V insulation tester (between output terminal and outer case)			
Open Circuit Protection	7.5 V (Zener diode)			
Operational Temperature	-20 ~ 60 °C, less than 80 %RH Without condensation			
Storage Temperature	-30 ~ 60 °C, less than 80 %RH Without condensation			
Flame Rating	UL94 V-0			
Output Cable lead	AWG24 Approx. L=200 mm	AWG22 Approx. L=150 mm		
Size and Weight	19.3×26.4×31 mm Approx. 20 gs	26.4×25.5×43.3 mm Approx. 40 gs	32.5×30.5×46.2 mm Approx. 75 gs	48.4×35.5×69.6 mm Approx. 170 gs

PACKAGING SPECIFICATIONS

- Bulk Packing specifications
Individually packaged in a plastic bag (1pc per bag),
it can order from 1pc.

Mouser Electronics

Authorized Distributor

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Nidec:

[C-CT-10](#) [C-CT-16](#) [C-CT-24](#) [C-CT-6](#)