

Precision Purpose CTL-Z series

Medium size enlarged capacity AC current sensor for precise measurement for both of PCB and panel mounting



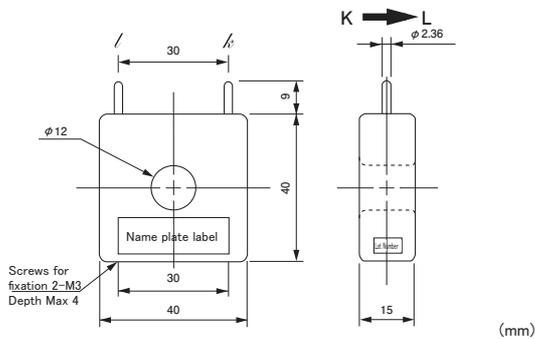
Model CTL-12-S30-20Z

[Features]

- Enlarged capacity model for primary current 1mA~200A with more secondary winding wire turn of medium size standard model (CTL-12-S30-10Z) of $\phi 12$ aperture diameter for precise measurement
- Possible to interface to electrical circuit directly with high current ratio of 2000:1
- Robust structure with output terminal of round pins ($\phi 2.36 \times 9\text{L}$). Possible to correspond to soldering to wire, and connector set, sold separately
- Prepared mounting bracket sold separately (HLD-12) for panel mounting

AC current sensor

[Outline drawing]



[Specification] Ta=25°C

Model	CTL-12-S30-20Z
Primary current	1mA ~ 200Arms (50 / 60Hz)、 $R_L \leq 10 \Omega$
Maximum primary current	320Arms continuous
Saturation limited current	240Arms (50 / 60Hz)、 $R_L \leq 1 \Omega$
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	2000 ± 4 turn
Secondary windings resistance	68 Ω (reference)
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output terminal in a lump)
Insulation resistance	DC500V, ≥100MΩ (between aperture and output terminal in a lump)
Operating temperature	-20°C ~ +75°C, ≤80%RH, no condensation
Storage temperature	-30°C ~ +90°C, ≤80%RH, no condensation
Structure	PBT plastic case, potted by epoxy on one side
Output terminal	φ 2.36X9L (round pins), tin plating
Screw torque	0.3N · m
Mass	approximately 57g

Remark (1) Output voltage is changed by the penetrated current/load resistor/[K] characteristic and so on. Please set up the condition for use with careful investigation of each characteristic

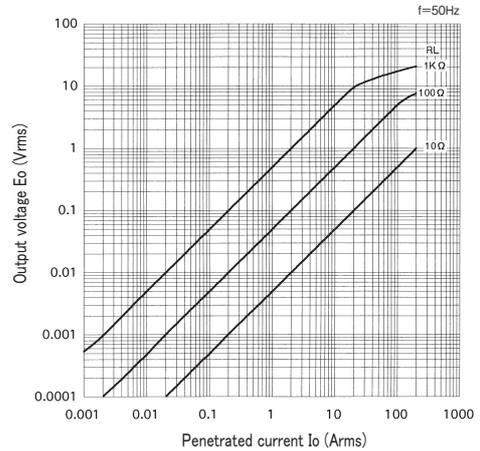
(2) Please use with enough margin if the range of coupling efficiency [K] ≤ 0.9, because it is the range to happen the individual difference.

(3) Opening the secondary during turn ON is hazardous and the cause of failure, because of generating high voltage

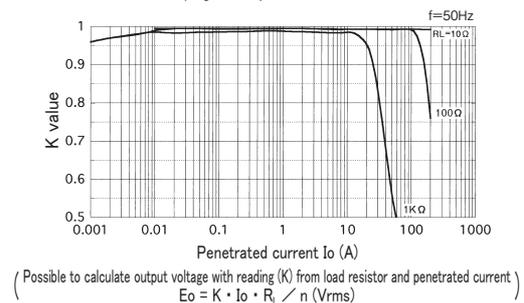
(4) Please be careful of CT heating in case to use with high frequency, although this CT is basically used at 50/60Hz.

(5) Please refer Appendix-1 accessories list for accessories

[Output voltage characteristics]



[Coupling efficiency (K) characteristics]



[Frequency characteristics]

