

Medium size large output AC current sensor for both of PCB and panel mounting

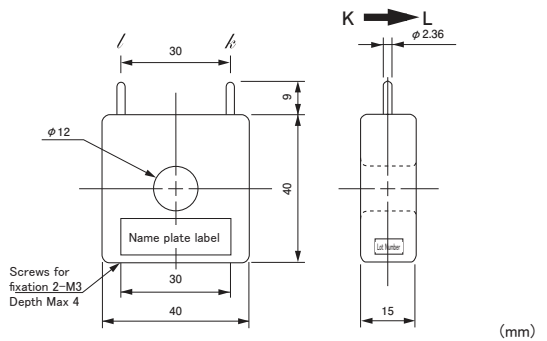


Model CTL-12-S56-20

[Features]

- The highest model of standard model (CTL-12 series) of $\phi 12$ aperture diameter
- Enlarged capacity model for primary current 320A max and saturated current 800A with wider section of core, and current ratio of 2000:1
- Possible to interface to electrical circuit directly by small secondary current with high current ratio of 2000:1
- Output terminal of round pins ($\phi 2.36 \times 9\phi$) and robust structure. Possible to correspond to soldering to wire and connector set sold separately
- Prepared mounting bracket sold separately (HLD-12) for panel mounting

[Outline drawing]

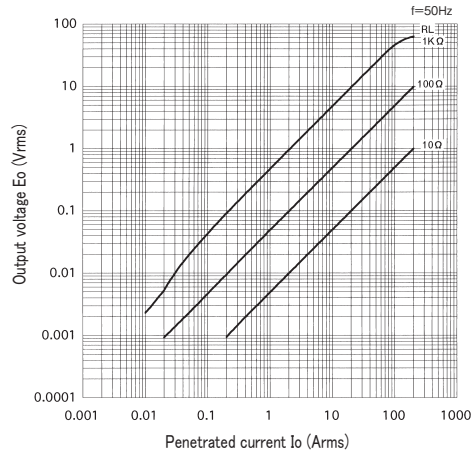


[Specification] Ta=25°C

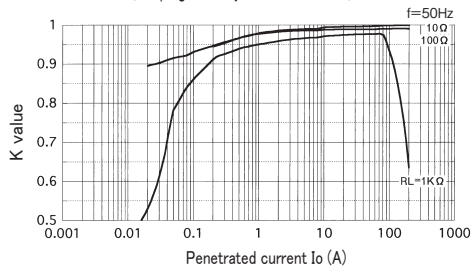
Model	CTL-12-S56-20
Primary current	0.1 ~ 320Arms (50 / 60Hz)、 $R_L \leq 10 \Omega$
Maximum primary current	260Arms continuous
Saturation limited current	800Arms (50 / 60Hz)、 $R_L \leq 1 \Omega$
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	2000 ± 2 turn
Secondary windings resistance	118 Ω (reference)
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output terminal in a lump)
Insulation resistance	DC500V, $\geq 100M\Omega$ (between aperture and output terminal in a lump)
Operating temperature	-20°C ~ +75°C, $\leq 80\%RH$, no condensation
Storage temperature	-30°C ~ +90°C, $\leq 80\%RH$, no condensation
Structure	PBT plastic case, potted by epoxy on one side
Output terminal	$\phi 2.36 \times 9\phi$ (round pins), tin plating
Screw torque	0.3N · m
Mass	approximately 70g

- 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 surely ask to our technical consulting service, if the power measurement is thought.
- (5) Please be careful of CT heating in case to use with high frequency, although this CT is basically used at 50/60Hz.
- (6) Please refer Appendix-1 accessories list for accessories

[Output voltage characteristics]



[Coupling efficiency (K) characteristics]



(Possible to calculate output voltage with reading (K) from load resistor and penetrated current)
 $E_o = K \cdot I_o \cdot R_L / n$ (Vrms)

[Frequency characteristics]

