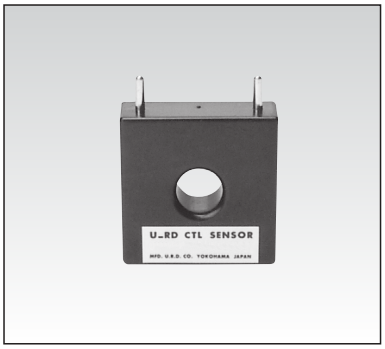
Precision Purpose CTL-Z series

Medium size high accuracy AC current sensor for precise measurement for both of PCB and panel mounting

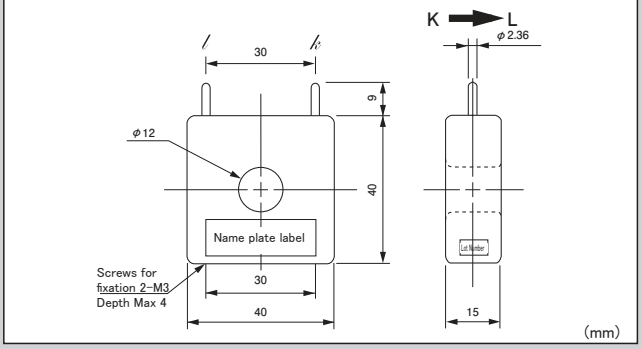


Model CTL-12-S60-7Z

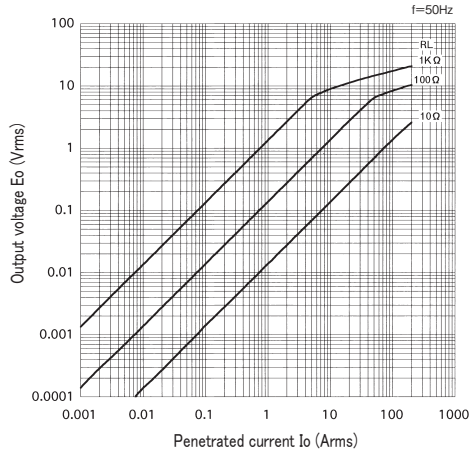
〔Features〕

- Dimension and shape compatible model with medium size standard model (CTL-12-S30-10Z) of ϕ12 aperture diameter for precise measurement
- Covering the wide range of 0.5mA~100A with enlarged core section
- Possible to interface to electrical circuit directly by small secondary current with high current ratio of 720:1
- Robust structure with output terminal of round pins (ϕ2.36X9ℓ). Possible to correspond to soldering to wire, and connector set, sold separately
- Prepared mounting bracket sold separately (HLD-12) for panel mounting

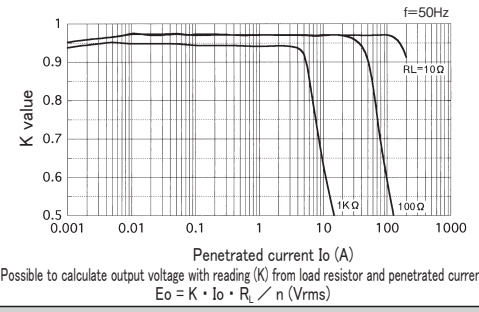
〔Outline drawing〕



〔Output voltage characteristics〕

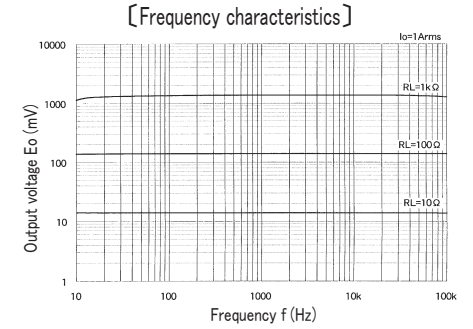


〔Coupling efficiency (K) characteristics〕



(Possible to calculate output voltage with reading (K) from load resistor and penetrated current
Eo = K・Io・R_L ／ n (Vrms))

〔Frequency characteristics〕



〔Specification〕 Ta=25℃

Model	CTL-12-S60-7Z
Primary current	0.5mA ～ 100Arms (50 ／ 60Hz)、R_L≦10Ω
Maximum primary current	230Arms continuous
Saturation limited current	200Arms (50 ／ 60Hz)、R_L≦1Ω
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)	719±2 turn
Secondary windings resistance	19Ω (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℃～ +75℃ , ≦80%RH, no condensation
Storage temperature	-30℃～ +90℃ , ≦80%RH, no condensation
Structure	PBT plastic case, potted by epoxy on one side
Output terminal	ϕ2.36X9ℓ (round pins), tin plating
Screw torque	0.3N・m
Mass	approximately 75g

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

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