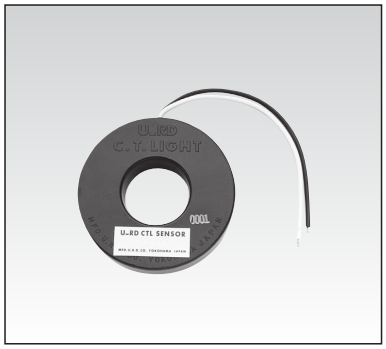
Precision Purpose CTL-Z series

Medium size enlarged capacity AC current sensor for precise measurement with large aperture and output wire type

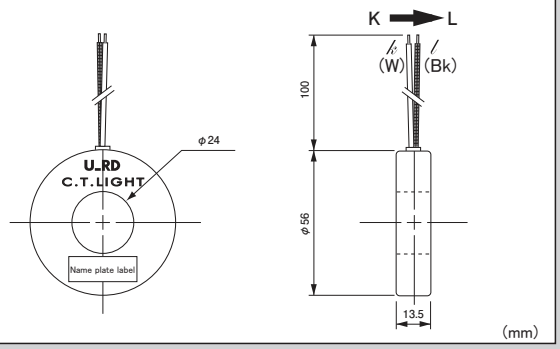


Model CTL-24-S28-20Z

〔Features〕

- Enlarged capacity model for primary current from 1mA to 280A with more secondary winding wire turn of standard model (CTL-24-S28-10Z) of large aperture of φ24 aperture diameter for precise measurement
- Possible to interface to electrical circuit directly by small secondary current with high current ratio of 2000:1
- Output wire (0.3m㎡×100ℓ)。
- Prepared mounting bracket sold separately (HLD-24) for panel mounting

〔Outline drawing〕

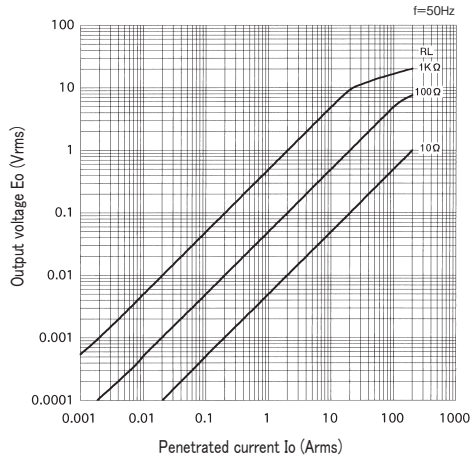


〔Specification〕 Ta=25℃

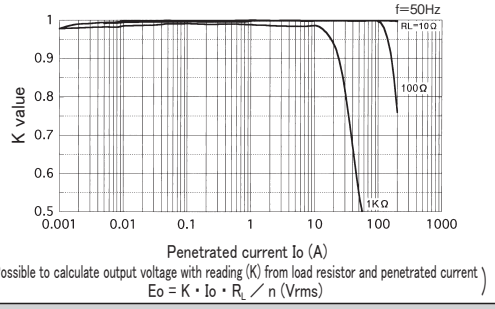
Model	CTL-24-S28-20Z
Primary current	1mA ～ 280Arms (50 ／ 60Hz)、RL≦10Ω
Maximum primary current	360Arms continuous
Saturation limited current	250Arms (50 ／ 60Hz)、RL≦1Ω
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	2000±2 turn
Secondary windings resistance	62Ω (reference)
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output wire in a lump)
Insulation resistance	DC500V, ≧100MΩ (between aperture and output wire in a lump)
Operating temperature	-20℃～ +75℃ , ≦80%RH, no condensation
Storage temperature	-30℃～ +90℃ , ≦80%RH, no condensation
Structure	Polycarbonate plastic case, potted by epoxy
Output wire	PVC Vinyl isolated wire (0.3mm^2×100ℓ)
Mass	approximately 62g

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〕

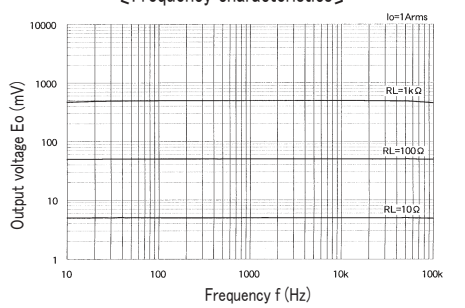


〔Coupling efficiency (K) characteristics〕



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

〔Frequency characteristics〕



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