

Precision Purpose CTL-Z series

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

AC current sensor

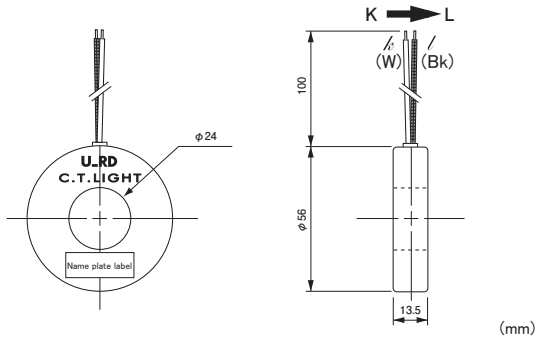


Model CTL-24-S28-20Z

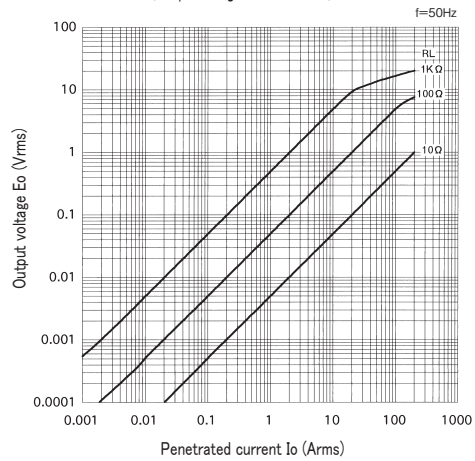
[Features]

- 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 $\phi 24$ 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 ($0.3\text{mm}^2 \times 100\ell$).
- Prepared mounting bracket sold separately (HLD-24) for panel mounting

[Outline drawing]



[Output voltage characteristics]

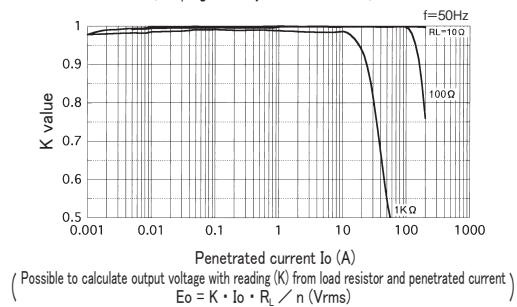


[Specification] Ta=25°C

Model	CTL-24-S28-20Z
Primary current	1mA ~ 280Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	360Arms continuous
Saturation limited current	250Arms (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	62Ω (reference)
Withstand voltage	AC2000V(50/60Hz), 1min(between aperture and output wire in a lump)
Insulation resistance	DC500V, $\geq 100M\Omega$ (between aperture and output wire 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	Polycarbonate plastic case, potted by epoxy
Output wire	PVC Vinyl isolated wire ($0.3\text{mm}^2 \times 100\ell$)
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

[Coupling efficiency (K) characteristics]



[Frequency characteristics]

