

# Precision Purpose CTL-Z series

## Small standard AC current sensor for precise measurement for panel mounting

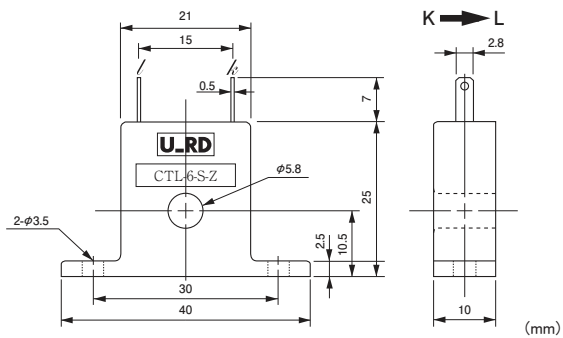


Model CTL-6-S-Z

### [Features]

- Small size standard current sensor for precise measurement (panel mounting type)
- Covering the wide range of 1mA~20A with adoption of permalloy core of high magnetic permeability
- Possible to interface with electrical circuit directly by 800:1 high current ratio
- #110 standard tab for output terminal. Possible to correspond to soldering to PCB and wire

### [Outline drawing]

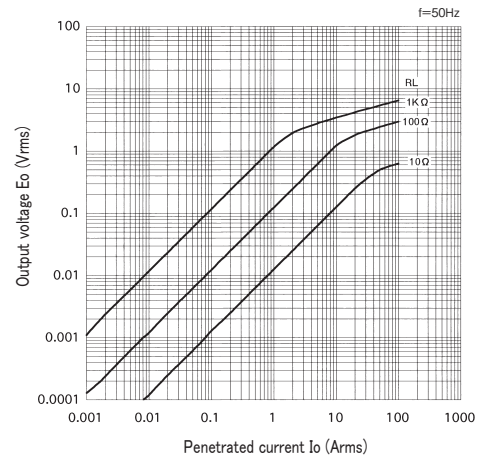


### [Specification] Ta=25°C

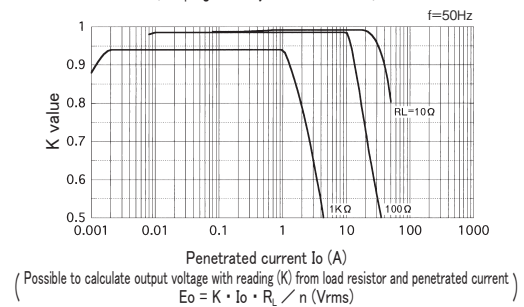
Model	CTL-6-S-Z
Primary current	1mA ~ 20Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	80Arms continuous
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	800 ± 2 turn
Secondary windings resistance	39Ω (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	#110 faston terminal, tin plating
Screw torque	0.3N · m
Mass	approximately 13g

- 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]

