

# General Purpose CTL series

## Small size standard AC current sensor for PCB or Panel mounting

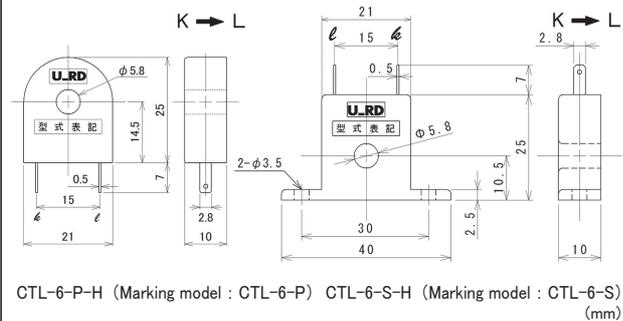


Model CTL-6-P-H · CTL-6-S-H

### [Features]

- Generic type for general industrial machine such as heater, motor, and so on. Best seller model more than 1 million cumulative production. (PCB or Panel mounting type)
- Covering the wide range of 0.1A~80A, though small product as aperture diameter  $\phi 5.8$  and mass approximately 12g.
- 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]

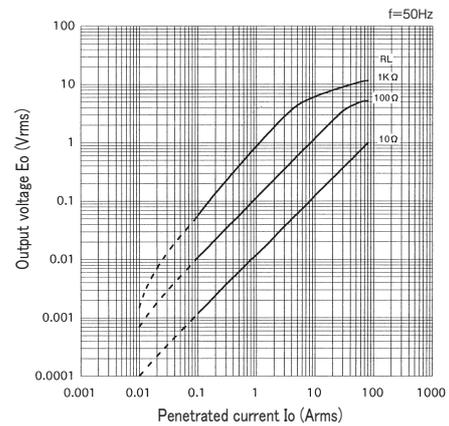


### [Specification] $T_a=25^\circ\text{C}$

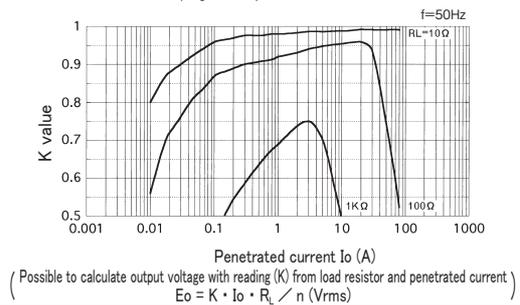
Model	CTL-6-P-H·CTL-6-S-H
Primary current	0.1 ~ 80Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	80Arms continuous
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	$800 \pm 2$ turn
Secondary windings resistance	$39\Omega$ (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	$-20^\circ\text{C} \sim +75^\circ\text{C}$ , $\leq 80\%RH$ , no condensation
Storage temperature	$-30^\circ\text{C} \sim +90^\circ\text{C}$ , $\leq 80\%RH$ , no condensation
Structure	PBT plastic case, potted by epoxy on one side
Output terminal	#110 faston terminal, tin plating
Mass	approximately 12g(CTL-6-P-H), 13g(CTL-6-S-H)

- 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  $[K] \leq 0.9$ , 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) Refer Appendix-1 accessories list for accessories

### [Output voltage characteristics]



### [Coupling efficiency (K) characteristics]



### [Frequency characteristics]

