

## Medium size standard AC current sensor with large aperture and output wire type

AC current sensor

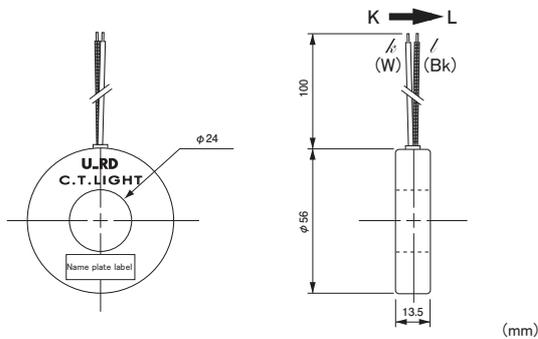


**Model** CTL-24-TE#B

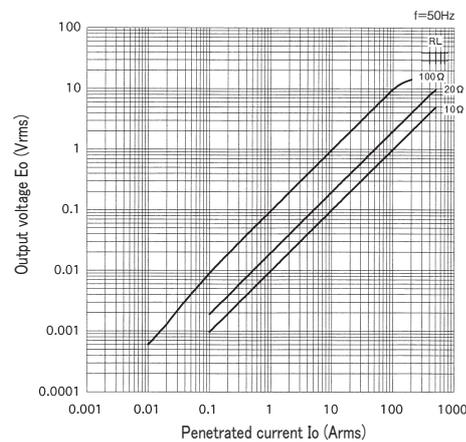
**[Features]**

- Enlarged capacity model compatible specification of turns with standard model (CTL-24-TE) of  $\phi 24$  aperture diameter
- The highest model of this class with primary current 500A max
- Possible to interface to electrical circuit directly by small secondary current with high current ratio of 1000:1
- Output wire (0.3mm<sup>2</sup> × 100 $\Omega$ ).
- Prepared mounting bracket sold separately (HLD-24) for panel mounting

**[Outline drawing]**



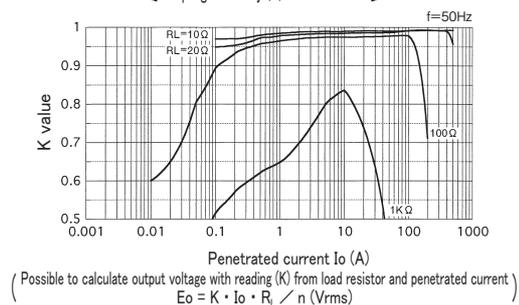
**[Output voltage characteristics]**



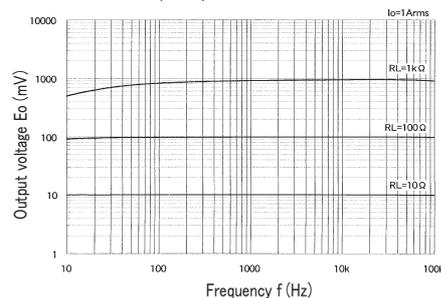
**[Specification] Ta=25°C**

Model	CTL-24-TE#B
Primary current	0.1 ~ 500Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	400Arms continuous
Saturation limited current	1000Arms (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)	1000 ± 2 turn
Secondary windings resistance	10.4 $\Omega$ (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 (0.3mm <sup>2</sup> × 100 $\Omega$ )
Mass	approximately 71g

**[Coupling efficiency (K) characteristics]**



**[Frequency characteristics]**



- 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) Please refer Appendix-1 accessories list for accessories