

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

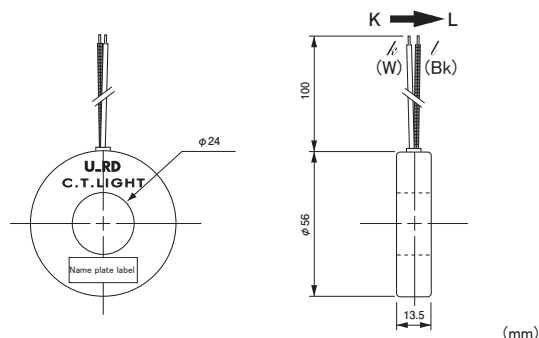


Model CTL-24-TE#B

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

### [Outline drawing]

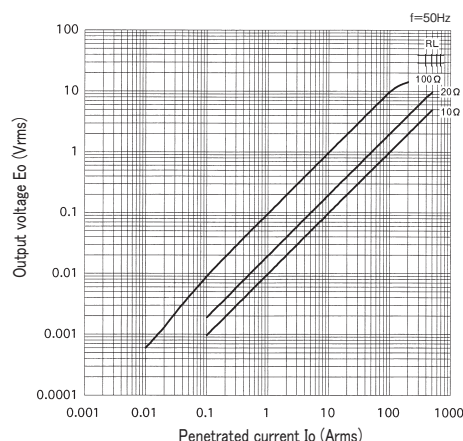


### [Specification] $T_a=25^\circ\text{C}$

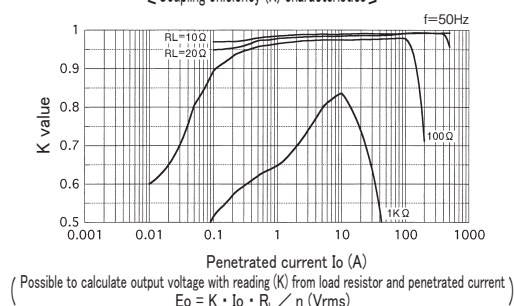
Model	CTL-24-TE#B
Primary current	0.1 ~ 500Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	400Arms continuous
Saturation limited current	1000Arms (50 / 60Hz)、 $R_L \leq 1\Omega$
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	$1000 \pm 2$ 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	$-20^\circ\text{C} \sim +75^\circ\text{C}$ , $\leq 80\%\text{RH}$ , no condensation
Storage temperature	$-30^\circ\text{C} \sim +90^\circ\text{C}$ , $\leq 80\%\text{RH}$ , 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 71g

- 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

### [Output voltage characteristics]



### [Coupling efficiency (K) characteristics]



### [Frequency characteristics]

