

# Precision Purpose CTL-Z series

## Large size enlarged capacity AC current sensor for precise measurement with large aperture and terminal type

AC current sensor

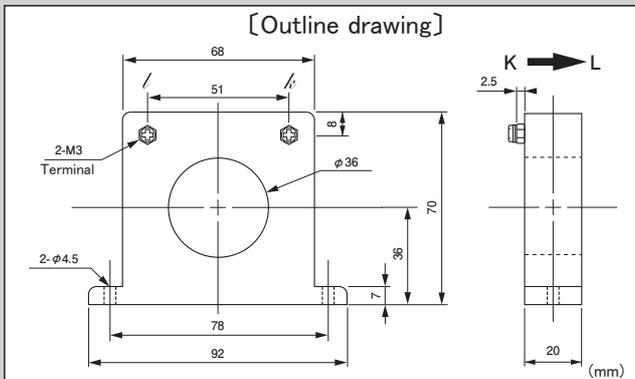


**Model** CTL-36-S50-20Z

**[Features]**

- Enlarged capacity model for primary current from 1mA to 400A with more secondary winding wire turn of standard model (CTL-36-S50-10Z) of large aperture of  $\phi 36$  aperture diameter for precise measurement
- Possible to interface to electrical circuit directly by small secondary current with high current ratio of 2000:1
- Output: M3-screw terminal, Mounting holes: 2- $\phi 4.5$ , robust structure suitable for installation into large panel

**[Outline drawing]**



**[Specification] Ta=25°C**

Model	CTL-36-S50-20Z
Primary current	1mA ~ 400Arms (50 / 60Hz)、 $R_L \leq 10\Omega$
Maximum primary current	500Arms 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)	2000 ± 2 turn
Secondary windings resistance	49 Ω (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°C ~ +75°C, $\leq 80\%RH$ , no condensation
Storage temperature	-30°C ~ +90°C, $\leq 80\%RH$ , no condensation
Structure	ABS plastic case, potted by epoxy on one side
Output wire	M3X5L (BS screw terminal)
Screw torque	M4 : 0.7N · m、M3 : 0.3N · m
Mass	approximately 170g

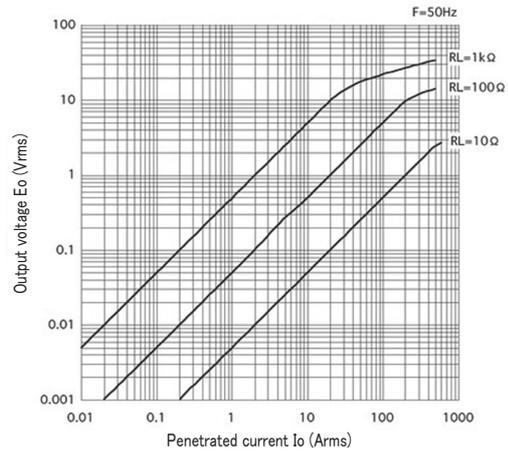
Remark (1) In the contents of product specification, inspection, and so on, it is based on the measurement in conditions of standard temperature, humidity, and no abnormality and no vibration, in the case of no special description. It is not guarantee all specifications in the operating temperature and all condition range.

(2) Impossible to use in outdoor exposure

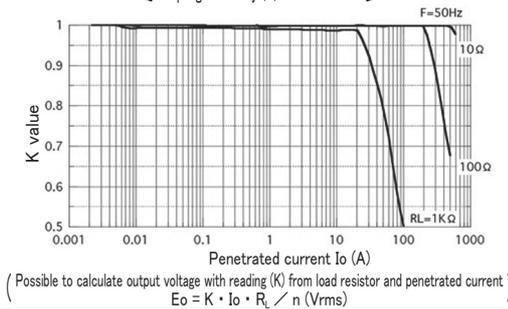
(3) Opening the secondary during turn ON is hazardous and the cause of failure, because of generating high voltage

(4) Please be careful of CT heating in case to use with high frequency, although this CT is basically used at 50/60Hz.

**[Output voltage characteristics]**



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



**[Frequency characteristics]**

