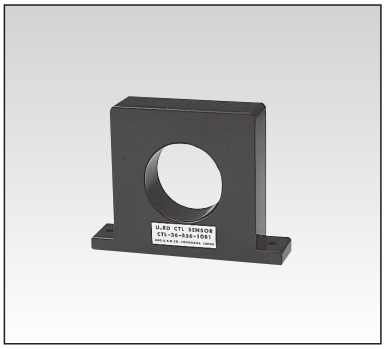
Large size standard AC current sensor with large aperture for panel mounting

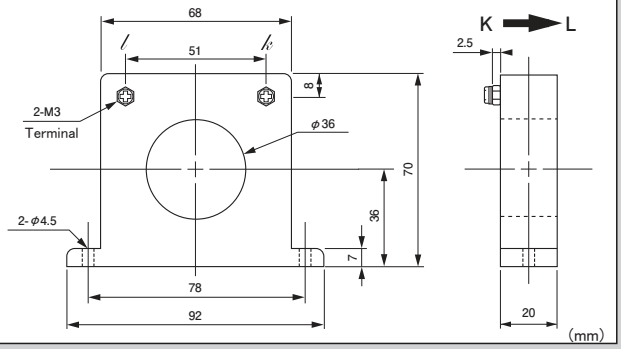


Model CTL-36-S56-10B1

〔Features〕

- ●Large aperture of ϕ36 aperture diameter. Large size standard current sensor
- ●The highest model of CTL generic series for general measurement with primary current 800A max
- ●Possible to interface to electrical circuit directly by small secondary current with high current ratio of 1000:1
- ●Output: M3-screw terminal, Mounting holes: 2-ϕ4.5, robust structure suitable for installation into large panel

〔Outline drawing〕



〔Specification〕 Ta=25℃

Model	CTL-36-S56-10B1
Primary current	0.1 ～ 800Arms （50 ／ 60Hz）、R_L≦10Ω
Maximum primary current	600Arms continuous
Saturation limited current	2000Arms （50 ／ 60Hz）、R_L≦1Ω
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	8.6Ω （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℃～ +75℃ , ≦80%RH, no condensation
Storage temperature	-30℃～ +90℃ , ≦80%RH, no condensation
Structure	ABS plastic case, potted by epoxy on one side
Output terminal	M3X5ℓ (BS screw terminal)
Screw torque	M4 : 0.7N・m、M3 : 0.3N・m
Mass	approximately 180g

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

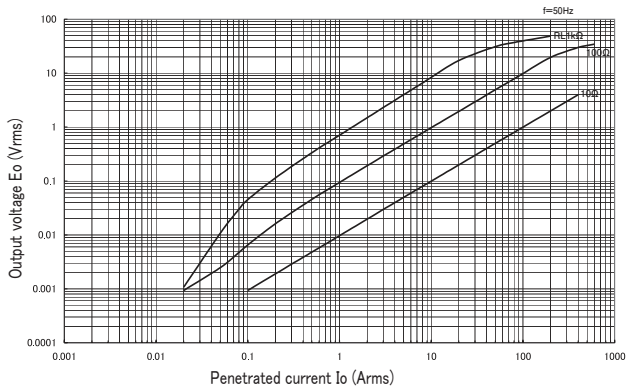
(2) Please use with enough margin if the range of coupling efficiency [K] ≦ 0.9, because it is the range to happen the individual difference.

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

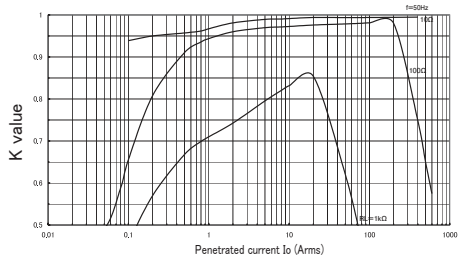
(4) Please surely ask to our technical consulting service, if the power measurement is thought.

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

〔Output voltage characteristics〕

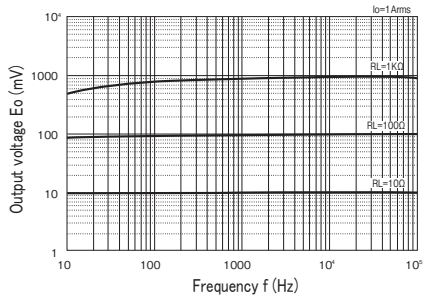


〔Coupling efficiency (K) characteristics〕



(Possible to calculate output voltage with reading (K) from load resistor and penetrated current)
Eo = K・Io・R_L ／ n (Vrms)

〔Frequency characteristics〕



2016.7