

φ 12, miniaturized AC current sensor of wire type for output

AC current sensor

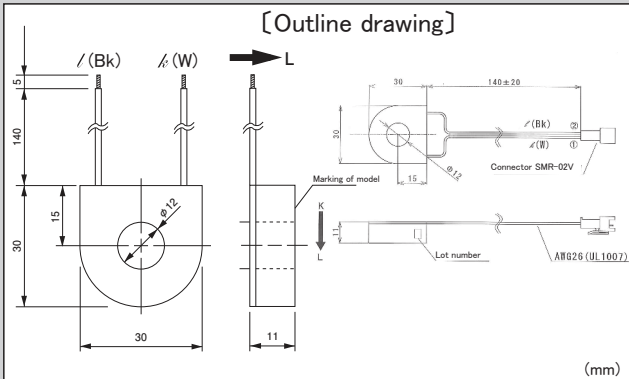


Model CTL-12L-30 · CTL-12L-1

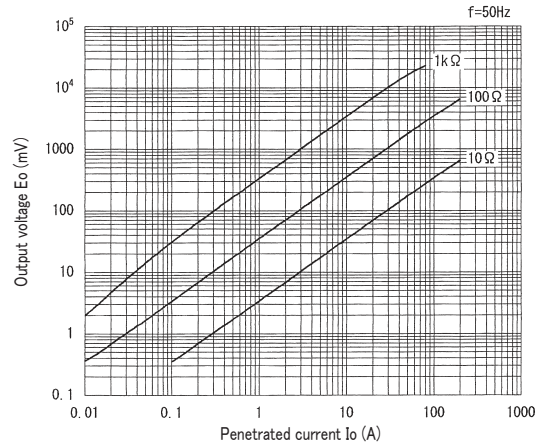
[Features]

- Enlarged primary current 180A max with high current ratio of 3000:1
- Miniaturized design as slimmed outline and mass, with keeping φ 12 for aperture diameter
- Wire type for output, and easy for assembling with any connector or extended wire (CTL-12L-1 is the connector type.)
- Possible to correspond to structure of pin terminal for PCB mounting

[Outline drawing]



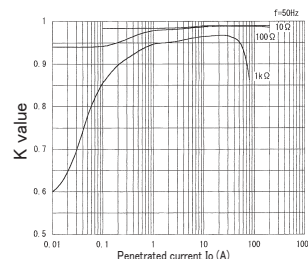
[Output voltage characteristics]



[Specification] Ta=25°C

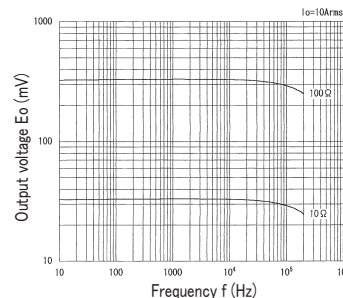
Model	CTL-12L-30·CTL-12L-1
Primary current	0.1 ~ 180Arms (50 / 60Hz)、 $R_L \leq 10 \Omega$
Maximum primary current	200Arms continuous
Output characteristics	Refer "Output voltage characteristics"
Linearity	Refer "Coupling efficiency [K] characteristics" (Use the flat range of [K] characteristic in the application as the linear sensor)
Secondary windings (n)	3000 ± 2 turn
Secondary windings resistance	210 Ω (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	PBT plastic case
Output wire	UL1007 Vinyl wire(AWG26X140L)
Output connector	Pin contact : SYM-001T-P0.6 Receptacle housing : SMR-02V-B (JST) ※Only for CTL-12L-1
Mating connector	Socket contact : SHF-001T-0.8BS Plug housing : SMP-02V-BC、NC (JST) (Not included)
Mass	approximately 20g

[Coupling efficiency (K) characteristics]



(Possible to calculate output voltage with reading (K) from load resistor and penetrated current)
 $E_o = K \cdot I_o \cdot R_L / n (V_{rms})$

[Frequency characteristics]



- Remark**
- (1) Free direction for setting. Fastening with plastic band, if fixing.
 - (2) Opening the secondary during turn ON is hazardous and the cause of failure, because of generating high voltage
 - (3) Please surely ask to our technical consulting service, if the power measurement is thought.
 - (4) Please be careful of CT heating in case to use with high frequency, although this CT is basically used at 50/60Hz.