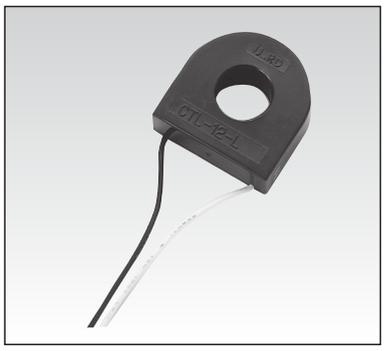
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# General Purpose CTL series

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

AC current sensor

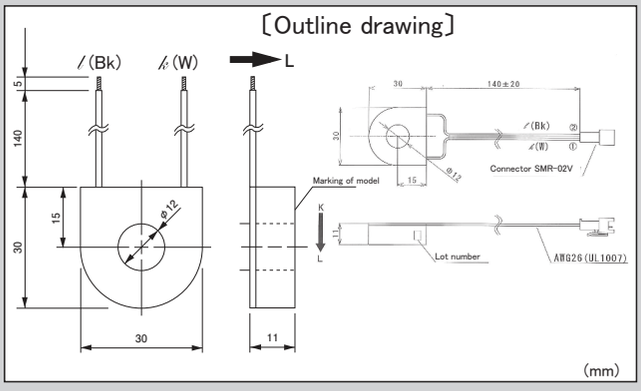



**Model** CTL-12L-30・CTL-12L-1

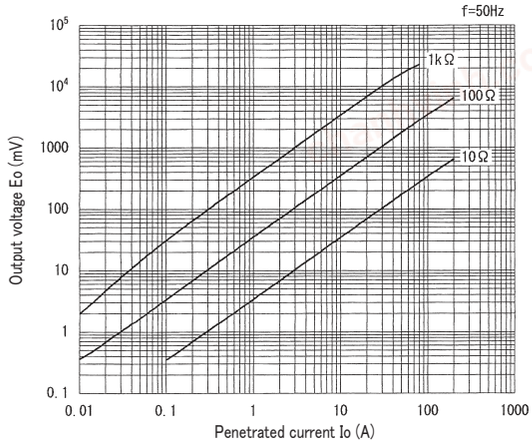
〔Features〕

- Enlarged primary current 180A max with high current ratio of 3000:1
- Miniaturized design as slimmed outline and mass, with keeping ϕ12 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

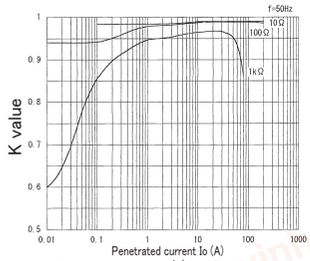
〔Outline drawing〕




〔Output voltage characteristics〕

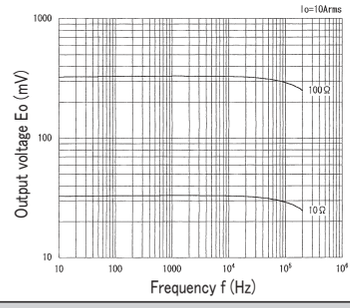



〔Coupling efficiency (K) characteristics〕




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

〔Frequency characteristics〕




〔Specification〕 Ta=25℃

| | |
|---|---|
| Model | CTL-12L-30・CTL-12L-1 |
| Primary current | 0.1 ～ 180Arms (50 ／ 60Hz)、$R_L$≦10Ω |
| 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 | 210Ω (reference) |
| Withstand voltage | AC2000V(50/60Hz), 1min(between aperture and output wire in a lump) |
| Insulation resistance | DC500V, ≧100MΩ (between aperture and output wire in a lump) |
| Operating temperature | -20℃～ +75℃ , ≦80%RH, no condensation |
| Storage temperature | -30℃～ +90℃ , ≦80%RH, no condensation |
| Structure | PBT plastic case |
| Output wire | UL1007 Vinyl wire(AWG26X140ℓ) |
| Output connector | Pin contact : SYM-001T-P0.6<br>Receptacle housing : SMR-02V-B<br>(JST) ※Only for CTL-12L-1 |
| Mating connector | Socket contact : SHF-001T-0.8BS<br>Plug housing : SMP-02V-BC、NC<br>(JST) (Not included) |
| Mass | approximately 20g |

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.

2017.11

Attention: Our products are designed and manufacrured only for industrial application. It is not for the application for medical, nuclear facilities, life line (mass transportation, weapon, and so on), airplane, and space satelite, with high level safety and reliability.