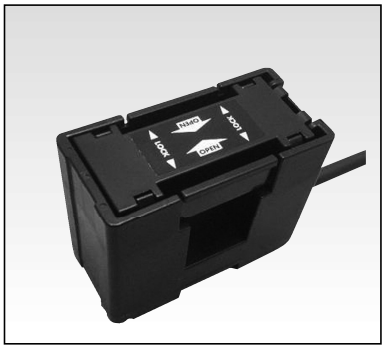
Split core clamp type sensor

Small Clamp type AC current sensor (ϕ 18 ／ 150Arms)

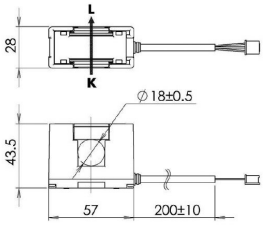


Model CTU-18-CLS

〔Features〕

- ●Compact design with setting clamp structure inside of frame
- ●Using wire with sheath for output wire
- ●Possible for voltage output of 500mV/100A with internal load resistor (In case not to use internal resistor, it functions as normal CT. Please connect external resistor.)。
- ●Good linearity until small current range of 10mA
- ●Decreasing influence of external magnetic field with double coils structure (Compared with CTL-10-CLS)
- ●Build in over voltage clamp device
- ●Suitable model for AC measurement with vinyl isolated wire below 18mm of finished outline
- ●Possible to correspond to OEM to match to the customer needs (Please ask separately)

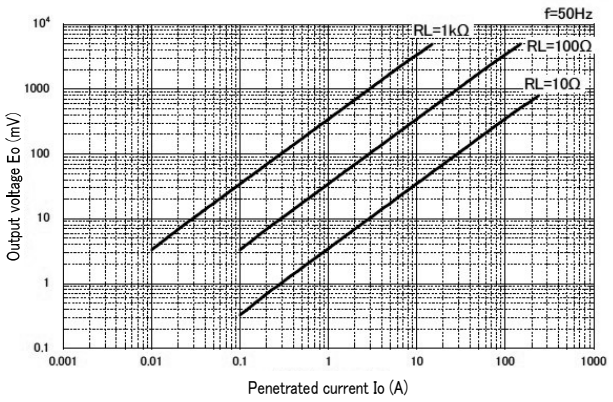
〔Outline drawing〕



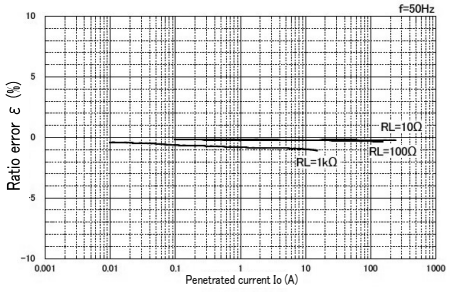
Connector PIN No.	Assignment
1	RL/Internal load resistor (RLi)
2	k/CT(k) output
3	l/CT(l) output

(mm)

〔Output voltage characteristics〕



〔Ratio error characteristics〕

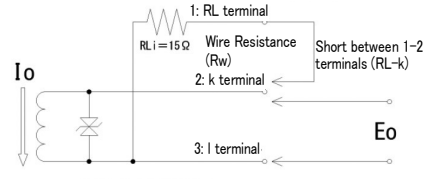


〔Specification〕 Ta=25℃

Model		CTU-18-CLS
Primary current		1mA ～ 150Arms （50 ／ 60Hz)、RL≦10Ω
Maximum primary current		250Arms continuous
Output characteristic	External RL (100A nominal)	500mV±1%/100A (50/60Hz, RL=15Ω) ※Not including the accuracy of external RL=15Ω
	External RL (other conditions)	10,100,1kΩ Refer Output voltage characteristic・Ratio error characteristic (typ)
	Internal RL (100A nominal)	500mV±2%/100A (50/60Hz) Internal RL=15Ω ※Refer Connection diagram
Current ratio		3000 : 1
Secondary windings resistance		140Ω （reference)
Open circuit protection		Built in 6.5Vp clamped device
Withstand voltage		AC2000V(50/60Hz), 1min(between core and output connector terminal in a lump)
Insulation resistance		DC500V, ≧100MΩ (between aperture and output connector terminal in a lump)
Operating temperature		-20℃～+50℃, ≦80%RH, no condensation, for indoor assembly, free direction for setting
Storage temperature		−30℃～+90℃, ≦80%RH, no condensation
Fitting repeatability		≃100 times(Not corresponding to frequent disorption)
Output wire		Vinyl wire （AWG26 3C×200ℓ)
Output connector		Socket contact : SXA-001T-P0.6 Plug housing : XAP-03V-1 (JST)
Mating connector		Pin contact : SXAM-001T-P0.6 Receptacle housing : XARR-03VF (JST) (Not included)
Mass		approximately 120g

Remark (1) With impacted force on joint surface, there are breakage of ferrite core
(2) No tension to wire more than 1kg
(3) Preparing extension wire as separately selling for extension of output wire
(4) 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.
(5) Impossible to use in outdoor exposure.
(6) Though voltage clamped ± 7.5Vp with open protection device in the case of wiring during hot line condition accidentally, it is not the acceptance of wiring during open condition, but it is for secondary electrical shock protection.

〔Connection diagram for voltage output with intenal RL〕



Eo=Io・RLi(15Ω)／n

In the case to use internal RL, cable length is recommended ≦ 1m, (Accessary:l 1m extention cable)
Wire resistance(Rw) << internal resistance (RLi=15 Ω)

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