

Split core clamp type sensor

Medium size, high current clamp type AC current sensor ($\phi 24 / 200\text{Arms}$)

AC current sensor

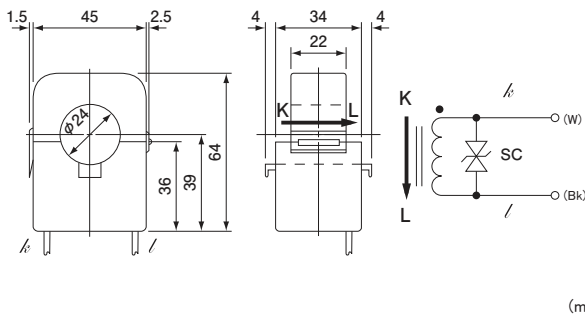


Model CTL-24-CLSF

[Features]

- Nylon spring, one touch clamp type for easy mounting to existing equipment such as panel board
- Possible to interface to system directly such as each type of energy saving enabled device, overload protector, and so on
- Built in over voltage clamped device
- Possible to earn good linearity until 10mA less than 1A with adoption of ferrite core
- Corresponding to high current until 200A max

[Outline drawing]

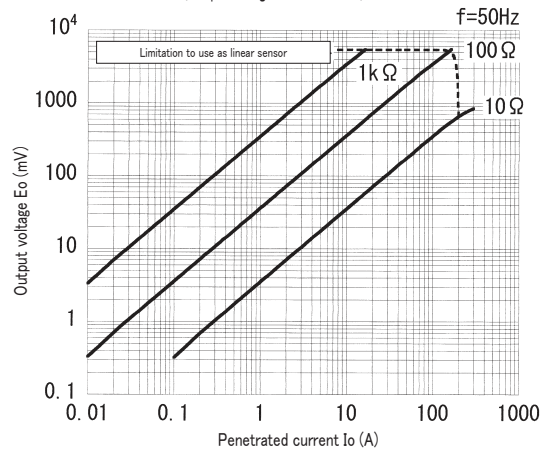


[Specification] Ta=25°C

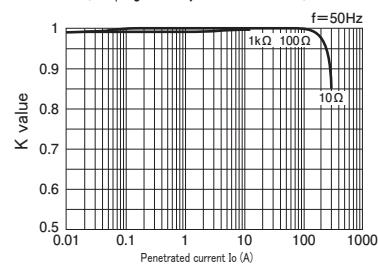
Model	CTL-24-CLSF
Primary current	0.01 ~ 200Arms (50 / 60Hz)、 $R_L \leq 10 \Omega$
Maximum primary current	300Arms continuous
Saturation limited current	Below dot line in Output voltage characteristic
Output characteristics	2970mV $\pm 2\%$ / 150A (50/60Hz, $R_L = 60 \Omega$)
Linearity	$\pm 1\%$ FS / 150A (50/60Hz, $R_L = 60 \Omega$)
Current ratio	3000 : 1
Secondary windings resistance	170 Ω (reference)
Open circuit protection	Built in 7.5Vp clamped device
Withstand voltage	AC2000V(50/60Hz), 1min (between core and output wire end in a lump)
Insulation resistance	DC500V, $\geq 100M \Omega$ (between core and output wire end in a lump)
Operating temperature	-10°C ~ +50°C, $\leq 80\%$ RH, no condensation, for indoor assembly, free direction for setting
Storage temperature	-30°C ~ +90°C, $\leq 80\%$ RH, no condensation
Structure	Nylon case simple closing type Ferrite core in case with clamping structure Nylon hinge and spring method
Fitting repeatability	≈ 100 times
Output wire	UL1007 Vinyl wire(AWG18X150L)
Mass	approximately 140g

- Remark (1) With impacted force on joint surface, there are breakage of ferrite core
- (2) No tension to wire more than 1kg
 - (3) 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.
 - (4) Impossible to use in outdoor exposure.
 - (5) Though voltage clamped $\pm 7.5\text{Vp}$ 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.

[Output voltage characteristics]



[Coupling efficiency (K) characteristics]



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

[Frequency characteristics]

