

FR020 High Precision Clamp Current Sensor



I、Brief Introduction

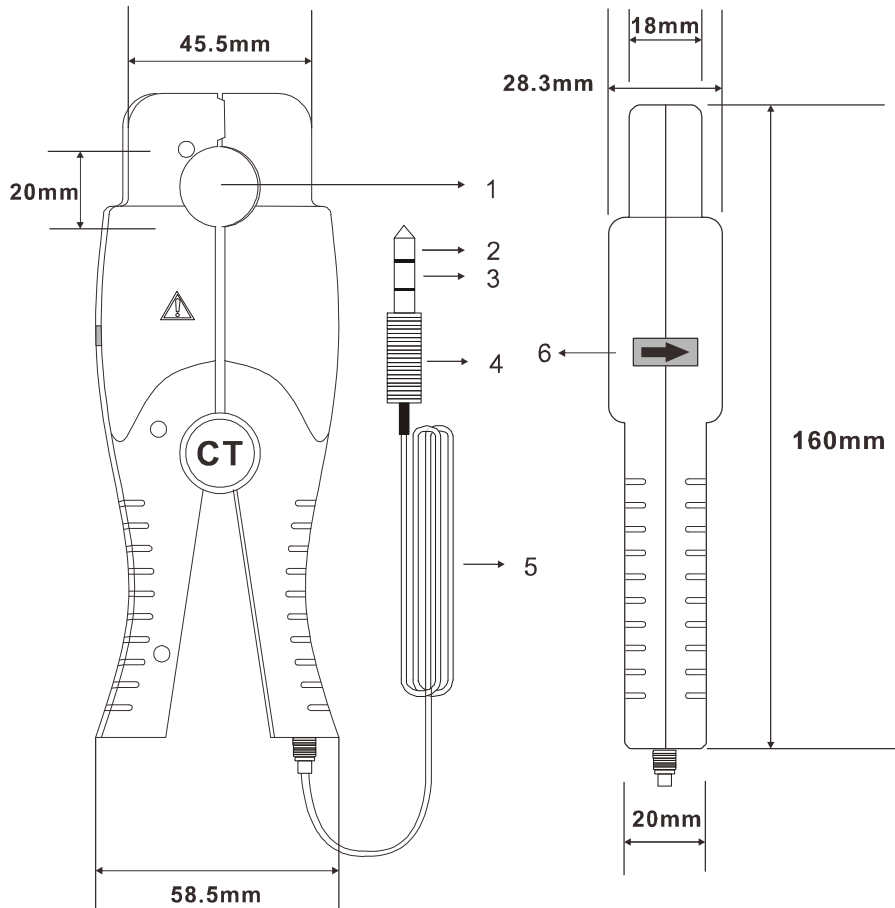
Clamp current sensor is a high-precision AC current convertor. It adopts a clamp-shaped structure. It can be quickly and easily accessed and used. The compact size is easier to carry and use. Applicable to AC current, leakage current, high harmonic current, phase, electric energy, power, power factor and other tests. It can be used with a variety of measuring instruments, such as: Field calibrator for watt-hour meter, multi-function energy meter, oscilloscope, digital multimeter, electrical identification device, cable fault detector, dual-clamp phase volt-ampere meter, digital current recorder, etc., can measure and compare a variety of electrical parameters under constant power. Widely used in substations, power plants, industrial and mining enterprises and testing stations, electrical maintenance departments for current detection and field electrical work, etc.

II、Precautions

1. Before use, you must check whether the appearance is deformed, otherwise it will affect the test accuracy;
2. Before use, you must check whether the end face of the iron core is clean and can be wiped with a dry silk cloth (no alcohol or water).
3. It's forbidden to use when the sensor is broken or disconnected.
4. The use of environmental requirements away from strong magnetic field, so as not to affect the test accuracy, the use of ambient temperature $-30^{\circ}\text{C} \sim +40^{\circ}\text{C}$, relative humidity should be less than 80%, is strictly prohibited in the wet and corrosive gas environment.
5. It is prohibited to disassemble and repair the sensor.
6. The core end must be kept clean and closed during use.
7. "⚠" safety sign, indicating that the input voltage or current should not exceed the marked value, this is to protect the internal circuit from damage.
8. Handle gently during use to prevent heavy objects from colliding to avoid affecting accuracy.
9. After use, it must be stored in a clean environment.

III、Specification Size

1. External Dimensions



1. Clamp head
2. Coil tap
3. Coil tap
4. Sensor output plug (Φ 3.5mm audio plug)
5. Output leads
6. Directional sign

2. Specification Parameter

Features	Portable CT clamp structure, safe and convenient to use
Jaw Size	Φ 20mm
Range	AC 0~200A
Resolution	AC 0.1mA
Accuracy	0.2%FS(50Hz/60Hz; 23°C \pm 2°C)
Phase Error	$\leq 2^\circ$ (50Hz/60Hz; 23°C \pm 2°C)
Turn Ratio	3000:1(optional 2000: 1; 1000: 1)
Reference load	RL: 0~300mA \leq 500 Ω ; 0~3A \leq 50 Ω ; 0~30A \leq 5 Ω
Dimensions	L58.5mm \times T28.3mm \times 高 160mm
Output Interface	Φ 3.5mm audio plug
Output Line Length	2m
Weight	250g
Output Method	Current sensing output
External	ABS resin, flame retardant rating 94V0

Material	
Line Voltage	600V AC (insulated wire) 30Vac (bare wire) test
Working Temperature	-25°C~55 °C
Insulation Resistance	100 M Ω @ 500Vdc
Medium Strength	AC3700V/rms (between iron core and shell)
Current Frequency	45Hz~65Hz(measured current frequency)
Frequency Characteristics	10Hz~100kHz



GuangZhou ZhengNeng Electronics Technology Co.

Address: 2F, No.15 Baoshu Road, Taihe, Baiyun District, Guangzhou, Guangdong, China

Toll-free call: 4000-1515-38

Tel: 86-20-36544172

Fax: 86-20-37319075

Post: 510540

Website: www.znel.e.com