

FU-CT-U

HIGH ACCURACY 0.1% 10Ω 60A MINIATURE SMALL CURRENT TRANSFORMER

FU-CT-U series current transformers are high precision small current transformers, they are in delicate aesthetic appearance, flexible structure, small volume and light weight, the insulating ability is strong, earthquake prevention. They can covert alternative current or a half-wave rectifier DC current to accurate low-current which are Suitable for GB/T17215.321 Electricity meters with DC and Even harmonic requirements.

This specification suitable for 50/60Hz multifunctional electronic electric energy meter, anti-stealing electric meter, digital meter, also be used for transducer electric variables, remote control data acquisition system, relay protection, digital device and meters.

All of our miniature current transformers are strictly comply IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, GB1208-2006, GB/T 20840.1-2010, GB/T 20840.2-2014, GB/T 22071.1-2018, IEC/EN61010-2-032, IEC/EN 61010-2-031.

Features

1. Harmonic measurement;
2. High content permalloy core;
3. Working Frequency: 50Hz~400Hz;
4. Operating Temperature: -40℃~95℃;
5. Multiple appearances can be choosed;
6. Measurement range of 1mA to 150A AC;
7. Low phase shift for power measurement;
8. High precision 0.1% for current measurement;
9. Improved ergonomic design & easy operation;
10. High accuracy, wide linear range, good consistency;
11. Holding wire diameter: $\phi 5\text{mm}$, 8mm, 13mm, 20mm;
12. IEC/EN61010-2-032, IEC 60044-1, IEC 61869-2 etc standard;
13. Wide linear output current, high precision and good consistency;
14. Comply to IEC 60044-1 Class 0.1, Class 0.2 standard requirements;
15. Covert alternative current or a half-wave rectifier DC current to accurate low-current;
16. DC and even harmonics: 100A/ $\sqrt{2}$, 1inductive, error should be less than $\pm 3\%$ @PF=1.0;
17. Suitable for three-phase electric energy meters with high precision and small phase displacement;
18. Encapsulated with epoxy resin, Power-frequency Withstand Voltages: 4000V 50Hz/1min, Insulation Resistance: $\geq 1000\text{M}\Omega/500\text{Vdc}$;



Applications

1. Digital meter;
2. Relay protection;
3. Metering device.
4. Digital devices and meters;
5. Anti-stealing electric meter;
6. Transducer electric variables;
7. Three-phase electric energy meters;
8. Remote control data acquisition system;

Parameters

Current error (ratio)±%				Phase error (angle)±'			
Rated current percent value				Rated current percent value			
5%	20%	100%	I _{max}	5%	20%	100%	I _{max}
-0.1~+0.1	-0.1~+0.1	-0.1~+0.1	-0.1~+0.1	-15~+15	-13~+13	-10~+10	-8~+8

Note: All the above data need to be measured after demagnetization

Selection Guide

Model	Rated Primary Current	Current Ratio	Rated Burden	Accuracy Class
FU-DCT-U001	5A~60A	2500 : 1	20Ω	0.1
FU-DCT-U002	5A~60A	2500 : 1	10Ω	0.1
FU-DCT-U003	5A~100A	2500 : 1	10Ω	0.1
FU-CT-U004	5A~60A	2500 : 1	10Ω	0.1
FU-CT-U005	5A~100A	2500 : 1	10Ω	0.1
FU-CT-U006	5A~100A	2000 : 1	10Ω	0.1
FU-CT-U007	5A~100A	2000 : 1	10Ω	0.1
FU-CT-U008	5A~60A	2000 : 1	20Ω	0.1
FU-CT-U009	5A~150A	2500 : 1	20Ω	0.1
FU-CT-U010	5A~40A	2500 : 1	20Ω	0.1

Notes: Only few typical products of this series are shown in the following page. GFUVE is capable of making other customized design and manufacturing per user request.