

FU-CT-PCB

ELECTRICITY METER 0.1% 20Ω 5A(100A) PCB MINIATURE CURRENT TRANSFORMER

FU-CT-PCB mounted 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. Their pin terminations enable direct solder to PCBA. Convert alternative current to accurate low-current for MCU circuit adaption.

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. The insulating ability is strong;
4. Multiple appearances can be chosen;
5. Operating Temperature: $-40^{\circ}\text{C} \sim 95^{\circ}\text{C}$;
6. Measurement range of 1mA to 120A AC;
7. Low phase shift for power measurement;
8. Improved ergonomic design & easy operation;
9. High precision 0.1% for current measurement;
10. Pin terminations enable direct solder to PCBA;
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 0.05 class, Class 0.1, Class 0.2 standard requirements;
15. DC and even harmonics: 100A/ $\sqrt{2}$, 1inductive, error should be less than $\pm 3\%$ @PF=1.0;
16. Encapsulated with epoxy resin, Power-frequency Withstand Voltages: 4000V 50Hz/1min, Insulation Resistance: $\geq 1000\text{M}\Omega/500\text{Vdc}$;



Appliations

- | | | |
|-----------------------------------|---------------------------------|--|
| 1. Ammeter; | 2. Digital meter; | 3. Power meter; |
| 4. Energy meter; | 5. Relay protection; | 6. Metering device; |
| 7. Electricity meter; | 8. Electric Power Transducer; | 9. Remote control data acquisition system; |
| 10. Anti-stealing electric meter; | 11. Digital devices and meters; | 12. Three-phase electric energy meters; |

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-CT-PCB01	5A-100A	2500 : 1	20Ω	0.1
FU-CT-PCB02	5A-20A	2000 : 1	10Ω	0.2
FU-CT-PCB03	5A-40A	2000 : 1	64.9Ω	0.2
FU-CT-PCB04	5A-60A	2000 : 1	20Ω	0.1
FU-CT-PCB05	1A-10A	2000 : 1	10Ω	0.1
FU-CT-PCB06	5A-100A	2500 : 1	15Ω	0.2
FU-CT-PCB07	5A-200A	2500 : 1	10Ω	0.1
FU-CT-PCB08	1A-6A	2000 : 1	10Ω	0.2
FU-CT-PCB09	5A-20A	2000 : 1	10Ω	0.2
FU-CT-PCB10	1A-12A	1500 : 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.