

FU-LV30

100A-3000/5A RESIN CAST 0.2 CLASS ECONOMIC LOW VOLTAGE CURRENT TRANSFORMER

FU-LV30 serial low voltage current transformer is low cost ac current instrument transformer, measuring AC current from 5A to 3000 Amps passing through the center conductor. This model CT has six diameter version ($\Phi 30\text{mm}$, $\Phi 35\text{mm}$, $\Phi 45\text{mm}$, $\Phi 42*10\text{mm}$, $\Phi 50*12\text{mm}$, $\Phi 50*103\text{mm}$), suite for all kinds of customers application. Low voltage current transformers are intended for supplying measuring instruments and protection circuits of electrical power devices with a maximum operating voltage of 0.72 kV and frequency of 50 Hz (or 60 Hz after prior arrangement with the manufacturer). LV current transformers are supplied with accessories which help to install and secondary terminal cover with possibility of sealing.

All of our GFUVE low voltage 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, IEC 60185.

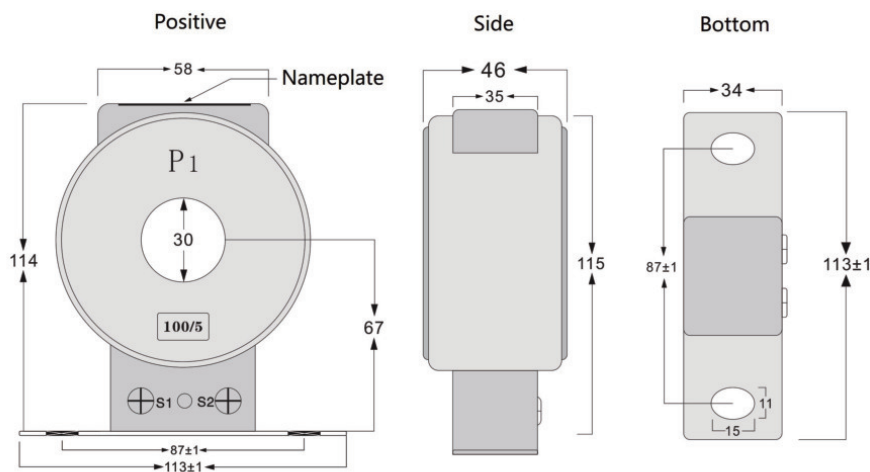
Features

1. Most cost-effective;
2. Rated voltage $\leq 0.72\text{kV}$;
3. Burden from 2.5VA to 20VA;
4. CE, UL / EN 61010 - 1 certified;
5. High accuracy 0.2, 0.2S, 0.5, 0.5S, 1;
6. Design using for more than 20years;
7. Small-size, compact size, light-weight;
8. As a measurement current transformer;
9. Measurement range of 5A to 3000A AC;
10. Low phase shift for power measurement;
11. Fully encapsulated by unsaturated resin casting;
12. Safe and Easy installation to distribution panels;
13. Using high magnetic silicon steel, good linearity and high sensitivity;
14. Current, electrical energy measurement or relay protection in 50Hz/60Hz A.C. circuits;
15. Holding wire diameter: $\Phi 30$, $\Phi 35$, $\Phi 45$, $\Phi 42*10$, $\Phi 50*12$, $\Phi 50*103$, $\Phi 70*137\text{mm}$;
16. Middle open window area for let-through bus and Metal plate base for CT fixing installation;
17. Isolated plastic case recognized according to UL94-V0;

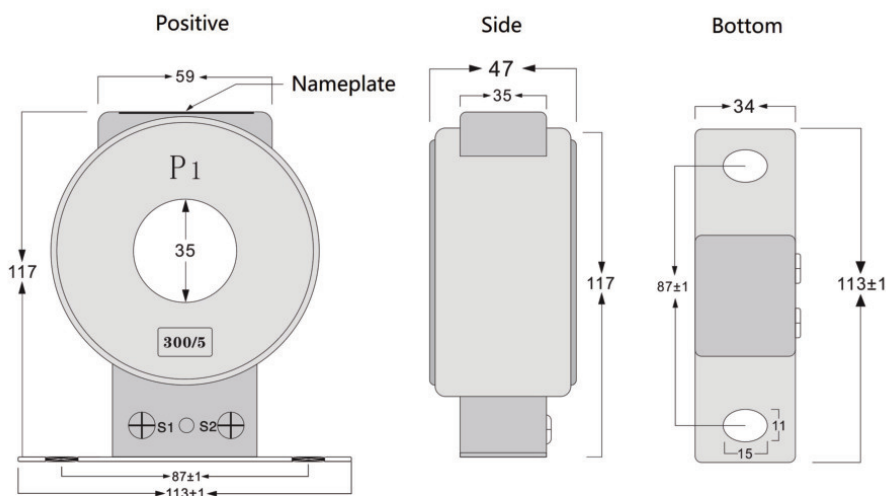
Applications

1. Load Center;
2. Energy meter;
3. Protection relay;
4. Power quality meter;
5. Digital Fault Recorders;
6. Three Phase Balance Control;
7. Smart Grid Application Features;
8. Various power monitoring systems;
9. In-Factory Display In-Home Display;
10. Energy meter current measurement;
11. Power Measurement Device For PLC;
12. Sub-Metering Accurate Measurement;
13. Inverters for Solar & Wind Turbine Systems;
14. HEMS (Home Energy Management System);
15. BEMS (Building Energy Management System);
16. Data Loggers to analyze Building & Machinery Performance;

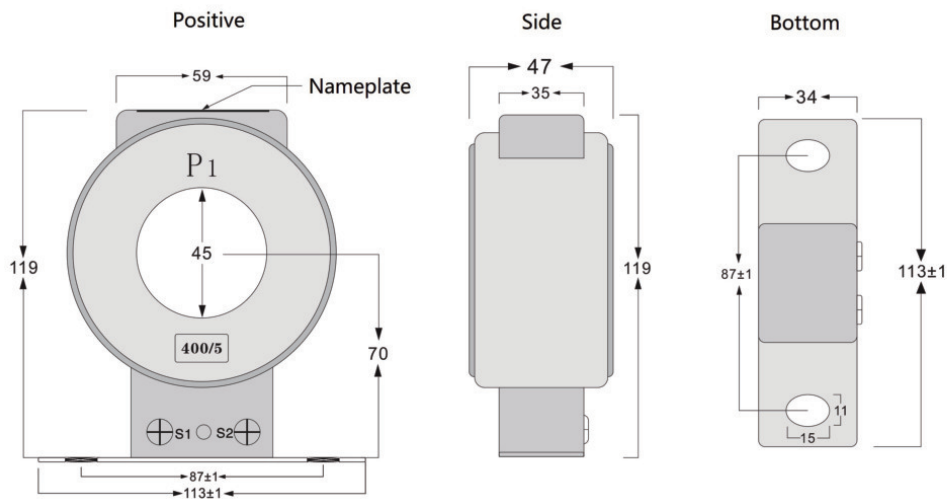
Outline Drawing



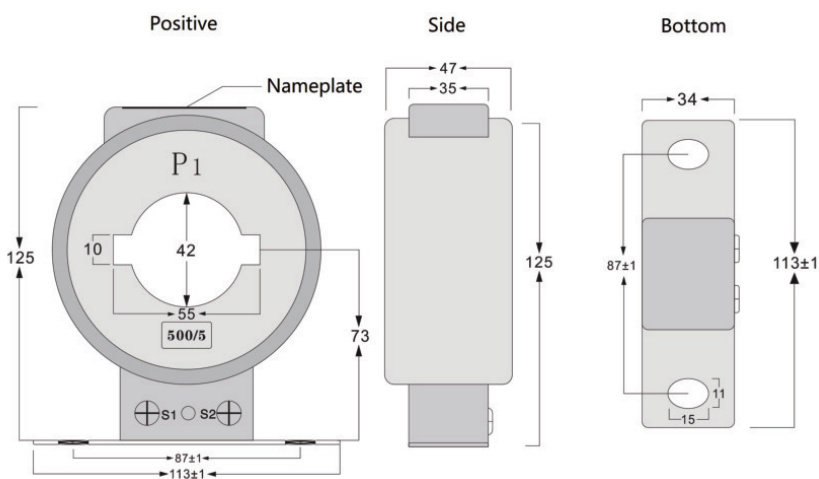
MODEL: FU-LV30
100/5A 2.5VA CLASS 0.5
200/5A 5VA CLASS 0.5



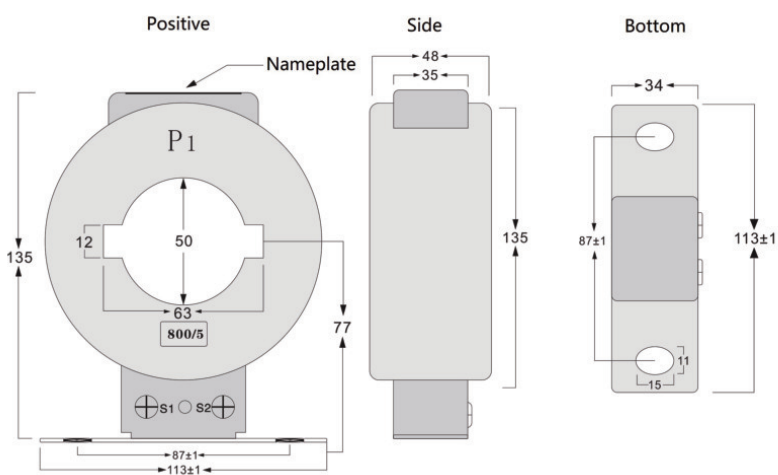
MODEL: FU-LV35
300/5A 5VA CLASS 0.5



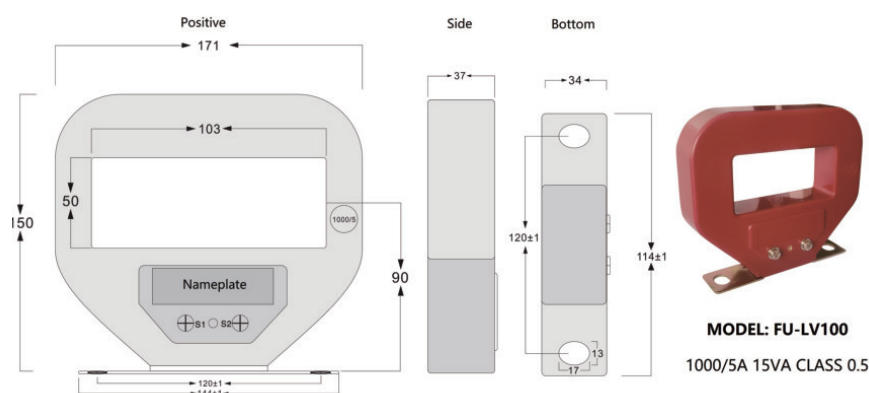
MODEL: FU-LV45
400/5A 5VA CLASS 0.5



MODEL: FU-LV42
500/5A 7.5VA CLASS 0.5
600/5A 10VA CLASS 0.5



MODEL: FU-LV50
800/5A 15VA CLASS 0.5



Parameters

Technical parameters	
Standards	IEC60044-1; IEC 61869-2; NTC 2205; ANSI/IEEE C57.13; GB1208-2006; GB/T 20840.1-2010, GB/T 20840.2-2014, GB/T 22071.1-2018 ; IEC60185 ; JJG1021 ;
Model	FU-LV30; FU-LV35; FU-LV45; FU-LV42; FU-LV50; FU-LV100; FU-LV130;
Type	Indoor type
Rated system Voltage, kV	0.38
Highest system voltage, kV	<0.72
Fault Current of system, KA	25 KA /3Sec
Accuracy Class	0.2S, 0.2, 0.5S, 0.5,1 (IEC60044-1/IEC61869-2 standard)
Rated primary current	100, 200A, 300A, 400A, 500A, 600A, 800A, 1000A, 1500A, 1600A, 2000A, 2500A, 3000A
Rated load	2.5VA-20VA
Rated frequency	50Hz or 60Hz
Rated secondary current	5A or 1A
Ratio	100/5A, 200/5A, 300/5A, 400/5A, 500/5A, 600/5A, 800/5A, 1000/5A, 1500/5A, 1600/5A, 2000/5A, 2500/5A, 3000/5A , 100/1A, 200/1A, 300/1A, 400/1A, 500/1A, 600/1A, 800/1A, 1000/1A, 1500/1A, 1600/1A, 2000/1A, 2500/1A, 3000/1A
Rated short-time thermal current	100kA, 1S
Rated continuous thermal current	120%I _n
Secondary winding power-frequency	3kV, 1min
Instrument security factor	FS ≤10
Material of insulation	Dry type, epoxy resin
Insulation class	E

Mechanical parameters

Dimensions (W×D×H) (mm)	φ30×φ115×46; φ35×φ117×47; φ45×φ119×47; φ10*55×φ125×47; φ12*63×φ135×48; φ50*103×φ150×37; φ70*137×φ215×37;
Jaw cable diameter(mm)	30 , 35 , 45 , 55*10 , 63*12 , 103*50 , 137*70
Weight (kg)	1; 0.8; 0.8; 0.9; 1; 1.6; 2.8;

Operating conditions

Operating temperature	-20°C to +70°C
Daily average temp	< +40°C
Storage temperature	-40°C to +70°C
Environment	indoors
Altitude	<3500 meters
Condition	No existence of severely begrimed, erosive and radioactive gas in the air. Permission of long-term operation under rated current.

Technical Data

Type	FU-LV30; FU-LV35; FU-LV45; FU-LV42; FU-LV50; FU-LV100; FU-LV130;			
Purpose	Measuring current transformer			
Rated primary current (AMP)	Accuracy class and rated load(VA)			
	0.2S	0.2	0.5S	0.5
100	2.5	2.5	2.5	2.5
150	2.5	2.5	2.5	2.5
200	2.5	2.5	5	5
300	2.5	2.5	5	5
400	5	5	5	5
500	5	5	7.5	7.5
600	5	5	7.5	10
750	5	5	10	10
800	7.5	7.5	15	15
1000	10	10	15	15
1500	15	15	15	15
1600	15	15	15	15
2000	15	15	15	15
2500	20	20	20	20
3000	20	20	20	20

Selection Guide

Model	Primary rated current	Rated load	Aperture (mm)	Description (mm)	Weight (kg)
FU-LV30	100-600A	≤10VA	φ30	φ30xφ115x46	1
FU-LV35	100-600A	≤10VA	φ35	φ35xφ117x47	0.8
FU-LV45	100-1000A	≤10VA	φ45	φ45xφ119x47	0.8
FU-LV42	100-1000A	≤10VA	φ55x10	φ10*55xφ125x47	0.9
FU-LV50	500-1500A	≤15VA	φ63x12	φ12*63xφ135x48	1
FU-LV100	500-2000A	≤20VA	φ103x50	φ50*103xφ150x37	1.6
FU-LV130	500-3000A	≤20VA	φ137x70	φ70*137xφ215x37	2.8

Ordering Information

Be sure to the type, current ratio, accuracy class, rated load and use of the products when you plan to make a order. Special specifications could be customized. All kinds of different specifications and parameters current transformers can be made according to your needs.