

## FU-LV30 SERIAL

### SERIAL CE UL LOW LOST 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 has four diameter version (  $\Phi$ 30mm,  $\phi$ 35mm,  $\phi$ 45mm,  $\phi$ 42\*10mm,  $\phi$ 50\*12mm,  $\phi$ 50\*103mm), 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 current transformers are strictly comply IEC60044-1, IEC 61869-2, NTC 2205, GB1208-2006, GB20840.1, GB20840.2, JIG1021, ANSI/IEEE C57.13, IEC 60185.

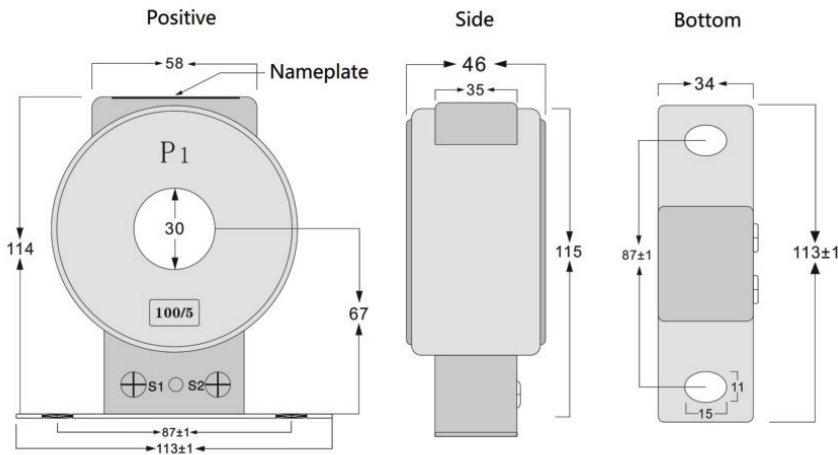
## Applications

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

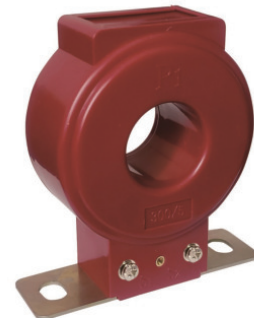
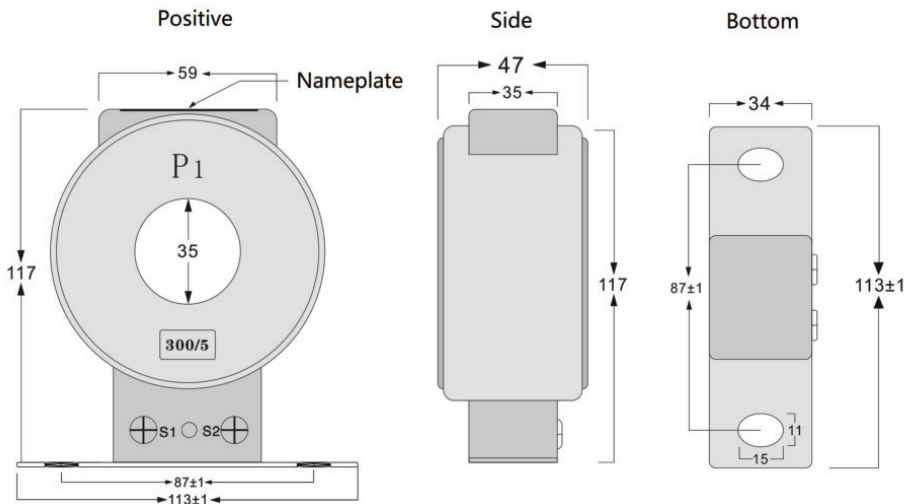
## Features

1. Most cost-effective;
2. Design using for more than 20years;
3. Rated voltage  $\leq$ 0.72kV;
4. Measurement range of 5A to 3000A AC;
5. Burden from 2.5VA to 20VA;
6. Low phase shift for power measurement;
7. CE, UL / EN 61010 - 1 certified;
8. Fully encapsulated by unsaturated resin casting;
9. High accuracy 0.2, 0.2S, 0.5, 0.5S;
10. Safe and Easy installation to distribution panels;
11. Small-size, compact size, light-weight;
12. Isolated plastic case recognized according to UL94-V0;
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\*137mm;
16. Middle open window area for let-through bus and Metal plate base for CT fixing installation;

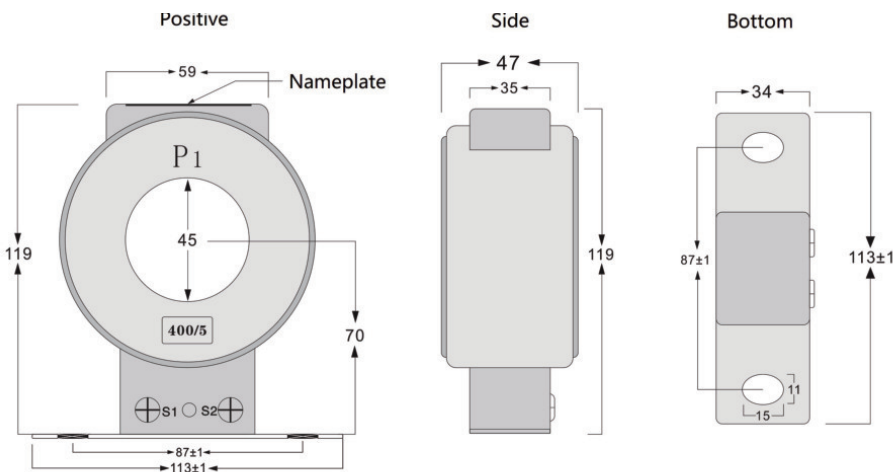
## Outline drawing



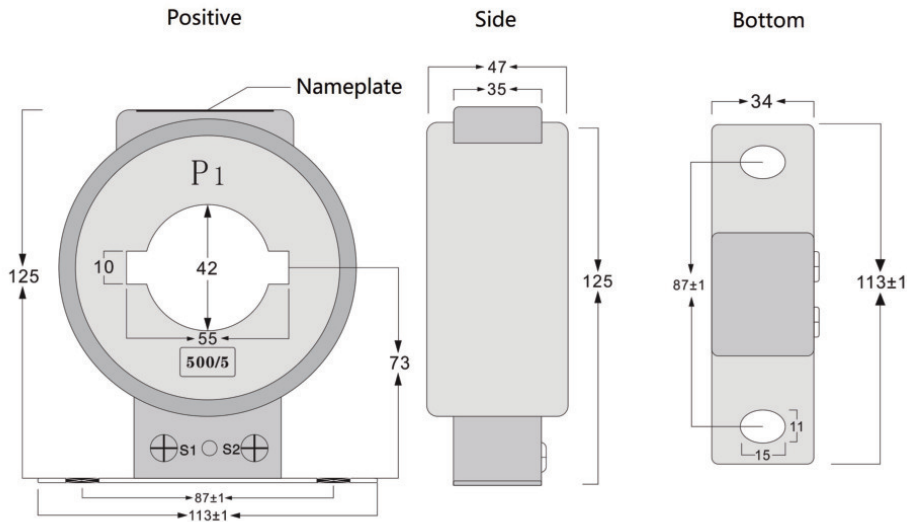
**MODEL: FU-LV30**  
 100/5A 2.5VA CLASS 0.5  
 200/5A 5VA CLASS 0.5



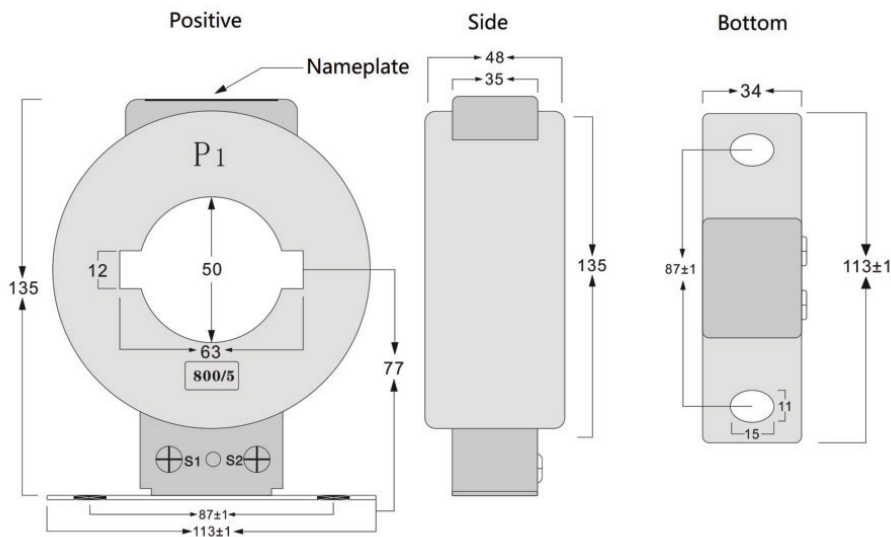
**MODEL: FU-LV35**  
 300/5A 5VA CLASS 0.5



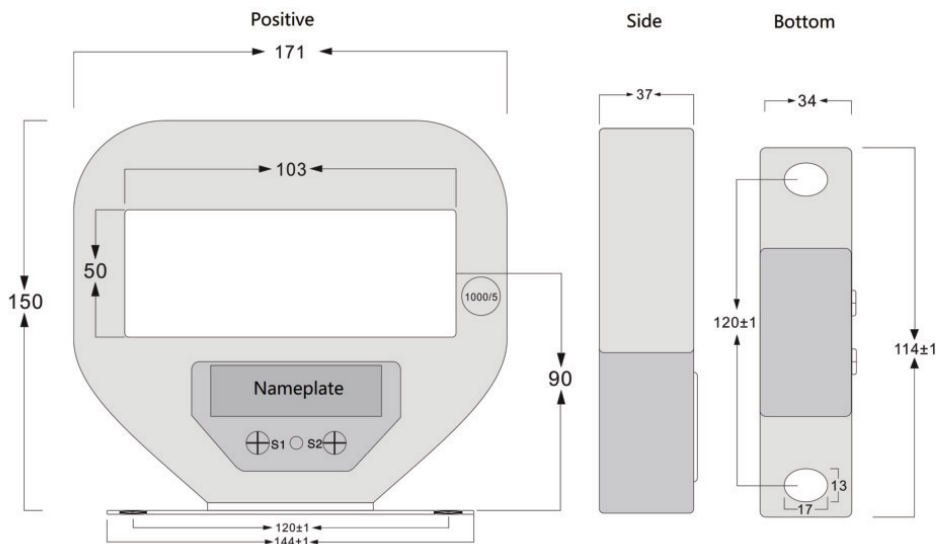
**MODEL: FU-LV45**  
 400/5A 5VA CLASS 0.5



**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



**MODEL: FU-LV100**  
 1000/5A 15VA CLASS 0.5

## Parameters

### Technical parameters

Standards	IEC60044-1; IEC60185; IEC 61869-2; ANSI/IEEE C57.13; GB20840.1, GB20840.2, 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 (IEC60044-1 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
Rated short-time thermal current	100kA, 1S
Rated continuous thermal current	120%I <sub>n</sub>
Secondary winding power-frequency voltage	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;
Weight (kg)	1; 0.8; 0.8; 0.9; 1; 1.6; 2.8;

### Operating conditions

Operating temperature	-20°C to +50°C
Daily average temp	<+40°C
Storage temperature	-40°C to +70°C
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