

## FU120

### LOW VOLTAGE SPLIT CORE BUS BAR TYPE CURRENT TRANSFORMER 3000A

The Model FU120 is a bus bar split core current transformer. Bus bar Type Split Core Current Transformer also called Split Core Current Transformer or Openable current Transformer. It mainly applies for electric system renovation project with easy installation, no need to remove primary busbar, can also operate when power on without affect clients, normal electricity utilization. It can help clients renovate projects and improve efficiency to save human, material and financial resources. This series can apply with relay device, measuring and metering devices. Its rated primary current from 300A to 3000A, secondary output have 1A , 5A, 500mA, 250mA, 333mV, 1V, 5V, 10V etc. All kinds of ratio can be customized and made.

All of our bus bar type current transformers are strictly comply IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, NTC 2205, GB1208-2006, GB/T 20840.1-2010, GB/T 20840.2-2014, GB/T 22071.1-2018.

## Appliations

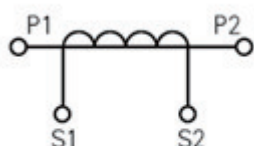
1. Load Center;
2. Energy meter;
3. Power Meter;
4. MV switchgears;
5. Distribution boxes
6. Digital Fault Recorders;
7. Three Phase Balance Control;
8. Power quality analyzer meter;
9. Smart Grid Application Features;
10. Various power monitoring systems;
11. In-Factory Display In-Home Display;
12.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



## Features

1. Ratio could be customized;
2. Bus bar type split core design;
3. CE, UL / EN 61010 - 1 certified;
4. High precision 0.2%, 0.5s, 0.5%;
5. Measurement range 0-4000A AC;
6. Easy install or remove with electricity;
7. Over-Voltage protection circuit is installed;
8. Secondary output 5A, 1A, 333mV, 1V, 2V, 5V....;
9. Various size to meet different busbar installation;
10. Isolated plastic case recognized according to UL94-V0;
11. Holding wire Size:120×30, 120×130mm... Can be customized;
12. IEC60044-1, IEC 61869-2, ANSI/IEEE C57.13, NTC 2205, GB1208-2006;

## Wiring Diagrams



### Single winding

P1, P2 is primary polarity terminal, S1, S2 is secondary polarity terminal.

P2, S2 is homonymous terminals (subtractive polarity).

## 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, IEC61010-1
Ratio	60: 1, 120:1, 500:1 or 3000:5 etc , customized
Accuracy	0.2% , 0.5%, 1%
Range of primary rated current	300A/400A/500A/600A/750A/800A/1000A/1200A/1500A/2000A/2500A/3000A/3200A/4000A
Range of Rated Burden	2.5VA-10VA
Rated frequency	50/60Hz
Rated secondary output	50mA-500mA, 1A, 5A AC optional 333mV AC or 100mV-2V optional
Frequency range	40Hz-2KHz
System Voltage	720V(0.72kV)
Rated continuous thermal current	120%I <sub>n</sub> continuously
Secondary winding power frequency withstand voltage(Dielectric strength)	3kV, 1min
Safety	CAT IV 600V IEC/EN 61010-1
Output	K1, K2 or S1, S2
Protection Level	3.0V0-P
Internal structure	Busbar type Design
Material	Silicon steel sheets+Enameled wire+ABS+ 94V-0

Mechanical parameters	
Dimensions (W×D×H) (mm)	166 x 110 x 49, 166 x 208 x 49
Jaw diameter(mm)	120 x 130mm, 120 x 30mm , ...
Weight (kg)	1.2, 1.7
Color	White and grey
Working conditions	
Operating temperature	-25°C to +55°C
Storage temperature	-40°C to +70°C
Environment	indoors
Altitude	<3000 meters
Conditions	No existence of severely begrimed, erosive and radioactive gas in the air. Permission of long-term operation under rated current.

## Specification

Type	FU120		
Purpose	Measuring current transformer		
Ratio	Accuracy class		
$I_1/I_2$	0.2	0.5	1
500A/333mV		YES	YES
1000A/333mV		YES	YES
2000A/333mV		YES	YES
3000A/333mV		YES	YES
4000A/333mV		YES	YES
500A/1V	YES	YES	YES
500A/2V	YES	YES	YES
500A/5V	YES	YES	YES
1000A/1V	YES	YES	YES
1000A/2V	YES	YES	YES
1000A/5V	YES	YES	YES
2000A/1V	YES	YES	YES
2000A/2V	YES	YES	YES
2000A/5V	YES	YES	YES
3000A/1V	YES	YES	YES
3000A/2V	YES	YES	YES
3000A/5V	YES	YES	YES
4000A/1V	YES	YES	YES
4000A/2V	YES	YES	YES
4000A/5V	YES	YES	YES
1000A/1A	YES	YES	YES
2000A/1A	YES	YES	YES
3000A/1A	YES	YES	YES
4000A/1A	YES	YES	YES

Type	FU120		
Purpose	Measuring current transformer		
Ratio	Accuracy class		
$I_1/I_2$	0.2	0.5	1
300A/5A		YES	YES
500A/5A		YES	YES
600A/5A		YES	YES
800A/5A		YES	YES
1000A/5A		YES	YES
1500A/5A		YES	YES
2000A/5A		YES	YES
2500A/5A		YES	YES
3000A/5A		YES	YES
4000A/5A		YES	YES

## Selection Guide

Model	Primary rated current	Rated load	Secondary output	Aperture (mm)	Description (mm)	Weight (kg)
FU-16	5-200A	≤10 Ohm	333mV,1V, 5V,100mA	φ16	38 x 55 x 18	0.06
FU-32	100-600A	≤10VA	333mV,1V, 5V, 1A, 5A	φ32	110 x 130 x 41	0.7
FU-36	100-600A	≤2.5VA	333mV,1V, 5V, 1A, 5A	φ10, φ16, φ24, φ36	26 × 43 × 27 31 × 50 × 30 43 × 73 × 39 60 × 89 × 43	0.1, 0.12, 0.2, 0.35
FU-80	100-1200A	≤5VA	333mV,1V, 5V, 1A, 5A	φ30, φ55, φ80	88 x 129 x 28 108 x 155 x 28 138 x 193 x 28	0.4, 0.55, 0.7
FU-100	300-3000A	≤10VA	333mV,1V, 5V, 1A, 5A	φ100	170 x 184.5 x 41	1
FU120	200-4000A	≤10VA	333mV,1V, 5V, 1A, 5A	120 x 130, 120 x 30	166 x 110 x 49 166 x 208 x 49	1.2, 1.7
FU160	500-5000A	≤20VA	333mV,1V, 2V, 5V,1A, 5A	160 x 80, 120 x 80	144 x 227 x 54	2.8, 2.3

## 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.