

FU-80

LOW COST INDOOR SINGLE PHASE SPLIT CORE CURRENT TRANSFORMER 1000/5A

The model FU-80 is a split-core current transformer offers 333mV, 100mV-2V and 10mA-500mA ,1A or 5A at secondary from sensed primary current (0-1200A). This model has three diameter version (30mm,55mm and 80mm), suite for all kinds of customers application.

This model FU-80 ct is a economic split core current transformer, using ABS and Anti-fire cover, it is very easy for installation.It has Low phase shift for power measurement.length of the output lead can be customized. This current transformer is compact and low cost current transformer with high accuracy. The CTs are ideal for quick and easy installation without disconnecting cables during installation. Multiple installation mechanisms provide stable and durable current measurement.

All of our split core 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.

Applications

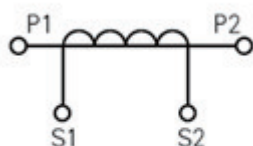
1. Load Center;
2. Distribution boxes;
3. Digital Fault Recorders;
4. Three Phase Balance Control;
5. Power quality analyzer meter;
6. Smart Grid Application Features;
7. Various power monitoring systems;
8. In-Factory Display In-Home Display;
9. Power Measurement Device For PLC;
10. Energy meter current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



Features

1. Low cost deign;
2. Faster installation;
3. Most cost-effective;
4. Safe and easy installations;
5. CE, UL / EN 61010 - 1 certified;
6. High accuracy 0.2%, 0.5s, 0.5%;
7. Small-size, compact size, light-weight;
8. Low phase shift for power measurement;
9. Measurement range of 1mA to 1200A AC;
10. Over-Voltage protection circuit is installed;
11. Holding wire diameter: $\phi 30\text{mm}$ or $\phi 55\text{mm}$ or $\phi 80\text{mm}$;
12. Isolated plastic case recognized according to UL94-V0;

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	100: 1, 400:5, 1000:5 or 1000:1 etc , customized
Accuracy Class	0.2 , 0.5, 1
Range of primary rated current	100A/150A/200A/250A/300A/400A/500A/600A/750A/800A/1000A/1200A
Range of Rated Burden	2.5VA-5VA
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 _n 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

Technical parameters - continued

Protection Level	3.0V0-P
Internal structure	Clamp-on Design
Material	Silicon steel sheets+Enameled wire+ABS+ 94V-0

Mechanical parameters

Dimensions (W×D×H) (mm)	88 x 129 x 28, 108 x 155 x 28, 138 x 193 x 28
Jaw cable diameter(mm)	30mm, 55mm, 80mm
Weight (g)	400, 550, 600
Color	Black

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	FU-30, FU-55, FU-80		
Purpose	Measuring current transformer		
Ratio	Accuracy class		
I_1/I_2	0.2	0.5	1
5A/333mV	YES	YES	YES
10A/333mV	YES	YES	YES
20A/333mV	YES	YES	YES
50A/333mV	YES	YES	YES
60A/333mV	YES	YES	YES
100A/333mV	YES	YES	YES
150A/333mV	YES	YES	YES
200A/333mV	YES	YES	YES
300A/333mV	YES	YES	YES
400A/333mV	YES	YES	YES
500A/333mV	YES	YES	YES
600A/333mV	YES	YES	YES
750A/333mV	YES	YES	YES
800A/333mV	YES	YES	YES
1000A/333mV	YES	YES	YES
10A/5mA	YES	YES	YES
20A/10mA	YES	YES	YES
50A/25mA	YES	YES	YES

Type	FU-30, FU-55, FU-80		
Purpose	Measuring current transformer		
Ratio	Accuracy class		
I_1/I_2	0.2	0.5	1
60A/30mA	YES	YES	YES
100A/50mA	YES	YES	YES
150A/75mA	YES	YES	YES
200A/100mA	YES	YES	YES
50A/50mA	YES	YES	YES
60A/60mA	YES	YES	YES
100A/100mA	YES	YES	YES
150A/150mA	YES	YES	YES
200A/200mA	YES	YES	YES
100A/100mV	YES	YES	YES
100A/1V	YES	YES	YES
100A/2V	YES	YES	YES
100A/5V	YES	YES	YES
100A/10V	YES	YES	YES
200A/1V	YES	YES	YES
200A/2V	YES	YES	YES
200A/5V	YES	YES	YES
200A/10V	YES	YES	YES
100A/1A	YES	YES	YES
200A/1A	YES	YES	YES
300A/1A	YES	YES	YES
400A/1A	YES	YES	YES
500A/1A	YES	YES	YES
600A/1A	YES	YES	YES
800A/1A	YES	YES	YES
1000A/1A	YES	YES	YES
200A/5A		YES	YES
300A/5A		YES	YES
400A/5A		YES	YES
500A/5A		YES	YES
600A/5A		YES	YES
700A/5A		YES	YES
750A/5A		YES	YES
800A/5A		YES	YES
1000A/5A		YES	YES
1200A/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 x 43 x 27 31 x 50 x 30 43 x 73 x 39 60 x 89 x 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.