

FU-16

ECONOMIC MINI 333mV SPLIT CORE CURRENT SENSOR FOR ENERGY METER

The model FU-16 split core current sensor is a 16mm diameter split-core current transformer offers 333mV, 100mV-2V and 10mA-200mA at secondary from sensed primary current (0-200A). Without using secondary CT inside of meter, users directly connect FU-16 series current sensor to meter for high accuracy metering application. It enables one meter to be adopted for various current rating by only changing primary CT so it makes compact meter design and reduces developing cost. Also, over-voltage protection circuit is included to offer safe, fast and cost effective installation. It has Low phase shift for power measurement. length of the output lead can be customized. This is a economical current transformer.

Features

1. Faster installation;
2. Most cost-effective;
3. High accuracy 0.2%,0.5%;
4. Safe and easy installations;
5. CE, UL / EN 61010 - 1 certified;
6. Holding wire diameter: $\phi 16\text{mm}$;
7. Small-size, compact size, light-weight;
8. Measurement range of 1mA to 200A AC;
9. Low phase shift for power measurement;
10. Over-Voltage protection circuit is installed;
11. Output model: Lead output(2m)-can be customized;
12. Secondary output have 333mV, 100mA, 1-5V output;
13. Isolated plastic case recognized according to UL94-V0;



Application

1. Switchgears;
2. General Sets;
3. Control panels;
4. Power Quality Analyzer;
5. Power quality monitoring;
6. Energy meter(kWh meter);
7. Recorders, loggers, oscilloscopes;
8. Distributed measurement systems;
9. Various power monitoring systems;
10. Power meter and harmonic meters;
11. HEMS (Home Energy Management System);
12. BEMS (Building Energy Management System);

Parameters

Technical parameters	
Standards	IEC/EN60044-1 & IEC61010-1 & IEC61869-2&ANSI C57.13
Ratio	1000: 1 or 2000:1 , customized
Nominal input current (Primary current)	5A/10A/20 A/30A/40A/50A/60A/80A/100A/150A/200A
Overload withstand	1.2 times rated current continuously
Accuracy	0.2%, 0.5 % , 1%
System Voltage	720V(0.72kV)
Output signal	5mA-200mA AC optional 333mV AC or 100mV-2V optional
Frequency range	40 Hz....500 Hz
Dielectric strength	3KV 50Hz/60Hz at 1 minute
Output	Standard 2.5 meter cable
Protection Level	3.0V0-P
Installation Category	CAT II or CATIII 600VAC
Max. jaw opening	16 mm
Material	Silicon steel sheets+Enameled wire+ABS
Mechanical parameters	
Dimensions (W×D×H) (mm)	38mm x 55mm x 18 mm
Weight (g)	60
Operating conditions	
Operating temperature	-25 to +55°C
Relative Humidity	0-85% non-condensing
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-16			
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

Type	FU-16			
Purpose	Measuring current transformer			
Ratio	Accuracy class			
100A/333mV	YES		YES	YES
150A/333mV	YES		YES	YES
200A/333mV	YES		YES	YES
5A/2.5mA	YES		YES	YES
10A/5mA	YES		YES	YES
20A/10mA	YES		YES	YES
50A/25mA	YES		YES	YES
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

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, 0.6
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	1A,5A	160 x 80	144 x 227 x 54	2.8