

LMCK185-10

HIGH QUALITY OUTDOOR WATERPROOF SPLIT CORE CURRENT TRANSFORMER 3000/5A

The model LMCK185-10 series outdoor split core current transformer are applicable for AC power system 35kV and measurement of current of power supply equipment below 10KV also can be used for microcomputer protection. And the Transformer is compatible with Distribution Transformer Monitor and provides high quality power parameter quality signal for the monitor to control, measure and monitor the energy quality and so on in grid system. The LMCK-185-10 split core current transformer applies to the outdoor electric power system with frequency 50Hz or 60Hz, its ingress protection is IP67. This type of current transformer employs silicon steel which with high permeability as magnetic material, has the characteristics of Small magnetic circuit loss and can be split, its semicircular core and secondary windings employ high quality epoxy resin vacuum, casting in plastic-case(ABS or PC) which is high accuracy, ultraviolet-proof and explosion-proof, fire-proof, maintenance-free, stable and reliable performance, easy installation, etc. All of our outdoor 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. Energy meter;
2. Power Meter;
3. MV switchgears;
4. Metering device;
5. Load monitoring;
6. Distribution boxes;
7. Power Quality meter;
8. Low voltage metering system;
9. Reactive compensation device;
10. Cable fault monitoring system;
11. Leakage current protection system;
12. Energy consumption monitoring system;
13. Distribution transformer power monitor system;



Features

1. 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;
2. High precision 0.2s, 0.2, 0.5s, 0.5;
3. Measurement range 0-5000A AC;
4. Designed more than 15 years life, maintenance-free;
5. 500/5A, 600/5A, 750/5A, 800/5A, 1000/5A, 1200/5A, 1400/5A, 1500/5A, 1600/5A, 1800/5A, 2000/5A, 2500/5A, 3000/5A, 4000/5A, 5000/5A;
6. 100/1A, 200/1A, 300/1A, 400/1A, 500/1A, 600/1A, 750/1A, 800/1A, 1000/1A, 1200/1A, 1400/1A, 1500/1A, 1600/1A, 1800/1A, 2000/1A, 2500/1A, 3000/1A, 4000/1A, 5000/1A;
7. 100A/333mV, 200A/333mV, 300A/333mV 1000A/333mV, 1500A/333mV, 2000A/333mV, 2500/333mV, 3000/333mV, 4000/333mV, 5000/333mV;
8. 100A/1V, 200A/1V, 300A/1V 1000A/1V, 1500A/1V, 2000A/1V, 2500A/1V, 3000A/1V, 4000A/1V, 5000A/1V;
9. 100A/5V, 200A/5V, 300A/5V 1000A/5V, 1500A/5V, 2000A/5V, 2500A/5V, 3000A/5V, 4000A/5V, 5000A/5V;
10. 50A/20mA, 100A/50mA, 200A/40mA, 300A/300mA 1000A/250mA, 1000A/500mA, 2000A/500mA, 2500A/500mA, 3000A/500mA;
11. Secondary windings are vacuum poured by insulated resin;
12. Secondary signal voltage output 333mV, 500mV, 1V, 5V etc optional;
13. Holding wire diameter: $\phi 120\text{mm}$;
14. High quality current transformer outdoor;
15. Easily installation with electricity;
16. Support Dual Ratio;
17. Clamp type structure current transformer;
18. IP67 level outdoor industrial design;
19. CT with outdoor cable, integrated design;
20. With CNAS Type tests and routine tests certificate;
21. High magnetic silicon steel core;
22. Cable length 1m, 2.5m, 5m, 7m, 10m etc optional;

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
Accuracy Class	0.2S, 0.2, 0.5S, 0.5%, 1%, 3%
Range of primary rated current	100-5000A
Range of Rated load	≤25VA
Rated frequency	50/60Hz
Rated secondary current	5A, 1A, 20mA, 40mA, 50mA, 100mA, 500mA etc
Rated short-time thermal current	40kA, 1S
Rated continuous thermal current	150%I _n
Secondary winding power frequency withstand voltage	3kV, 1min
Safety Factor Rating	(FS) <10
Output signal	1A, 5A, 333mV, 1V or 5V(customized)
Safety	CAT IV 600V IEC/EN 61010-1
Insulation Class	E
Flame retardant ABS and UV plastic shell inside, jaw waterproof apron.	
Mechanical parameters	
Aperture (mm)	Φ185
Dimensions (W×D×H) (mm)	350×284×86
Weight (kg)	4.5
Length of Cable	2.5 M(standard), 5M, 7M, 10M or customized
Cable information	2*16AWG ,Voltage: 400/720V, outdoor+UV
Color	Orange, black or customized
Working conditions	
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +70°C
Ingress Protection	IP67
Environment	outdoors or indoors
The Height of above sea level	0- 3000m
Conditions	No existence of severely begrimed, erosive and radioactive gas in the air. Continuous working under the rated current is allowed.

Specification

Type	LMCK185-10(2.5m outdoor cable)			
Purpose	Measuring current transformer			
Ratio	Accuracy class and rated load(VA)			
I_1/I_2	0.5S	0.5	1	3
100/1		0.1	1	2.5
150/1		0.1	1	2.5
200/1	1	2.5	2.5	2.5
250/1	1	2.5	2.5	2.5
300/1	1	2.5	2.5	2.5
400/1	2.5	2.5	2.5	2.5
500/1	2.5	2.5	5	5
600/1	2.5	2.5	5	5
800/1	2.5	2.5	5	5
1000/1	2.5	2.5	5	5
1200/1	2.5	2.5	5	5
1400/1	2.5	2.5	5	5
1500/1	5	5	10	10
2000/1	5	5	10	10
2500/1	5	5	10	10
3000/1	5	5	10	10
4000/1	10	10	15	15
5000/1	10	10	15	15
300/5	2.5	2.5	5	5
400/5	2.5	2.5	10	10
500/5	5	5	10	10
600/5	5	5	10	10
800/5	5	5	10	10
1000/5	5	5	10	10
1200/5	5	10	10	10
1400/5	5	10	10	10
1500/5	10	10	15	15
2000/5	10	10	15	15
2500/5	10	10	15	15
3000/5	15	15	15	15
4000/5	20	20	25	25
5000/5	20	20	25	25

Ratio	Accuracy class			
I_1/I_2	0.2S	0.2	0.5S	0.5
100/333mV	Y	Y	Y	Y
150/333mV	Y	Y	Y	Y
200/333mV	Y	Y	Y	Y
250/333mV	Y	Y	Y	Y
300/333mV	Y	Y	Y	Y
400/333mV	Y	Y	Y	Y
500/333mV	Y	Y	Y	Y
600/333mV	Y	Y	Y	Y
800/333mV	Y	Y	Y	Y
1000/333mV	Y	Y	Y	Y
1200/333mV	Y	Y	Y	Y
1400/333mV	Y	Y	Y	Y
1500/333mV	Y	Y	Y	Y
2000/333mV	Y	Y	Y	Y
2500/333mV	Y	Y	Y	Y
3000/333mV	Y	Y	Y	Y
4000/333mV	Y	Y	Y	Y
5000/333mV	Y	Y	Y	Y

Selection Guide

Model	Primary rated current	Rated load	Secondary output	Aperture (mm)	Description (mm)	Weight (kg)
FU-16	5-200A	$\leq 10 \text{ Ohm}$	333mV, 1V, 5V, 100mA	$\varphi 16$	38 x 55 x 18	0.06
FU-32	100-600A	$\leq 10 \text{ VA}$	333mV, 1V, 5V, 1A, 5A	$\varphi 32$	110 x 130 x 41	0.7
FU-36	100-600A	$\leq 2.5 \text{ VA}$	333mV, 1V, 5V, 1A, 5A	$\varphi 10, \varphi 16, \varphi 24, \varphi 36$	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	$\leq 5 \text{ VA}$	333mV, 1V, 5V, 1A, 5A	$\varphi 30, \varphi 55, \varphi 80$	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	$\leq 10 \text{ VA}$	333mV, 1V, 5V, 1A, 5A	$\varphi 100$	170 x 184.5 x 41	1
FU120	200-4000A	$\leq 10 \text{ VA}$	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	$\leq 20 \text{ VA}$	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.