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DD862 single phase meter



The DD862 single phase meter is designed to meet the IEC62053-21, IEC62052-11 standards for both indoor and outdoor installations. The meter with mechanical construction complying BS5685 is also available. With accuracy of class 2, it measures active energy in single-phase two-wire or three-wire alternating current power grids. Connection is direct or by instrument transformers. The average service life (MTTF) is 10 years and the maximum overload capacity is 500% Ib.

Construction

Meter case

Two types of cases are available. One is the insulating case of protective-class II and the other is the weather-proof case complying to IEC60529 and Ip54.

Terminal block

The terminal block is molded of Bakelite. The voltage test link can be located inside or out-side of the meter case. The maximum diameter of the terminal hole is 8.5mm.

Driving element

The driving element consists of a voltage element and a current element, both of which are fixed to the frame. The voltage element has a low load adjustment mechanism, and the current element has an inductive load adjustment mechanism.

Rotor

The rotor shaft is made of aluminum alloy with a small hole in the upper end for storing lubrication and for fitting a brass bearing. The worm is turned of brass, and is acid-cleaned or nickel-plated. The worm and shaft can be detached.

Braking element

The magnet is made of AlNiCo5 alloy and designed as U-shaped so that the effect of short-time over current upon the magnet is negligible. The full load error can be fine controlled by adjustment mechanism.

Frame

The frame is die-casted by high-quality Al alloy of stable property to avoid distortion. The application of static



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spray-painting on the surface prevents the frame from oxidation.

Upper bearing

The pin is made of high-quality abrasion-proof stainless steel and is embedded on the brass pin base.

Lower bearing

Both double jewel bearing and magnetic bearing are available.

Register

The DD862 meter with direct-reading cyclometer type register is available.

The register is self-located and is mounted on the frame by one screw. Fixing with two screws is also available but needs to be manually adjusted. There are two types of gears available: brass gears and self-lubricating plastic gears.

Technical data

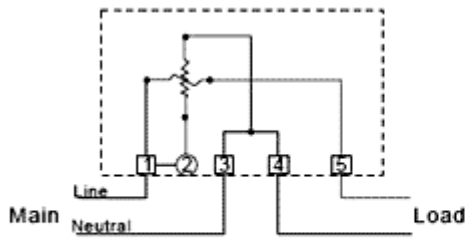
1	Meter type	DD862
2	Applicable Standards	IEC60521、IEC514
3	Accuracy	Class 2 (according to IEC60521)
4	Average service life (MTTF)	10years
5	Basic current (Ib) A	1.5 2.5 3 5 10 10 15 20 30
6	Maximum current (Imax) A	6 10 12 20 40 50 60 80 100
7	Rating current of transformer In	5A Direct connection
8	Reference voltage Un	110V,120V,220V,230V,240V
9	Reference frequency fn	50Hz,60Hz
10	Power losses in voltage circuit at Un	50Hz: 1.2W/6VA, 60Hz: 1.0W/5VA
11	Power losses in current circuit at 50Hz Un Ib	<0.6VA
12	Non-running with no-load	0.8~1.1Un
13	Starting current	0.5%Ib
14	Mean temperature Form 0.1Ib to Imax at unity PF Form 0.2Ib to Imax at unity 0.5lagging	<0.08%/°C <0.12%/°C
15	Insulation level: Withstanding A.C. voltage for 50Az, 1min Withstanding impulse voltage 1.2/50us	>2kV(when Bakelite base>4kV) >6KV(when Bakelite base>8kV)
16	Rated load speed at unity PF, Ib	13.2r/min
17	Rated load torque at unity PF, Ib	450uNm
18	Weight of rotor	24g
19	Weight of meter	1.5~1.6kg
20	Meter base	Steel, Aluminum alloy, Bakelite
21	Meter cover	ABS, Aluminum, Glass, Bakelite, transparent PC
22	Terminal cover	ABS, Bakelite, PC
23	Register	Cyclometer single, Unidirectional, Jumping , Metal
24	Option	Reverse running stopper, pulse



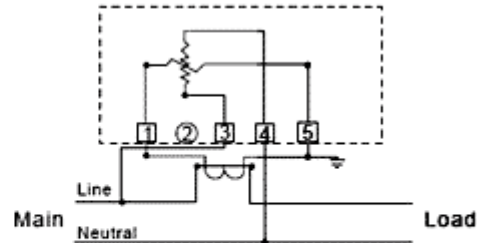
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	sampling device
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Typical connection diagram



Direct connection(symmetrical)
single-phase two-wire



Transformer connection(symmetrical)
for single-phase two-wire

Outline & installation size

