

Schematic diagram of the shaft-type fan generator

What is a shaft generator?

Installing a shaft generator on board a vessel. The shaft generator enables production of electric power by the engine that has a low specific fuel consumption. In addition, the lower number of running hours of the gensets reduces maintenance and expenses for spare parts. In the early 2000s, shaft generators were more common.

What are the operating modes of a shaft generator?

Engine (EC). Shaft generator operating modes A shaft generator can have a multi-purpose function on board a vessel and it can be applied in different modes depending on the situation. The following sections describe the three modes: power take-off, home. Transit mode - power take-off (PTO) In the typical application

What is the difference between a shaft generator and a generator-to-grid subgroup?

Between the engine and the shaft generator system. The generator-to-grid subgroup is related to the power fed to the grid and the system between the shaft generator and the grid. The shaft generator system can be placed either on the aft-end (towards the propeller) or on the front end of the engine. The front-end mounted generator can

Where can a shaft generator be placed?

Between the shaft generator and the grid. The shaft generator system can be placed either on the aft-end (towards the propeller) or on the front end of the engine. The front-end mounted generator can be mounted on the engine or on the tank top. The aft-end mounted generator can be more

How does a shaft generator affect engine speed?

Engine speed under the added resistance. The power taken out via a shaft generator adds to the power required for driving the propeller. As resistance increases on the hull, e.g., when the sea state develops, there comes a point where load must be transferred from the shaft generator to the gensets.

How a shaft generator helps a merchant fleet comply with EEDI?

Overall efficiency of the merchant fleet. The combination of a shaft generator and the MAN B&W two-stroke marine engine gives a powerful tool for complying with the EEDI. The shaft generator can minimise the overall operating costs of the vessel when shifting the hotel load from the

A gas turbine shaft is coupled to the generator shaft, either directly or via a gearbox "direct drive" application. A gearbox is necessary in applications where the manufacturer offers the package ...

To maintain the torque performing on the rotor, PMDC motors include a commutator, set to the rotor shaft. The commutator activates the current supply toward the stator thus as to continue ...

Another type of fan airflow diagram is a velocity diagram, which displays the speed and direction of air as it

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moves through the system. This diagram can be helpful for analyzing the efficiency ...

Yes, there is a battery, but that is only used to power the starting of the vehicle. An alternator is a type of generator that converts mechanical energy into electrical energy. The output of the ...

The schematic diagram of an electric fan motor typically includes various important components such as the rotor, stator, windings, brushes, and commutator. ... They are positioned in contact with the rotating commutator, ...

A box will pop up asking you for the type number on your tool. You will need to enter this type of number to proceed. the model number and type number are usually on the warning label or ...

The schematic diagram of the turbine generator shafting is shown in Fig. 1a. The left end of the shaft is a turbine and the right end is a compressor. The impeller and the shaft are pin ...

modeling of variable speed alternator (Shaft Generator) with PWM voltage source inverter used in ship. Detailed knowledge of electromagnetic characteristics of shaft generator is necessary for ...

The generator output breakers are used to synchronize the generator to the 138KV AC grid. They are controlled from the generator section (MCB01-R) of the main control board in the control ...

To maintain the torque performing on the rotor, PMDC motors include a commutator, set to the rotor shaft. The commutator activates the current supply toward the stator thus as to continue a steady angle = 90, among two fields. ...