

SolarInvert Energy Solutions

Container ship generator parameters



Overview

How is shaft generator power determined for container ships?

Based on the collected technical and operational data for container ships of various load capacity, constructed between 2000 and 2015, and by applying different analytical and statistical methods the parameters have been determined. Shaft generators' power has been established in relation to the power of main engines.

Do ships need a generator based power system?

In general, ships' operations require power lower than the installed generator capacity. However, when the generator is operated at a low load, its efficiency decreases. In this study, based on actual operation data, the load requirements for each operation mode were analyzed, and a diesel-generator-based power system was designed.

What is a containerised generator set?

On a regular basis, containerised generator sets (CGS) are placed on board ships to provide replacement power in case of a damage to one of the ship's generator sets, or additional power, e.g. to provide power to extra deck equipment or reefer containers. There are currently no clear rules and requirements for such time limited installations.

Do feeder container ships use shaft generators?

The paper presents the obtained parameters of specific propulsion systems cooperating with shaft generators, used at feeder container ships.

How to choose a generator for a ship?

Because the ship is for the transport of cargo, it is essential to design the capacity of the appropriate equipment. The size of the generator that supplies power to the ship is calculated in consideration of the safety margin along with the setting of the maximum usable load [20, 21, 22, 23, 24].

How many gensets does a container vessel have?

The main engine capacity of the containers is between 7302 and 63,970 kW, and the auxiliary engine capacity is between 423 and 4236 kW . Mostly, bulk carrier, chemical tanker, and ro-ro vessels have three gensets each, while container vessels have four gensets .

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 **LFP 12V 100Ah**

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and phase --of two or more ...

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The container generators are fully operational supplied, including air-intake, exhaust system and silenced muffler, tank, control panel and accessories such as lighting and fire extinguishers.

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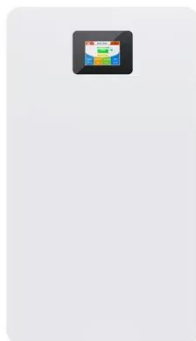
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Characteristic Parameters for Propulsion Systems ...

The paper presents the obtained parameters of specific propulsion



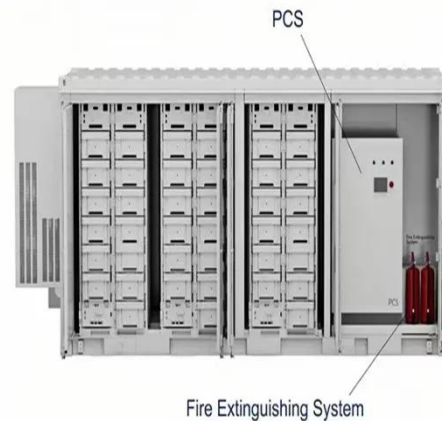
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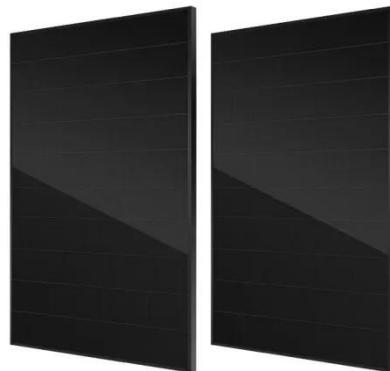
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