Margrete Læsø

Comprehensive Monitoring, Easy Installation On-the-fly

DEIF has developed a series of instruments perfectly suited to monitoring and analysing marine electrical systems.

IMO's mandatory guidelines on energy management require the industry to find new ways of reducing energy consumption. Energy optimisation is not only one of the key ways for the shipping industry to reduce its environmental impact but also a way of generating cost savings.

With a focus on energy consumers mainly influenced by human interaction, such as lights, air, heat, etc., DEIF's energy monitoring products form an advanced platform for monitoring, controlling and managing energy data on-board ships and in other maritime environments.

Easy installation of energy meters on essential consuming systems like AC, hydraulics, air-compressors, etc. provides measurements for a data system with a customised HMI that enables precise targeting of energy waste and maintaining proper energy supervision.

DEIF's energy monitoring products can also be used to monitor harmonic distortion according to DNV specifications, as well as power quality.

Application Challenge

Built in Ringkøbing, DK, in 1996, Margrete Læsø is a ferry with a 589 passenger capacity and room for 76 cars.

The ferry's owner, Færgeselskabet Læsø K/S had specified commissioning without interrupting commercial operations, easy initial installation, and the option of being able to change measuring points at later dates as important criteria in acquiring an energy monitoring system.

The system should also be available to several user groups, including technical staff, ship operators, passengers, management, etc., with an aim of increasing the crew's energy awareness and its ability to intercept and arrest energy waste.

Færgeselskabet Læsø K/S

Færgeselskabet Læsø serves the daily route between Frederikshavn on the continental peninsula Jutland and the island of Læsø in the North Sea Bay of Kattegat with the ferries Margrete Læsø and Ane Læsø.

FÆRGESELSKABET LÆSØ I/S

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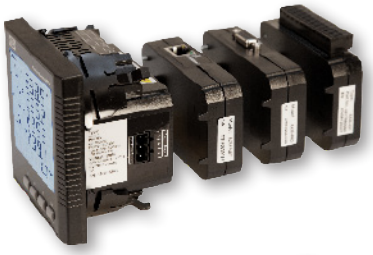
Data

- 4 × gensets 420 KW
- 3 × thrusters 315 KW
- 22 × MIC-2
- 66 × Splitcore CTs

Products



Multi Instrument, MIC-2

Split Core Transformer, SCT

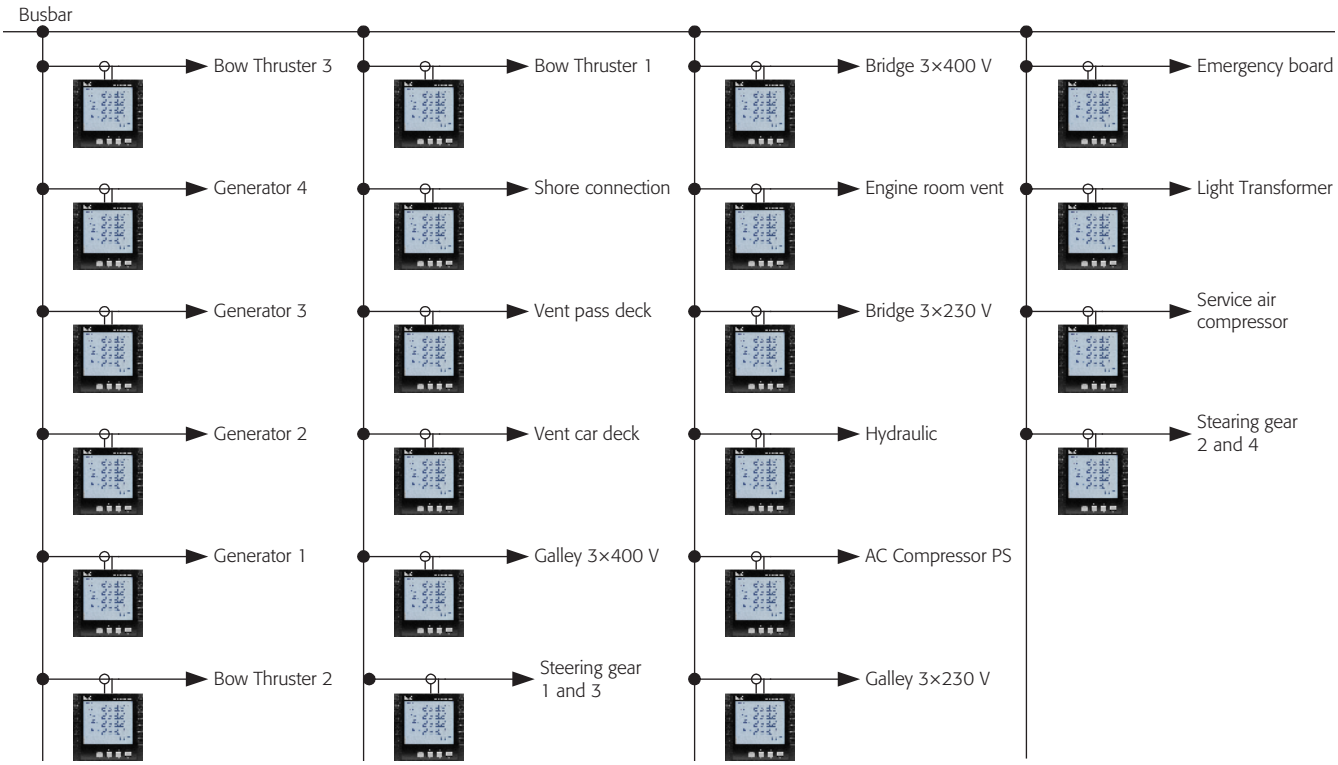
Split Core Transformer, KBU

DEIF Solution

Together with the crew onboard Margrethe Læsø, the measuring points relevant to measure was pointed out. These points were selected from a theory of finding potential energy waste. All installation was carried out by their own electrician, who installed the meters and current transformers in time gaps between normal operations, without being forced to dismount cables as the DEIF split-core current transformers could easily be mounted around the wires.

Using the ferry's existing technical local network, it was easy to connect all DEIF MIC-2 for easy transferring of power, energy, and power quality measures. All data is collected by a data acquisition unit with a graphical user-interface for displaying relevant data to visualise energy waste for the crew. enabling crew to intervene earlier and stop energy waste.

Case Diagram



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