ID-Ship

ComAp

Description

- A small ferry has two propellers, one in bow and one in stern. Propellers can rotate by 360° to give requested maneuverability to the ferry.
- Each propeller is driven by two engines located in two separate engine rooms.
- In each engine room is also one auxiliary genset.
- Propulsion engines are controlled by InteliDrive Marine, in PROP configuration, via J1939 bus. Redundant J1587 bus is used in case of J1939 failure.
- Requested speed is defined by 4-20mA signal from the bridge.
- InteliDrive controllers make propulsion load-sharing to keep engines evenly loaded.
- Engines of auxiliary gensets are controlled by InteliDrive Marine in AUX configuration.
- InteliDrive controllers communicate to a ship's control and visualization system via Modbus RTU/TCP converter and Ethernet bus.
- Optimal configurable structure of InteliDrive's Modbus message together with high communication speed of Ethernet bus gives immediate information on engine speed and torque required on a bridge of quickly maneuvering ship.

Scope of supply:

- 6× ID-DCU Marine
- 6× ID-RPU
- 4× ID-COM
- 6× Modbus RTU/TCP converter (not delivered by ComAp)

MODBUS DISPLAY PANEL

BRIDGE

ETHERNET

4 - 20 mA REQUESTED SPEED

MODBUS TCP — RTU MODBUS — ID-DCU MARINE — J1587 — J1939 — CLUTCH CONTROL — 1

MODBUS TCP — RTU MODBUS — ID-DCU MARINE — J1587 — J1939 — 2

4/20mA SPLITER — 2x 4/20mA — CAN2

MODBUS TCP — RTU MODBUS — ID-DCU MARINE — J1587 — J1939 — CLUTCH CONTROL — 2

1 ECU   2 ECM

ENGINE ROOM 1

TRANSMISSION — HYDRAULIC CLUTCH — ENGINE

Applications