**Wider 165 Mega Yacht**

Onboard Power System
100% Electric Propulsion

**PROJECT**
Wider 165 Mega Yacht - Onboard Power System

**LOCATION**
Ancona (Italy)

**CLIENT**
Wider

**APPLICATION**
Full Electric & Hybrid Super Yacht

**SCOPE OF SUPPLY**
Full electrical power and control system including redundant main propulsion drives

**MAIN COMPONENTS**
Custom propulsion system engineering, drives, Power Management System (PMS), Human Machine Interface (HMI), black box and remote control
Full power control system by Nidec

Nidec designed and supplied the complete power system based on water cooled NIDEC drives integrated with PLC, custom HMI, black box and remote control for remote diagnostics. All electric motors (main propulsion, thrusters), generators and battery pack are managed by NIDEC’s in-house Power Control System based on DC bus architecture.

The main propulsion motors are powered by redundant drives to enhance reliability. The system also includes an advanced data logger and remote diagnostic system which allow remote assistance and trouble shooting.

Nidec on board

- Common DC bus architecture
- Variable speed generators (4 x 350kW)
- Main propulsion (2 x 531kW)
- Thrusters (2 x 70kW)
- On board grid 230V & 400V
- Harbor grid
- Battery management (600kWh)
- Power Management System (PMS, HMI & remote control)
- Water cooled drive modules

System benefits

- Improved energy efficiency & pollution reduction
- Very high comfort
- Fantastic Night Mode with diesel generators OFF (battery mode)
- Zero Emission Mode for Restricted Areas
- Lower fuel consumption and emissions
- Environmental benefits
- Less space required for propulsion machinery