

CIRCA MARINE & INDUSTRIAL LTD

ENGINEERS AND SHIPBUILDERS

Circa 24m Offshore Motor Yacht ***"Deo Juvante"***

As-Built Specification

Public Version

245 Lower Port Road | PO Box 571 | Whangārei 0140 | New Zealand
Phone: +64 9 438 9522 | Deon@circamarine.co.nz | www.circamarine.co.nz

1. Dimensions & Capacities

Certification	CE
Length Overall	25.9m
Length Waterline	24.7m
Beam	5.9m
Draft	approx. 1.8m
Displacement (Full Load)	approx. 77 tonnes
Fuel Capacity	14,000L
Fresh Water Capacity	5,000L
Waste Water Capacity	600L
Cruising Speed	11 knots
Maximum Speed	approx. 16 knots
Range	5,000+ NM (economical conditions)

2. Construction

Aluminium offshore motor yacht constructed to recognised marine standards.

Features a fully welded hull, deck, and superstructure with watertight subdivision and integral tankage.

Designed and built for extended offshore cruising capability.

3. Propulsion & Machinery

- Main Engines: **2 x MAN D2676 LE451 – 500HP @ 1800rpm**
- Gearboxes: **ZF 550-1 marine gearboxes**
- Propulsion: Twin shaft drive with fixed pitch propellers
- Generator: **Cummins Onan marine generator (approx. 19–22kW)**
- Alternators: Dual engine-driven alternator systems
- Bow Thruster: **Side-Power proportional thruster system**

4. Stabilisation & Steering

- Stabilisation: **Humphree all-speed fin stabilisation system**
- Steering: Hydraulic steering system with multiple control stations

5. Fuel System

Multi-tank diesel fuel system with transfer capability and onboard filtration.
Configured for extended range operation and fuel management.

6. Electrical System

- 24V DC onboard system
- 230V AC system via shore power, generator, and inverter/charger
- Battery System: Lithium house battery bank
- Inverter/Charger System: **Victron Energy**
- Solar Array: Roof-mounted solar panels with MPPT regulation

Integrated vessel monitoring and power management systems installed.

7. Plumbing & Water Systems

- Freshwater system with pressurisation and hot water supply
- Hot Water: **Isotemp / Webasto system**
- Watermaker: **Sea Recovery Aqua Whisper Pro**
- Grey water and black water holding systems
- Bilge and pumping systems throughout vessel

8. Navigation & Electronics

- Navigation System: **Furuno TimeZero PC-based system**
- Radar: **Furuno Doppler radar systems**
- Satellite Compass: **Furuno SCX20**
- Autopilot: **Simrad AP70 system**
- AIS: **Furuno Class A AIS**
- Sonar: **Furuno sonar systems**
- Vessel Monitoring: **Maretron monitoring system (NMEA 2000 network)**

9. Communications

- VHF: **Icom marine VHF system**
- HF/SSB: **Icom system**
- Satellite Communications: **Iridium GO**
- Loudhailer/Intercom system installed

10. HVAC & Refrigeration

- Air Conditioning: **Dometic reverse-cycle system**
- Diesel Heating: **Eberspächer diesel boiler system**

Refrigeration:

- Isotherm marine refrigeration systems
- Liebherr refrigeration (crew area)
- Ice-maker and cockpit refrigeration installed

11. Interior & Domestic Appliances

- Galley Appliances: **Miele appliances (cooktop, oven, dishwasher)**
- Laundry: **Miele washer and dryer**
- Entertainment: Samsung TV and audio system

Interior fit-out completed to offshore cruising standard with customised finishes.

12. Deck Equipment

- Windlass: **Maxwell VWC4000 system**
- Winches: **Lewmar electric winches**
- Anchoring system with chain and primary anchor
- Mooring equipment and fendering supplied

13. Safety Systems

Fire suppression system installed in engine room with automatic shutdown capability.

Bilge pumping, alarms, and monitoring systems fitted throughout the vessel.

14. Trials & Delivery

The vessel has undergone commissioning, harbour testing, and sea trials to verify operational performance of onboard systems.