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Eco Boats Australia.

The green alternative in boating.



28' Cruising Yacht with 2.5kW DC inboard

The Compass is a well known Australian built masthead sloop. Production ceased in 1981 but hundreds of these comfortable cruising yachts can still be found around the country. 'Elcie Jay' is a Compass 28 with an overall length of 8.5m on a LWL of 6.7m, and a displacement of 3.2 tonnes.

Her old diesel inboard had given up the ghost and as her owner only needs auxiliary power to go on/off the mooring it was decided this can be conveniently done with a compact & quiet electric boat motor. The Mastervolt-Bellmann 2.5kW electric inboard has performance equivalent to a 7HP diesel motor.



Controller, motor and battery bank

The electric motor is much smaller than the original diesel inboard and positioned in the aft section of the motor bay. The 24V battery bank is installed where the diesel motor used to be providing a compact and clean set-up.



Compass 28 under sail



24V DC electric inboard motor



Diesel motor in Compass 28



Electric motor in Compass 28

The digital display that is part of the 'plug & play' package gives all-important information such as battery condition, remaining running time and the power consumption in kW. The electric boat motor is powered by a 24V / 120Ah battery bank consisting of 2 AGM batteries. At cruising speed the batteries will provide approx. 1 hour of running time. Longer running times can be easily achieved by increasing the battery capacity.

This yacht lives on a swing mooring and will be fitted with solar panels to keep the batteries charged. This eliminates the dependency on fossil fuels and ensures Elcie Jay is powered purely by the sun and the wind.

Should her owner wish to go on an extended cruise, a small generator can be brought onboard to provide additional energy, turning it into a very fuel efficient serial-hybrid drive system.



Compass 28 on mooring



For more information on electric propulsion visit:

www.ecoboats.com.au

For more information on the installation:

<http://compass28electricdrive.blogspot.com>