



Blue Hybrid System[®]



The Green Heart of boating



A **LONCIN** COMPANY

WHY CHOOSING

BLUE HYBRID SYSTEM®



It is a mechatronic marine propulsion system entirely conceived and designed by CMD, applicable to all kind of engines (old and above all new generation) that allow you to navigate in all marine areas where respect for the environment requires silence and zero polluting emissions.

The system is made up of a three-phase synchronous electric engine which allows you to navigate up to 8kn in electric.

The alteration of electric / endothermic propulsion takes place automatically thanks to the HCU device (Hybrid Control Unit) projected entirely by CMD.

During endothermic navigation, the batteries are recharged automatically, guaranteeing in the standard version, **over 2 hours of navigation**.

Thanks to the CMD technology, the electric propulsion control takes place through the same control commands of the endothermic propulsion, displaying the operating parameters.

Today the Blue Hybrid System® is the only system capable to offer a total integration with any basic propulsion engine .



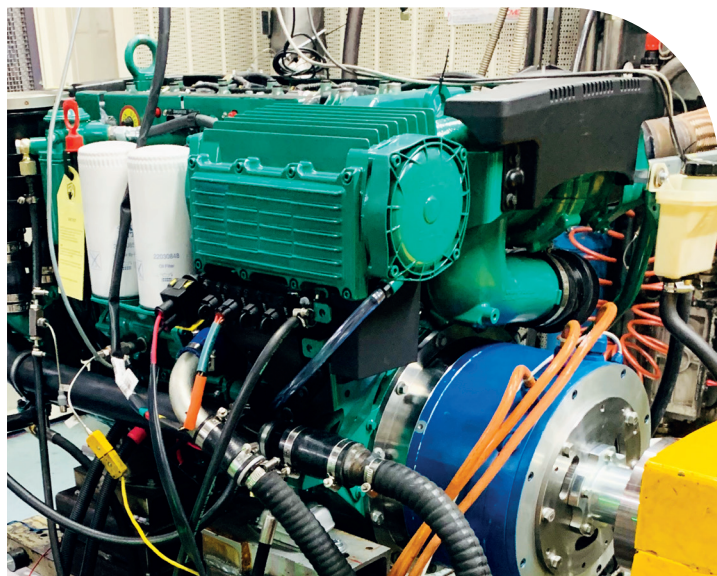
Blue Hybrid System® is a registered trademark owned by CMD S.p.A. to LONCIN Company.

All components have been tested in the laboratory and have overcome rigorous endurance trials on a test boat.

The particular and characteristic elements of the BHS are:

- **Compactness:** only 30 cm in size;
- **Adaptability to any type of marine engine** with a perfect integration of the engine electronics one;
- **Kit "Plug & Play":** the supply is complete in each detail. Neither the yard and the machinist take care of the wiring, everything is installed, connected and browsed by us;
- **Possibility of programming and calibration** from the whole system to specific customer requirements: automatic passage in the entrance electrical operation in protected areas marked on maps, speed limits in areas subject to requirements, booster function gliding for reducing the installed diesel power, etc.

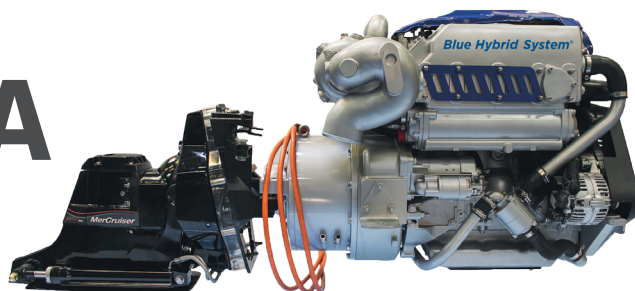
Usable with any type of propulsion: shaft line, stern drive, surface propellers, POD, IPS and Sail drive.



CMD S.p.A.
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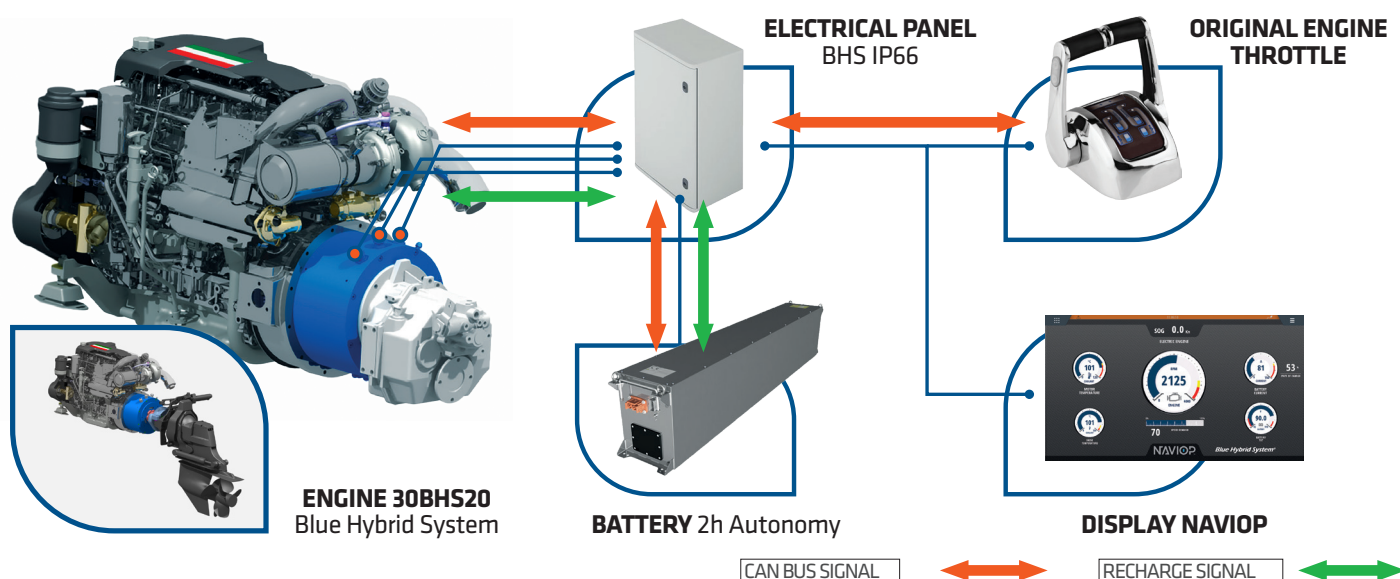
TECHNICAL DATA



BLUE HYBRID SYSTEM®

Electric Unit Engine	8 synchronous poles
Maximum Propulsion Power [kWe]	20
Maximum Recharge Power [kWe]	15
Battery Voltage [V]	96 DC
Battery Life [cycles]	> 2000
Battery Capacity [kWh]	13,2
Duration electric propulsion standard equipment	2h with standard use cycle
Total electrical system weight [kg]	240
Single Battery Weight [kg]	125

OPERATING SCHEME



USING AREAS

APPLICATIONS



The Blue Hybrid System® has been designed for applications in the recreational and commercial marine field. It is the best solution for protecting the marine ecosystem and the environment: in this way it will be possible to navigate in preserved

areas respecting the limits imposed by the laws of protection in terms of emissions and noise.

CMD S.p.A.
The Green Heart of Boating

Suitable for all types of transmission and boat



**FISHING
BOATS**



**PASSENGER
TRANSPORT
BOATS**



**SMALL OR
MEDIUM
YACHTS**



A **LONGIN** COMPANY

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