



# Gardenergy

enjoy the sound of power



electric outboards & powertrains

# PRODUCTS LINE

a solution for any request

OUTBOARDS



POD



INBOARDS



BATTERIES



DRIVES

**Gardenergy was established to offer a simple and reliable product featuring cutting-edge technology that allows your boat to cruise in total silence while respecting the environment.**

*“Looking forward we designed an electric power train to conceive a new way to experience navigation. Simple, reliable and silent Gardenergy engines are the perfect companion for navigating in protected areas, but also for all those applications where electric traction must be efficient and high-performing.”*

# TARGET

a solution for everyone

**New horizons to develop a business that focuses on respect for man and the environment.**

## OEM’S

Boat builders and shipyards seeking a high-performing, reliable partner for their electrical product. Gardenergy offers OEM supplies of electric inboard and outboard engines for new products and the retrofit market of engines by other brands and with different technologies.



## Private owners

Private yachtsmen and nautical dealers seeking a standard product that is also easily customisable in terms of performance and accessories.



## Retrofit and conversion

To all those who wish to convert their boat by replacing an internal combustion engine with an electric one, Gardenergy offers the chance to easily adapt the new engine to the boat.

# OUTBOARDS

a complete line



REMOTE CONSOLE

STAND ALONE - REMOTE STEERING



POD

STAND ALONE - TILLER

# REMOTE CONSOLLE

different positions, a single driving solution



A solution with a user interface on the panel and designed for connection to your boat's steering system

**1. Remote interface.** You can choose the type of display for your panel. **2. Custom propeller.** The propeller design adapts to the boat type on which the engine is installed. **3. Fastening system.** Simple installation on the transom of your boat. **4. Plug & Play utilities.** With the Smart system you can have up to 4 plug-and-play utilities that are ready for use. **5. Power connections.** Easy and Plug & Play design for quick and safe connection.

# STAND ALONE

practical and lightweight



## Remote steering

The simple solution designed for connection to your boat steering system.

## Tiller

The ready-for-use solution. You can control your electric outboard thanks to a comfortable and sturdy tiller. Joystick or knob with inverter, choose the Gardenergy comfort.

**1. Running inverter.** For high powers, the safety of a control separate from the accelerator. **2. Control joystick.** The joystick design allows for a practical and manageable handgrip. **3. Control knob.** Standard knob to accelerate with maximum ease.

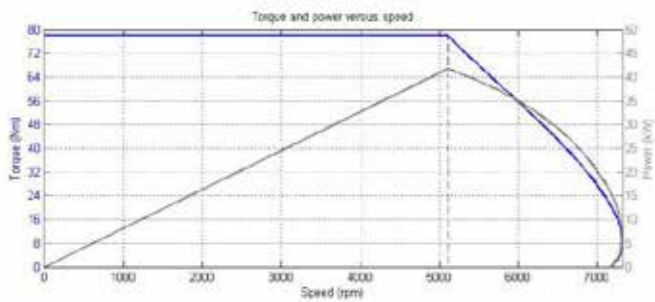
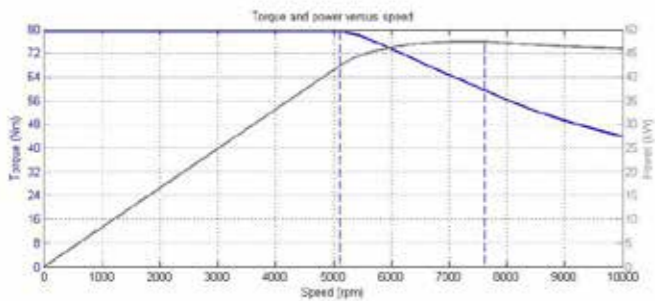
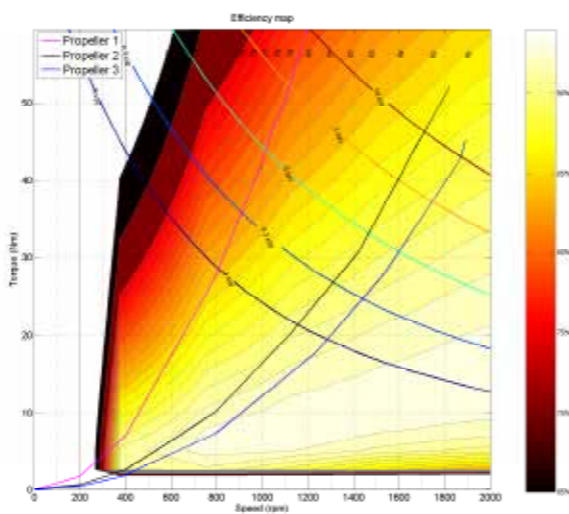
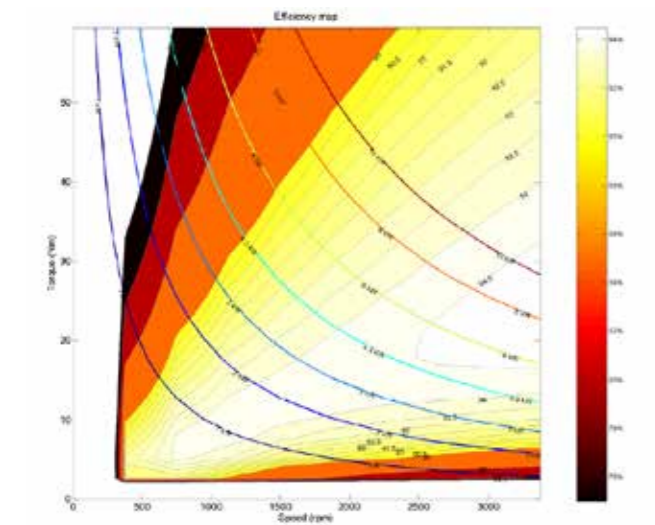
# POD

the easiest choice

The pod allows for a practical and economical installation where space is restricted and under the hull.

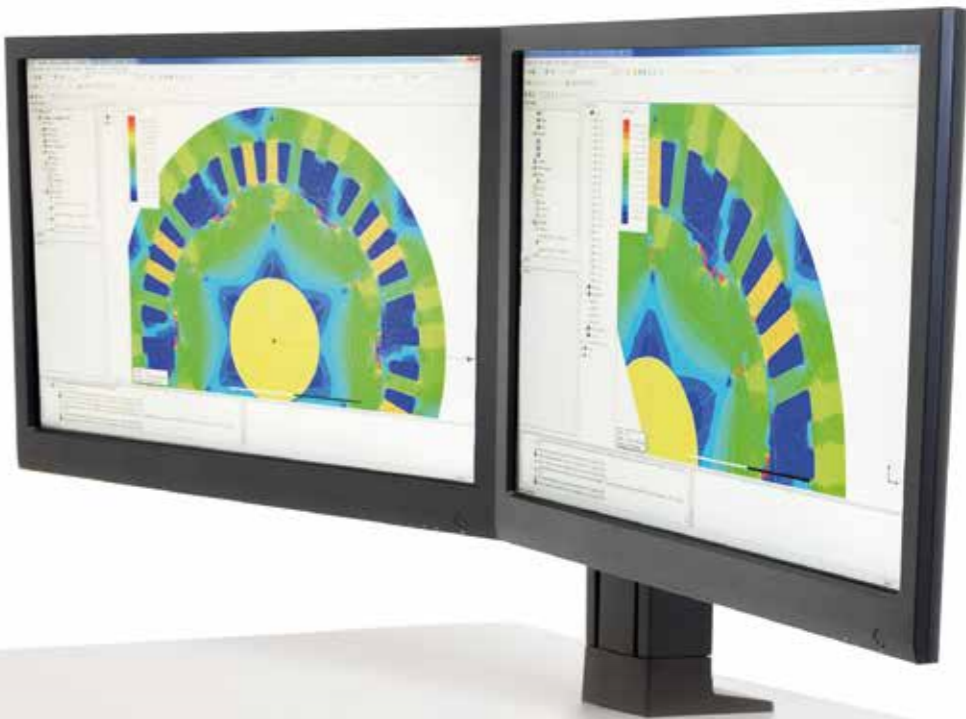
Connect an accelerator and the battery cables thanks to a Plug & Play system and sail away.





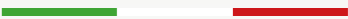
All Gardenergy products are created according to innovative technological choices that allow you to achieve top performances in their category.

- The electric motor is a PMAC type (called brushless), to ensure maximum efficiency and reliability over time. It was designed by skilled engineers using modern simulation software.
- The Gardenergy motors are able to provide optimal torque so that they can be directly coupled to the propeller, without using a speed reducer. This solution allows for quiet operation and maximum transmission efficiency.
- All of our motors are vacuum impregnated with a special epoxy resin that helps heat dissipation, reduces noise and makes them extremely sturdy.



- The electronic power board of the outboard is built into the motor foot, ensuring improved heat dissipation and maximum engine performance even at high ambient temperatures.
- All engine components are made of aluminium alloy castings, which are then processed with CNC machines to guarantee perfect couplings, maximum durability over time and sturdiness in case of shocks.
- All aluminium parts are subjected to hard anodisation.
- The outboard meets military standards, has 5 coats and includes the antifouling treatment to guarantee engine protection over time.

Our technicians are able to support the construction sites in choosing the best powertrain based on the boat's characteristics. Our company is also available for the development of customised solutions exclusively for manufacturers.



# DASHBOARD TECHNOLOGY



## Easy

A simple and direct interface to always know the state of your battery.

## Smart

Touch-screen technology for control over your boat at the touch of a finger. Stay connected with GPS and GSM tracking.

intuitive and functional in every format

1.



2.



3.



4.



5.

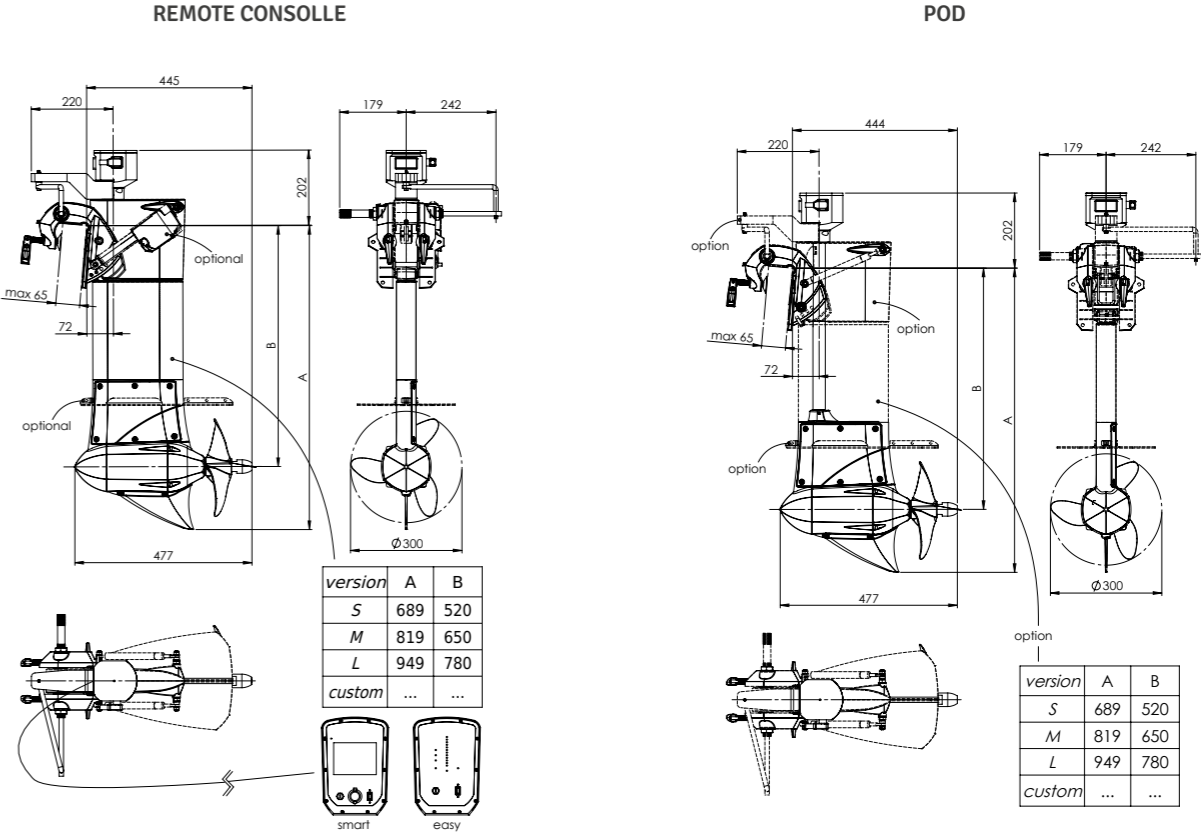
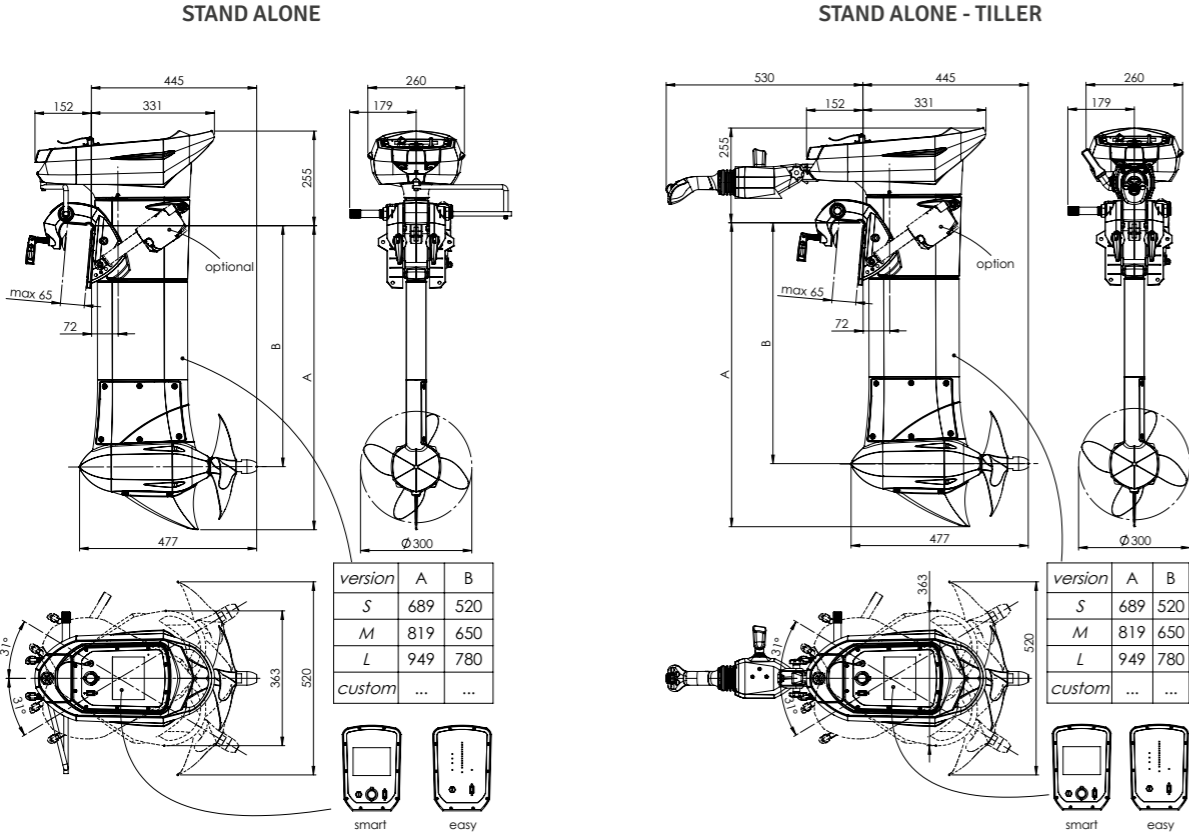


6.



**1. EASY with LED technology.** Available with APP and Bluetooth technology with the option of diagnostics and setting of the operating speed. **2. SMART with touch screen display.** The control panel with touch-screen display to directly control the various on-board accessories such as the bilge pump, tilt and trim and designed with the GPS/GSM functions. Comes with Bluetooth and APP. **3. App.** Available for both IOS and ANDROID devices, the app allows you to view and configure all the parameters of your boat in real time via a Bluetooth connection. **4. Stereo.** There are different types of stereo systems and radios with a Bluetooth audio version for listening to music from your playlist on your mobile phone up to the stereo system with a built-in radio. **5. GPS/GSM.** To know the position of your boat at all times. Particularly useful for rental fleets, but also for those wishing to activate a tracking function and as alarm system. **6. Ignition key and dead man switch.** Your ignition key and the safety of the operator's presence always with you.

# CONFIGURATIONS



# DATASHEET

MODEL	6.3	8.4	12.6	16.8	20.10
Input power from batteries	3.000 Watts	4.300 Watts	6.000 Watts	8.000 Watts	10.800 Watts
Mechanical shaft power	2.508 Watts	3.673 Watts	5.126 Watts	6.912 Watts	9.227 Watts
Comparable petrol outboard	6-4 Hp	9-6 Hp	12-9 Hp	16-12Hp	20-15 Hp
Full power electronic efficiency	95 %	96 %	96 %	96 %	96 %
Full power motor efficiency	88 %	89 %	89 %	90 %	89 %
Nominal voltage	24 V	48 V	48 V	48 V	48 V
Total weight	25 kg	26 kg	25 kg	28 kg	29 kg
Standard Propeller	3 blades	3 blades	3 blades	3 blades	3 blades
Max propeller speed	1400 rpm	1450 rpm	1600 rpm	1750 rpm	1.950 rpm
Custom propeller	On request				
Control	Remote throttle				
Steering	Remote steering				
Tiller	Available				
Mechanic tilt&trim	Standard, 4 position				
Electric tilt&trim	On request				
Bluetooth 4.1	Embedded				

OPTIONS		
OUTBOARD VERSION	EASY	SMART
Display	Led display	Touch display
App	Yes	Yes
Gps	-	Yes
Gsm	-	Yes
12V Exit	-	Yes
Usb	-	Yes
Bilge pump	-	Yes
Light	-	Yes
Clacson	-	Yes
Stereo	-	Yes
Audio Bluetooth	Yes	Yes
Solar system	Yes	Yes
Alluminium shaft profile	Yes	Yes
Cavitation plate	Yes	Yes
Fin	Yes	Yes

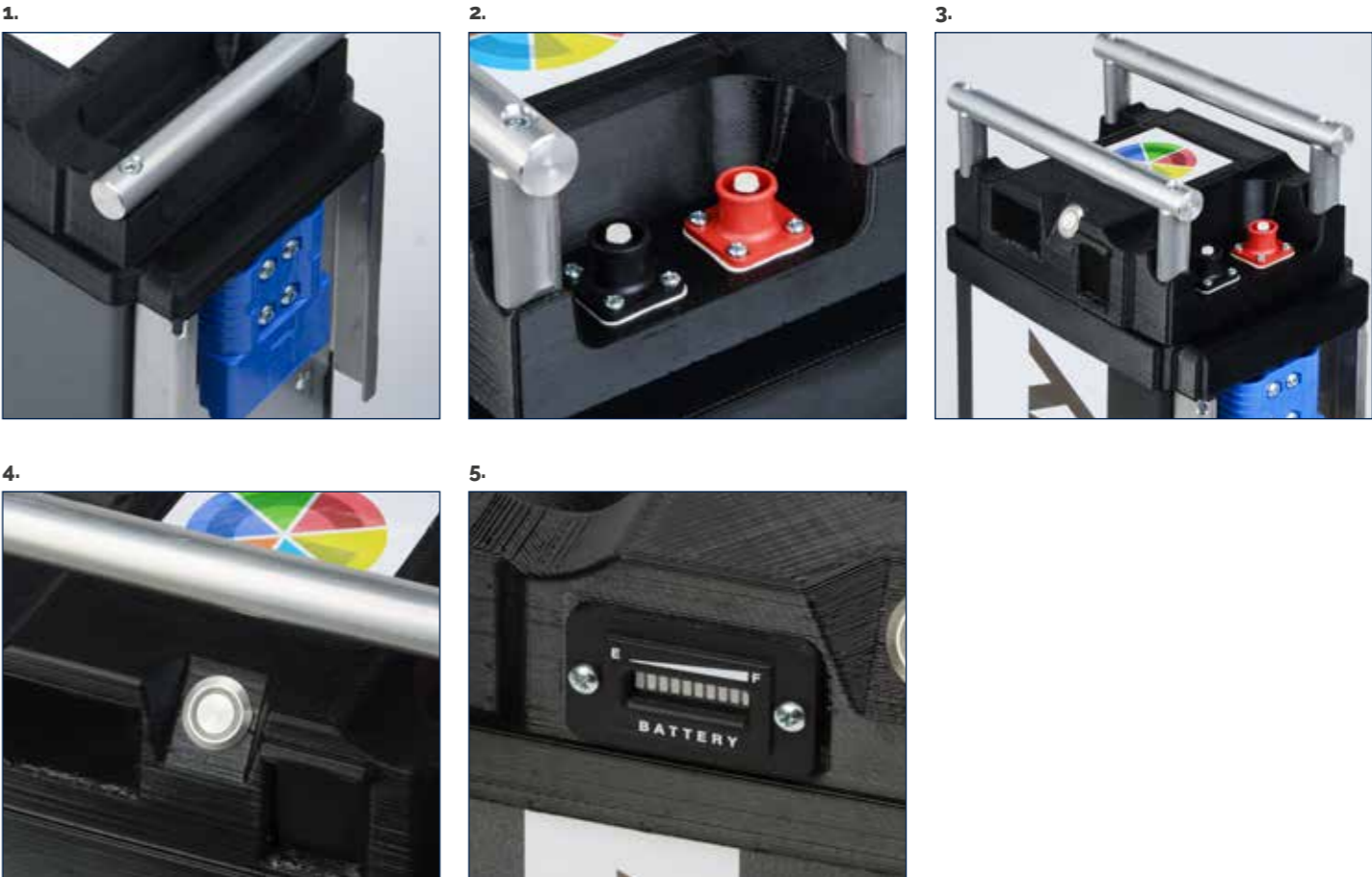
# BATTERIES

top up with energy



Our batteries have an IP67 protection degree and discharge currents up to 500A.

Batteries with a single case for 48V systems and the innovative quick coupling system for quick and safe connections.



TYPE	Series	Capacity [Wh]	Voltage [V]	Current [Ah]	Max discharge current [A]	Lenght [mm]	Lenght with Plug & Play bracket [mm]	Wide [mm]	Height [mm]	Weight [kg]
B1250.48.100	Lilon	1.250	48	26	100	230	260	165	220	10
B2500.24.300	Lilon	2.500	24	104	300	230	260	165	340	19
B2500.48.300	Lilon	2.500	48	52	300	230	260	165	340	19
B.3800.48.500	Lilon	3.800	48	79	500	230	260	165	460	26
B.7600.48.500	Lilon	7.600	48	158	500	230	260	165	790	49

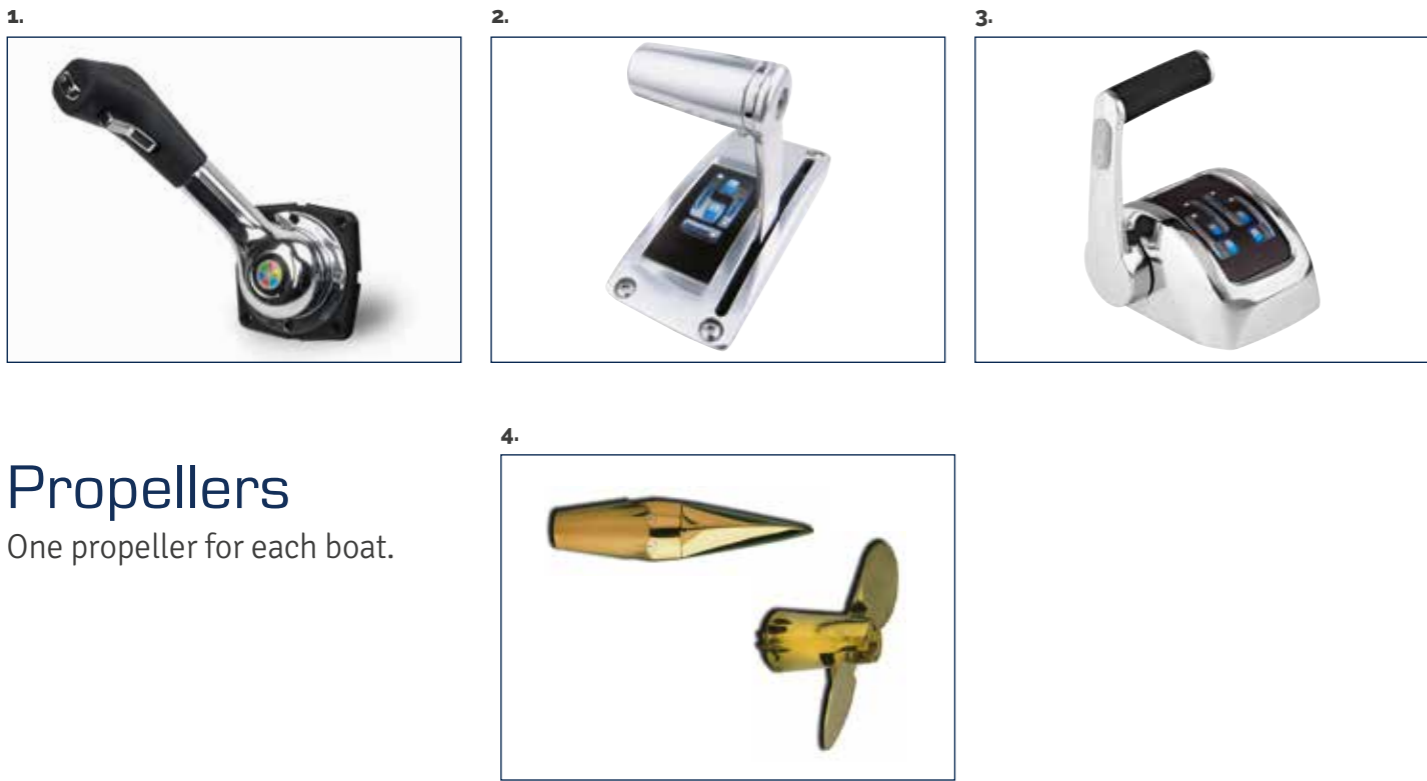
1. **Quick coupling for fastening.** Install your battery thanks to the quick plug-and-play system. 2. **Plug & Play power.** The new quick coupling power connectors guarantee a simple and safe connection. 3. **Handles.** The practical handles are ideal for carrying your battery wherever you are. 4. **Power button.** A built-in button to turn your battery on/off. The version with remote button is also available. 5. **Built-in display.** A simple display allows you to display the battery charge status in real time. For SMART versions, the full battery status can be displayed directly on the control screen.

# ACCESSORIES

designed for any request

## Accelerators

An accelerator for any kind of boat and panel.



**1. Side single-lever accelerator.** Standard system with Hall-effect sensor. **2. Front single-lever accelerator.** Front lever system with CAN BUS. **3. IP68 side single-lever accelerator.** Side lever system with CAN BUS. **4. Sailboat propeller.** Closed for minimum resistance with windy and open for maximum thrust with the electric motor. **5. Bilge pump.** **6. Lights.** **7. Buzzer.** **8. Audio system.** **9. Plug & Play connections.** **10. Folding panel.** 95Wp of power with multicrystalline silicon cells. **11. Multiple contact technology.** To increase the life of your panel. **12. Fastening systems.** Secure your panel with maximum freedom.

## Optional features

Plug & Play utilities to expand your system at all times.



## Flexible photovoltaic panels

The power of the sun always with you.



# DRIVES AND INBOARD



## Drives

It lets you to control your electric motor thanks to simple and reliable electronics.



TYPE	Power max [kW] With cool down	Voltage max [V] With cool down	Max Input corrent [A] with cool down	Max Output current with cool down	Efficiency	Lenght [mm]	Wide [mm]	Height [mm]	Weight [kg]
D15	15	60	250	240	%95	180	150	67	2
D68	68.4	120	570	550	%95	262	212	102	4,6
D160	160	400	400	400	%93	380	315	120	12,5

1. Plug & Play power. The new quick coupling power connectors guarantee a simple and safe connection
2. Cooling system. The drive aluminium body contains the electronics cooling system for optimal operation at all times.

the full range for your inboard system



## Inboard

The compact solution to integrate your electric motor inside your boat.

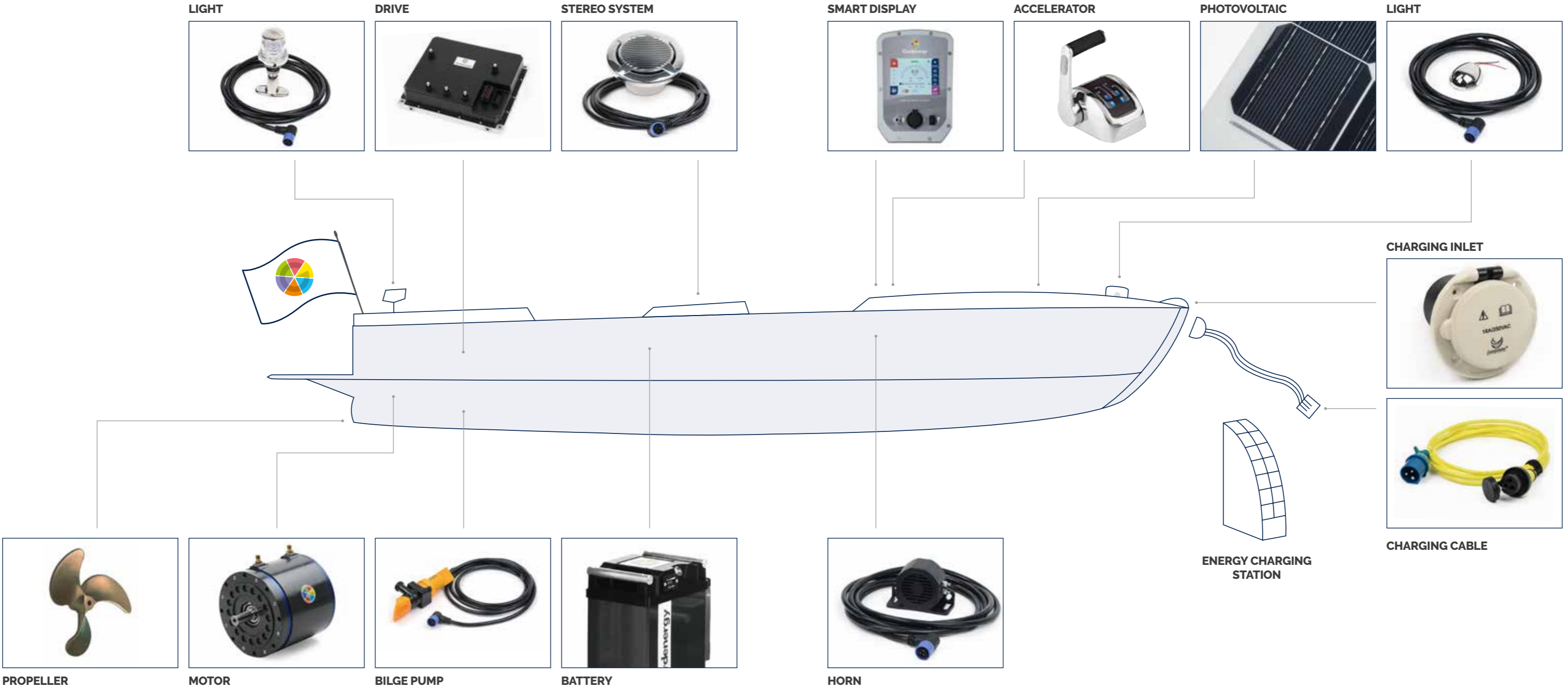


TYPE	Shaft Power max [kW]	Max Voltage [V]	Max speed [rpm]	Shaft Max Torque [Nm]	Max Efficiency	Lenght [mm]	Wide [mm]	Height [mm]	Weight [kg]
I10	10	96	2500	60	%94	160	160	180	2
I65	15	120	570	550	%95	262	212	102	4,6
I120	65	400	7200	100	%96	190	190	210	20

3. Plug & Play power. The new quick coupling power connectors guarantee a simple and safe connection

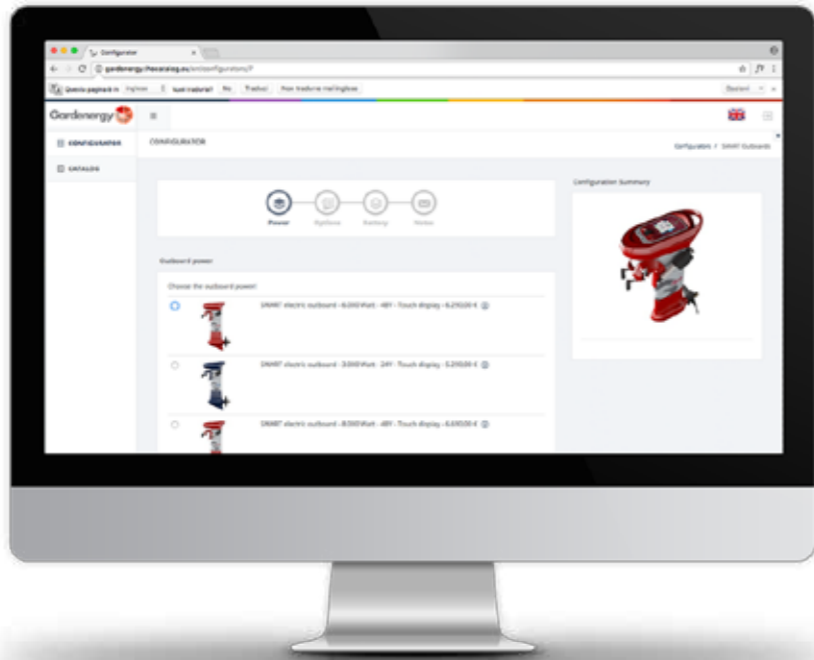
# CUSTOMS POWERTRAIN

the idea becomes reality



# CONFIGURE ONLINE

find and configure the best solution  
for your needs



# ONLINE PRICE LIST

[www.gardenergy.com](http://www.gardenergy.com)

# PRE AND AFTER-SALES

assistance

## Warranty.

Gardenergy offers a 3-year warranty\* on all its products.  
*\*3-year warranty only for private customers, the warranty for companies is valid for 1 year and can be extended.*

## A dedicated centre of excellence.

Gardenergy created its centre and network to meet customer expectations. You will have a 100% dedicated pre and after-sales service.

## All our services.

Gardenergy provides all customised services needed by customers. Our representatives have been trained according to the needs of all sectors. They will advise you on the choice of your next product, be it an accessory or a powertrain, or on assistance contracts or loans tailored to your needs.

## We take care of you.

Gardenergy provides annual maintenance services for warranty extensions divided into 3 different packages designed to best meet the needs of individual customers.

**BASIC:** to access discounts and a fast spare parts service.

**PREMIUM:** thanks to the annual on-site service and additional benefits, your fleet of powertrains will always be in perfect shape.

**KASCO:** a service to fully protect your investment.



## Gardenergy's commitments.

A wide range of configurations and set-ups.  
Dedicated test drives available by appointment.  
24/7 assistance. Quick repairs.  
Scheduled maintenance carried out on-site.





## electric outboards & powertrains

[gardenergy.com](http://gardenergy.com)

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