Marine & Leisure Battery Solutions

An outstanding battery range
Powering your freedom

Comprehensive battery range for all marine needs:

- Engine start
- Equipment supply
- Dual supply

Made in Europe by Exide Technologies
Original Equipment Manufacturer
Ensure safer & longer trips
by choosing the right battery

The battery is critical to safety and comfort. It powers key operations like engine start, radio, GPS, lighting, heating and refrigeration, allowing passengers to feel sheltered, entertained and connected to the outside world. Exide’s new marine range covers all the energy needs of both professional installers and private users. It offers the very best in reliability and electrical performance, allowing you to extend average trip length, experience improved luxury and comfort on board, and benefit from exceptional battery lifespan.

Exide’s premium marine batteries are a preferred choice for boat builders. The batteries are DNV-GL approved, the highest endorsement for a marine market product, making it easier to align with European naval regulations for newly built boats.
How to select the best battery solutions:

1. Identify the boat’s energy needs

2. Identify the boat’s electrical configuration to find the right battery combination

3. Select the best battery technology according to its conditions of use

**Engine Start Need**
Starting a combustion engine requires high peaks of power during a short time, leaving batteries unused for the rest of the journey. The electrical unit used to measure engine start need is MCA*

**Dual Supply Need**
Starting engine in combination with the supply to other electrical equipment requires high peaks of power and also a variable power drain, causing battery discharge during the journey. The electrical unit used to measure dual supply need is Wh*

**Equipment Supply Need**
An uninterrupted supply to emergency or comfort equipment uses power at consistently high levels, causing deep battery discharge during the journey. The electrical unit used to measure equipment supply need is Wh*

*MCA = BCI Marine Cranking power in Amps at 0ºC
*Wh = Available Watt x hour at 20h rate from a battery, without exceeding its recommended depth of discharge
How to select the best battery solutions:

2 Identify the boat’s electrical configuration to find the right battery combination

Examples of different configurations

**Case A. Engine only**
Boats for which batteries are applied to engine start only. The electrical equipment is not supplied with energy when the engine is switched off. This configuration corresponds to Engine start need.

**Case B. Engine & Equipment**
Boats for which one unique bank of battery has to supply power for engine start and electrical equipment. This configuration corresponds to Dual supply need.

**Case C. Engine + Equipment**
Boats for which 2 separated banks of batteries are dedicated to supply power, one for engine start and the other for electrical equipment. This configuration corresponds to two needs: Engine start plus Equipment supply. In total, 2 different batteries are required.

**Case D. Engine + Equipment + Other**
Boats for which, in addition to 2 main battery banks (engine + equipment), other batteries are installed to supply power directly to electrical winches, thrusters or trolling motors. This configuration corresponds to three needs: Engine start plus Equipment supply plus Dual supply. In total, 3 different batteries are required.
Each energy need has its optimal battery solution

**Engine Start Need**

Exide START battery range is designed to supply high power for engine start when installed alone for boats with basic equipment (case A). It can also be used when installed in engine-dedicated battery banks for the most sophisticated yachts (cases C&D). The batteries are usually charged after starting the engine, as the alternator quickly returns consumed power. The START design provides good performance and service life duration. START battery range, with MCA* performance from 500A to 1100A, is the choice to cover all engine start needs from small outboards to big sterndrives.

**Dual Supply Need**

Exide DUAL battery range is designed to supply power for boats having one battery bank for all consumers (case B). It is also suitable for additional batteries directly applied to electrical winches, thrusters and trolling motors (case D). The batteries are partially discharged during use. This means that the DUAL’s reinforced design, together with a good recharging procedure, is key to providing the best result and service life duration. DUAL battery range, with Wh* performance from 350Wh to 2100Wh, is the choice to cover all dual supply needs for the most popular recreational boats.

**Equipment Supply Need**

EQUIPMENT battery range is designed to supply power for boats with dedicated battery banks for equipment such as navigation, emergency, safety and comfort (cases C&D). The batteries are partially or even deeply discharged during use. This means that the EQUIPMENT’s special design, together with a good recharging procedure, is the key to providing the most reliable result and service life duration. EQUIPMENT range, with Wh* performance from 290Wh to 2400Wh, is the choice to cover all equipment supply needs, from small electronics to emergency power.

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* MCA = BCI Marine Cranking power in Amps at 0ºC
* Wh = Available Watt $\times$ hour at 20h rate from a battery, without exceeding its recommended depth of discharge
Select the best battery technology according to its conditions of use

How to select the best battery solutions:

1. Select the best battery technology according to its conditions of use

**Engine Start Need**

- **Technology:** Standard flooded with plug venting
- **Benefits**:
  - Superior starting power
  - Absolutely maintenance free
  - Low gas emission
  - To be installed in special container
  - Slight inclination

- **Technology:** AGM flat or orbital with VRLA venting
- **Benefits**:
  - Superior starting power
  - Absolutely maintenance free
  - Suitable for long resting periods
  - Internal gas recombination
  - No location constraints
  - Safe and clean (spark & spill-proof)
  - High inclination
  - High vibration & tilt resistant
  - Up to 50% faster recharging

**Dual Supply**

- **Technology:** Standard flooded with central degassing
- **Benefits**:
  - Low maintenance
  - Low gas emission
  - Spark arrestor & central degassing for safe gas conduction
  - Upright mount
  - Medium vibration & tilt resistant
  - Start & supply
  - Top indicator for electrolyte & charge inspection (except ER660)

- **Technology:** AGM flat or orbital with VRLA venting
- **Benefits**:
  - Superior starting power
  - Absolutely maintenance free
  - Suitable for long resting periods
  - Internal gas recombination
  - No location constraints
  - Safe and clean (spark & spill-proof)
  - High inclination
  - High vibration & tilt resistant
  - Up to 50% faster recharging

**Graphs**

1. **Depth of discharge at 20°C**
2. **Vibration resistance at 6g/35Hz**
3. **Marine cranking power coverage at 0°C**

**How to select the best battery solutions:**

1. Select the best battery technology according to its conditions of use
Technology:
AGM flat or orbital with VRLA venting

Benefits:
- Absolutely maintenance free
- Suitable for long resting periods
- Internal gas recombination
- No location constraints (safe for cabin mount)
- Safe and clean (spark & spill-proof)
- High inclination
- High vibration & tilt resistant
- Faster recharge
- Up to 50% faster recharging
- Extra start & supply

Equipment Supply Need

Technology:
Standard flooded with glass mat separators and plug venting

Benefits:
- Low maintenance
- Superior cycling
- Slight inclination
- Medium vibration & tilt resistant

Technology:
Gel (electrolyte fixed in a gel) with VRLA venting

Benefits:
- Absolutely maintenance free
- Suitable for long resting periods
- Internal gas recombination
- No location constraints (safe for cabin mount)
- Safe and clean (spark & spill-proof)
- High inclination
- High vibration & tilt resistant
- High energy density
- Space saving of up to 30%
- Superior cycling

DUAL & DUAL AGM
Shelf life at 20ºC

EQUIPMENT & EQUIPMENT GEL
Depth of discharge at 20ºC

DUAL & DUAL AGM
Vibration resistance at 6g/35Hz*

DUAL AGM ORBITAL
DUAL AGM FLAT
DUAL

EQUIPMENT & EQUIPMENT GEL
Shelf life at 20ºC

EQUIPMENT & EQUIPMENT GEL
Vibration resistance at 6g/35Hz*

DUAL
DUAL AGM
EQUIPMENT
EQUIPMENT GEL

* Referred to EN50342
Finalize your choice by calculating the energy required in watts per hour

1. Start by calculating device consumptions

<table>
<thead>
<tr>
<th>Device</th>
<th>Power consumption (W)</th>
<th>Daily running time (h)</th>
<th>Added energy to supply (W)x(h)=(Wh)</th>
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<tr>
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<td>Coffee machine</td>
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<td>+ 300</td>
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<tr>
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<tr>
<td>Fridge</td>
<td>80</td>
<td>6</td>
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</table>

TOTAL ADDITION = 1,070

SAFETY FACTOR x 1.2

TOTAL REQUIRED = 1,284

2. Apply a safety factor to cover overuse (recommended)

3. Select your battery set according to the requirements

**EQUIPMENT GEL**
- 1 battery ES1300 providing 1,300 Wh* and weighing 39 kg

**DUAL AGM**
- 2 batteries EP 900 providing 2x900= 1,800 Wh* and weighing 2x32= 64 kg

**DUAL**
- 3 batteries ER 450 providing 3x450= 1,350 Wh* and weighing 3x23= 69 kg

*Wh = Available Watt x hour at 20h rate from a battery, without exceeding its recommended depth of discharge

**Did you know?**

When selected battery technology does not achieve the required Wh for a vehicle, either the number of batteries connected in parallel has to be increased or the technology has to be upgraded to Equipment Gel.

Jet-skis and scooters, often used as service vehicles, are fitted with the Exide Pwoersport offer.
More than batteries

Because marine battery use is seasonal, tools such as testers and chargers are essential for marine professionals and end users alike. Exide has a comprehensive range of accessories and support for batteries of all kinds of applications. We help you test, charge, select, replace and recycle batteries – everything workshops need to keep work in-house, provide quality service and grow profitability.

Testing

Battery Tester
Test every battery to reassure your customers and detect potential risks.

Charging

Battery Charger
Exide chargers can be used on cars, boats and motorcycles, and are ideal for both consumers and professionals. Workshops use the device to ensure customers leave with a fully charged battery every time.

Selecting

Battery Finder App
Search by car model, VIN or registration number to quickly find the right battery on the go.

QR Code
Want to find out more? Scan the QR code on the battery label and get more information right away. No more waiting until you get home.

Web Catalogue
Please visit our new website and find out more about Marine&Leisure batteries and solutions according to your needs on www.exide.com/eu

Exide recycles!

What to do with old batteries?
Subscribe to our recycling programme. We pick them up and reward you for your environmental consciousness.
## Type List

<table>
<thead>
<tr>
<th>CODE</th>
<th>TECHNOLOGY</th>
<th>PERFORMANCES</th>
<th>DIMENSIONS</th>
<th>TECHNICAL CHARACTERISTICS</th>
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Exide also produces batteries for light vehicles, commercial vehicles, motorcycles and caravans. Contact your local sales representative or visit www.exide.com to find out more.

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**EQUIPMENT GEL**

**EQUIPMENT**

**VINTAGE**

- EU 72L: 70 Ah 6V 630 175 190 3 EN taper posts 17 L03
- EU 77-6: 77 (6V) 360 175 190 3 Standard 18 H02
- EU 80-6: 80 (6V) 600 158 165 220 0 Standard 11 M02
- EU 140-6: 140 (6V) 900 267 195 236 0 Standard 19 M04
- EU 165-6: 165 (6V) 900 330 174 234 0 Standard 25 M05
- EU 190-6: 190 (6V) 1150 398 174 234 0 Standard 28 M06
- EU 260-6: 260 (6V) 1300 350 175 290 0 Standard 40 M08

* MCA = BCI Marine Cranking power in Amps at 0°C
* Wh = Available Watt x hour at 20h rate from a battery, without exceeding its recommended depth of discharge

**Did you know ?**

Exide also produces batteries for light vehicles, commercial vehicles, motorcycles and caravans. Contact your local sales representative or visit www.exide.com to find out more.
Exide Technologies, with operations in more than 80 countries and more than 120 years of experience, is one of the world’s largest producers and recyclers of lead-acid batteries. The company develops state-of-the-art energy storage solutions for the automotive and industrial market. Leading car, truck and lift truck manufacturers trust in Exide Technologies as an original equipment supplier. Exide also serves the aftermarket through a portfolio of successful and well-known brands.

Exide Transportation manufactures batteries for light and commercial vehicles, as well as agricultural and marine leisure applications. Industrial markets – under the division GNB Industrial Power – include efficient energy storage solutions for motive power applications such as lift trucks, cleaning machines and other commercial electrical vehicles, and network power applications such as telecommunications systems, renewables, and uninterruptible power supply (UPS).

Exide’s engineers have always been at the forefront of bringing important innovations to the industry. Exide’s ISO/TS-certified manufacturing facilities ensure that customers receive products that are produced with maximum efficiency and fulfill the highest quality standards, while minimizing impact on the environment.

Exide’s extensive sales and distribution network provides quality service and delivers on time to its customers. Its world-class recycling facilities ensure that batteries will be reused, helping to make a positive contribution to the environment. Exide also provides services, accessories and energy consulting to its clients.