An ocean full of possibilities.

With the full diversity of the Marine & Leisure battery range ready for new adventures.

Creating the future – the Exide way:

Innovation | Reliability | Sustainability | High Performance

ENERGIZING A NEW WORLD

EXIDE TECHNOLOGIES

exidegroup.com

The world is changing.
That's why we are energizing a new world.

For Exide, now is the time to release new energies to move even further into the future. Our new claim **"Energizing a new world"** is designed to convey this aspiration. We want to bring change to life, face challenges together with our partners, and develop solutions for today and tomorrow. **Let's create the future – the Exide way:**

Innovation is the engine of technology leadership. That's why we are constantly evolving, remain self-critical, and continue to inspire our customers. We believe that great questions deserve great answers, which is what our innovative R&D is responsible for.

Reliability defines our business. This applies to our products as well as our innovative development work, services, and partnerships. We have a responsibility that doesn't stop with our products, but rather starts there.

Sustainability is an important part of our responsibility. That's why we rely on renewable energies and intelligent recycling concepts.

High performance is the standard we set for our products and services. We want all our solutions to be best in class. This gives our customers the certainty of being optimally equipped for any task.

There's no place more relaxing than a boat.
Our batteries make sure it stays that way.

We live in a time when energy and its reliable availability are becoming increasingly relevant. As one of the largest battery manufacturers in the world, Exide is naturally aware of this responsibility. With more than 130 years of experience, we are working today more than ever on innovative solutions that users in various industrial sectors, as well as in everyday life and leisure, can rely on at all times.

Exide's new marine range supplies all the essential functions such as engine start, GPS, lighting, heating, refrigeration, and radio. This reliability in use increases safety and comfort on board the boat. Finding the right battery for upcoming adventures is a simple maneuver. The following pages provide a smart step-by-step instruction.

1 **Identify** the boat's energy needs.

2 **Find** the right battery combination.

3 **Select** the best performing battery technology.

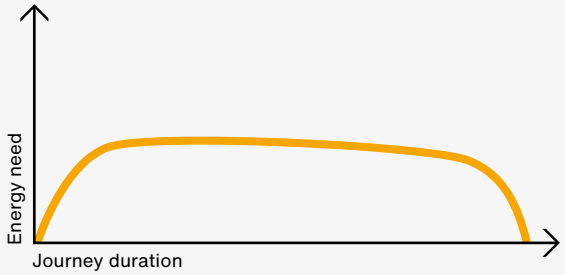
Identify the boat's energy needs.

1

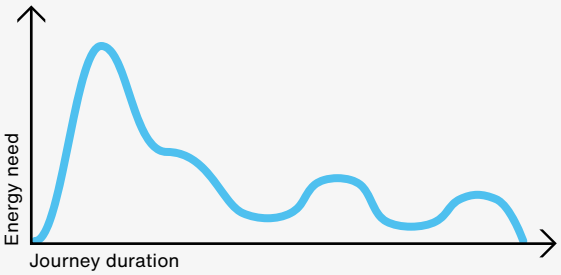
Finding the right battery is easy. Whether with our **Online Battery Finder** or offline on the next pages. The first step is to determine the energy requirements. After that, it is important to find the perfect battery combination before finally selecting the appropriate battery from our range.
The Marine & Leisure range comprises three battery groups from which batteries can be combined to meet specific requirements:

Equipment supply need

Batteries in this category provide uninterrupted supply to emergency or comfort equipment. This consumes a constant amount of power, resulting in deep discharge during the journey. The electrical unit used to measure equipment supply need is Wh*.



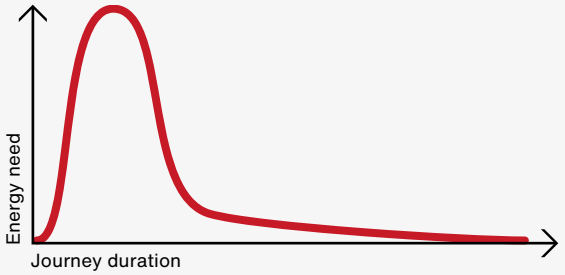
Dual supply need



Batteries in this category cover twice the supply needs of a boat. They are used for starting the engine as well as for the operation of other electrical devices. These batteries are characterized by high peaks of power and variable power drain, which causes the battery to discharge during the journey. The electrical unit used to measure dual supply need is Wh*.

Engine start need

Batteries in this category are only used when starting a combustion engine. They require high power peaks during a short time and remain unused for the rest of the journey. The electrical unit used to measure engine start need is MCA*.



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

Find the right battery combination.

2

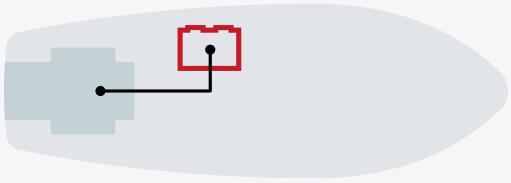
After the required amount of energy per day has been determined, there are various options for battery combinations – depending on whether

- only one battery is needed for the engine (case A),
- one battery is needed to power both the engine and equipment on board (case B),
- at least two batteries are needed for the engine and equipment (case C) as well as other applications (case D).

Perfect for seasonal use

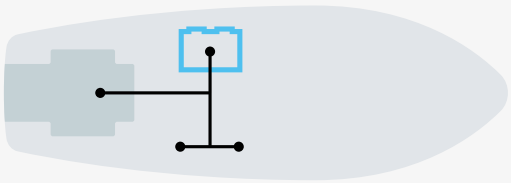
Case A:
Engine only

The battery is only used for starting the engine. The electrical equipment is not supplied with energy when the engine is switched off. This configuration corresponds to Engine start need.



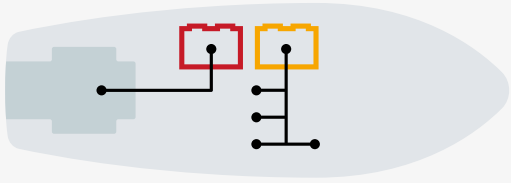
Case B:
Engine & Equipment

A single battery bank is used for engine start and electrical equipment. This configuration corresponds to Dual supply need.



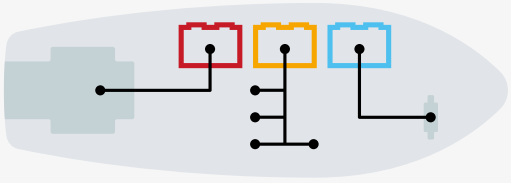
Case C:
Engine + Equipment

Two separate banks of batteries are dedicated to supplying power: one for engine start and the other for the electrical equipment. This configuration corresponds to Engine start need plus Equipment supply.



Case D:
Engine + Equipment + Other

In addition to two main battery banks (engine + equipment), other batteries are required to supply power directly to electrical winches, thrusters or trolling motors. This configuration corresponds to Engine start plus Equipment supply plus Dual supply.



Our solutions meet every demand.
No matter how individual it is.

First the suitable battery combination was determined, then the individual energy consumption. Here are more details about specific batteries of the Marine & Leisure range.

Equipment supply need

Our 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 special design of Equipment batteries, together with a good charging procedure, is the key to a reliable result and service life duration. The range offers Wh* performance from 290 Wh to 3800 Wh.

Dual supply need

The Exide Dual battery range is designed to supply power for boats with one battery bank for all consumers (case B). It is also suitable for additional batteries used for electrical winches, thrusters, and trolling motors (case D). The batteries are partially discharged during use. The Dual's construction, together with the good recharging procedure, is the key to providing the best result and service life duration. This range offers Wh*performance from 350 Wh to 2100 Wh.

Engine start need

The Exide start batteries are designed to supply high performance for engine start when installed alone for boats with basic equipment (case A). They can also be used in engine-dedicated battery banks for the most sophisticated yachts (cases C and D). The batteries are usually charged after starting the engine, as the alternator quickly returns consumed power. Their design provides service life duration and an MCA* performance from 500 A to 1100 A.

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

Select from the best batteries for any requirement.

3

The Exide Marine & Leisure range offers optimal solutions depending on energy consumption and battery combination. The following ranges are available:

Equipment supply need

Equipment Li-Ion

Lithium-Ion technology

- Ultra lightweight
- Superior cycling
- Up to 50% faster recharging
- Ready to use
- Absolutely maintenance free
- Suitable for long resting periods
- Battery management systems for safe operation and best performance
- Optimal charging at cold temperatures
- Charging also possible via solar panel
- Bluetooth connectivity and mobile app
- Sleep mode preserves battery charge during idle time

Equipment Gel

Gel (electrolyte fixed in a gel) with VRLA venting

- Superior cycling
- Internal gas recombination
- No location constraints
- Safe and clean
- High inclination
- High vibration & tilt resistant
- Absolutely maintenance free
- Suitable for long resting periods
- High energy density
- Space savings of up to 30%

Equipment AGM

Absorbent Glass Mat

- Superior cycling
- Internal gas recombination
- Absolutely maintenance free
- Medium inclination
- Faster recharging

Equipment

Standard flooded with glass mat separators and plug venting

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

Dual supply need

Dual AGM

AGM flat or orbital with VRLA venting

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

Dual EFB

Enhanced Flooded Battery

- Extra start & supply
- Maintenance free
- Maximum charge acceptance

Dual

Standard flooded with central degassing

- Start & supply
- Low maintenance
- Low gas emission
- To be installed in special container
- Upright mount
- Medium vibration & tilt resistant
- Top indicator for electrolyte & charge inspection (except ER660)

Engine start need

Start AGM

AGM flat or orbital with VRLA venting

- Superior starting power
- Absolutely maintenance free
- Suitable for long resting periods
- Up to 50% faster recharging
- High inclination
- High vibration & tilt resistant
- Internal gas recombination
- No location constraints
- Safe and clean

Start

Standard flooded with plug venting

- Superior starting power
- Absolutely maintenance free
- Very low gas emission
- Spark arrestor & central degassing for safe gas conduction
- Slight inclination

We offer batteries for all needs. Our step-by-step guide leads to the best solution.

To make the right choice, the total energy required for the boat has to be determined in watts per hour. To do this, all relevant energy sources in the boat need to be added up. A simple formula indicates the individual energy consumption per day, having regard to a safety factor.

1. Start by calculating device consumptions

Energy consumption (Wh) = Power x Daily usage

25W 4h
Lamp
100 Wh

300W 1h
Coffee machine
300 Wh

35W 2h
Water pump
70 Wh

80W 6h
Fridge
480 Wh

40W 3h
TV set
120 Wh

= Total energy needed **1070 Wh**

2. Apply a safety factor to cover overuse

x 1.2 = Total required **1284 Wh**

3. Select your battery set according to the requirements

Equipment Li-Ion

Reference: EV1250
Energy: 1.250 Wh*
Weight: 10.7 kg

Equipment Gel

Reference: ES1300
Energy: 1.300 Wh*
Weight: 39 kg

Dual AGM

Reference: EP900
Energy: 2 x 900 Wh*
Weight: 2 x 32 kg

Dual EFB

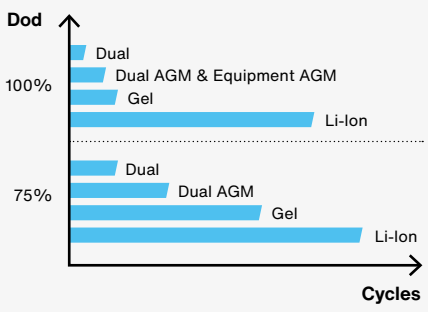
Reference: EZ600
Energy: 3 x 600 Wh*
Weight: 3 x 20 kg

Dual

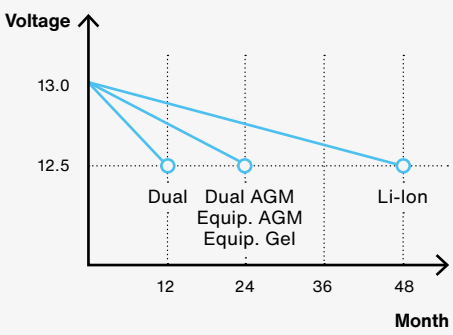
Reference: ER450
Energy: 3 x 450 Wh*
Weight: 3 x 23 kg

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

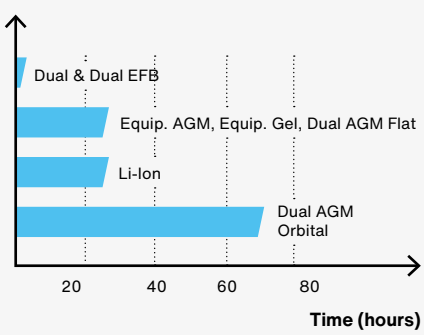
Cycling performances vs. depth of discharge at 20°C



Shelf life at 20°C



Vibration resistance at 6G/35Hz*



Accessories and support for batteries.

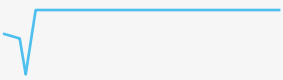
Because marine battery use is seasonal, tools such as testers and chargers are essential for marine professionals and end users alike. Exide has a comprehensive range of accessories and support for batteries for all kinds of applications. We help you test, charge, select, replace, and recycle batteries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

Battery Tester EBT-965P

Our advanced and easy-to-use next-generation tester is designed for the most reliable diagnostics of any make or type of battery. It enables preventative maintenance and ensures maximum customer satisfaction. Previous testers only measured the conductance, but the new EBT-965P also features Conductance Profiling™, including battery health and the remaining available energy in the test results.

Standard Testers
Conductance

Cranking Capability CCA



Exide EBT-965P Tester
Conductance Profiling™

Energy Availability START STOP CCA

Battery Charger

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

QR Code

Want to find out more?
Scan the QR code on the battery label and get further information right away.

Boating is full of adventure. That's why we make battery selection a walk in the park.

Click here to open the Battery Finder or scan the code.

On every boat there are different requirements for battery performance. The correct battery needs to be selected for the vehicle type and specific electrical needs. We are happy to help with this – with our **Online Battery Finder.** After just a few clicks, a selection of suitable batteries is displayed, guaranteeing individual comfort on board.

Boats are as different as their owners. Our versatile options create waves of excitement.

The code structure.

E M 1000

Brand		Range name	Electrical unit		Performance
E	Exide	M	Start AGM	MCA*	1000	1000 A
		N	Start	MCA*	1000	1000 A
		P	Dual AGM	Wh*	1000	1000 Wh
		R	Dual	Wh*	1000	1000 Wh
		S	Equipment GEL	Wh*	1000	1000 Wh
		T	Equipment	Wh*	1000	1000 Wh
		U	Vintage	Ah	100-6	100 Ah/ 6V
		V	Equipment Li-Ion	Wh*	1000	1000 Wh

The type list of all Marine & Leisure batteries.

Equipment Li-Ion

Exide	Technology				Performance			Dimensions			Technical Characteristics				
Code	Gel	AGM Flat	Li-Ion	Flooded	Wh*	Capacity Ah (20h)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal	Weight (kg)	Box	
EV640 EV640S			•		640	50	-	308	168	211	0	M08	8.5	D31	
EV1250 EV1250S			•		1250	96	-	355	176	190	0	Standard	10.7	L05	
EV1300 EV1300S			•		1300	100	-	308	168	211	1	M08	11.7	D31	
EV1300/24 EV1300S/24			•		1300	50	-	307	170	216	1	M08	12.3	G77	
EV2500 EV2500S			•		2500	200	-	485	170	240	1	M08	25	F51	
EV3800/36 EV3800S/36			•		3800	100	-	520	269	221	1	M08	39	H52	

*S – with Sleep mode

Equipment Gel

ES290	•				290	25	-	166	175	125	0	Flat Lug (M5)	10	P24	
ES450	•				450	40	-	210	175	175	0	Flat Lug (19)	14	LB1	•
ES650	•				650	56	-	278	175	190	0	Standard	21	L03	•
ES900	•				900	80	-	353	175	190	0	Standard	26	L05	•
ES950	•				950	85	-	330	171	235	1	Standard	28	D02	•
ES1000-6	•				1000	195 (6V)	-	244	190	275	0	Standard	29	GC2	•
ES1100-6	•				1100	200 (6V)	-	244	190	275	0	Threaded insert	31	GC2	•
ES1200	•				1200	110	-	286	269	230	2	Standard	38	D07	•
ES1300	•				1300	120	-	345	171	283	0	Standard	38	D03	•
ES1350	•				1350	120	-	513	189	223	3	Standard	38	D04	•
ES1600	•				1600	140	-	513	223	223	3	Standard	47	D05	•
ES2400	•				2400	210	-	518	274	240	3	Standard	64	D06	•

Equipment AGM

EQ600		•			600	70	-	278	175	190	0	Standard	21	L03	•
EQ800		•			800	95	-	353	175	190	0	Standard	26	L05	•
EQ1000		•			1000	120	-	286	269	230	2	Standard	40	D07	•

Equipment

ET550				•	550	80	-	278	175	190	0	Standard	21	L03	
ET650				•	650	100	-	353	175	190	0	Standard	27	L05	
ET950				•	950	135	-	513	189	223	3	Standard	40	D04	
ET1300				•	1300	180	-	513	223	223	3	Standard	50	D05	
ET1600				•	1600	230	-	513	274	249	3	Standard	65	D06	

Dual AGM

Exide	Technology				Performance			Dimensions			Technical Characteristics				
Code	Gel	AGM Flat	AGM Orbital	Flooded	Wh*	Capacity Ah (20h)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal	Weight (kg)	Box	
EP450			•		450	50	750	260	173	206	1	Standard & Threaded	19	G34	•
EP500		•			500	60	680	242	175	190	0	Standard	18	L02	•
EP600		•			600	70	760	278	175	190	0	Standard	21	L03	•
EP800		•			800	95	850	353	175	190	0	Standard	26	L05	•
EP900		•			900	100	800	347	174	238	1	SAE M 3/8«- 5/16» taper&stud	31	G31	•
EP1200		•			1200	140	700	513	189	223	3	Standard	41	D04	•
EP1500		•			1500	180	900	513	223	223	3	Standard	50	D05	•
EP2100		•			2100	240	1200	518	274	240	3	Standard	70	D06	•

Dual EFB

EZ600				•	600	70	760	278	175	190	0	Standard	20	L03	•
EZ650				•	650	75	750	270	173	222	0	Standard	19	D26	
EZ850				•	850	100	900	353	175	190	0	Standard	26	L05	•

Dual

ER350				•	350	80	510	270	173	222	1	Standard	18	D26	
ER450				•	450	95	650	306	173	222	1	Standard	22	D31	
ER550				•	550	115	760	349	175	235	1	Standard	28	D02	
ER600				•	600	120	800	349	175	285	1	Standard	31	D03	
ER660				•	660	140	750	513	189	223	3	Standard	37	D04	
ER850				•	850	170	1000	513	223	223	3	Standard & Threaded	46	D05	

Start AGM

Code	Gel	AGM Flat	AGM Orbital	Flooded	MCA* A (BCI)	Capacity Ah (20h)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal	Weight (kg)	Box	
EM900			•		900	42	700	230	173	206	1	Standard & Threaded	16	G86	•
EM960		•			960	100	800	347	174	238	1	SAE M 3/8» taper&stud	31	G31	•
EM1000			•		1000	50	800	260	173	206	1	Standard & Threaded	18	G34	•

Start

EN500				•	500	50	450	207	175	190	0	Standard	12	L01	
EN600				•	600	62	540	242	175	190	0	Standard	14	L02	
EN750				•	750	74	680	278	175	190	0	Standard	17	L03	
EN800				•	800	90	720	353	175	190	0	Standard	20	L05	
EN850				•	850	110	750	349	175	235	1	Standard	25	D02	
EN900				•	900	140	800	513	189	223	3	Standard	34	D04	
EN1100				•	1100	180	1000	513	223	223	3	Standard	43	D05	

Vintage

EU72L				•	-	72	640	278	175	190	1	Standard	16	L03	
EU77-6				•	-	77 (6V)	650	215	169	184	0	Standard	18	H02	
EU80-6				•	-	80 (6V)	600	158	165	213	0	Standard	11	M02	
EU140-6				•	-	140 (6V)	900	257	175	236	0	Standard	18	M04	
EU165-6				•	-	165 (6V)	900	330	174	234	0	Standard	25	M05	
EU200-6				•	-	200 (6V)	1150	398	174	234	0	Twin EN taper posts	28	M06	
EU260-6				•	-	260 (6V)	1300	345	172	286	0	Standard	39	M08	

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

Energy that goes beyond.

- Automotive plant
- Industrial plant
- R&D facility
- Recycling
- Global HQ
- Principle sales offices
  + sales offices and distribution centers across the world

Subject to alteration

AXEMLBEPDF00224

All manufacturing plants **ISO 9001** certified

All automotive plants **IATF 16949** certified

All manufacturing plants **ISO 14001** certified

All manufacturing plants **ISO 50001** certified

Most manufacturing plants **ISO 45001** certified

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