Technical specifications

START AGM

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES MCA* A (EC)	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
EM 900			•	900	42	700	230	173	206	1	Standard + Threaded	16	G06	•
EM1000			•	1000	50	800	260	173	206	1	Standard + Threaded	18	G34	•
EM1100		•		1100	100	925	330	173	240	9	Standard + Threaded	33	G31	•

START

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES MCA* A (EC)	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
EN 500				500	50	450	210	175	190	0	Standard	13	L01	
EN 600				600	62	540	242	175	190	0	Standard	15	L02	
EN 750				750	74	680	278	175	190	0	Standard	18	L03	
EN 850				850	110	750	350	175	235	1	Standard	28	D02	
EN 900				900	140	800	513	189	223	3	Standard	37	D04	
EN1100				1100	180	1000	513	223	223	3	Standard	45	D05	
EN1400				1400	225	1300	518	279	240	3	Standard	60	D06	

DUAL AGM

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES Wh*	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
EP 450			•	450	50	750	260	173	206	1	Standard + Threaded	19	G34	•
EP 900		•		900	100	720	330	173	240	9	Standard + Threaded	32	G31	•
EP1200		•		1200	140	700	513	189	223	3	Standard	45	D04	•
EP1500		•		1500	180	900	513	223	223	3	Standard	55	D05	•
EP2100		•		2100	240	1200	518	279	240	3	Standard	72	D06	•

DUAL

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES Wh*	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
ER 350				350	80	510	260	175	225	1	Standard	19	D26	
ER 450				450	95	650	310	175	225	1	Standard	23	D31	
ER 550				550	115	760	350	175	235	1	Standard	29	D02	
ER 650				650	142	850	350	175	290	1	Standard	35	D03	

EQUIPMENT GEL

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES Wh*	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
ES 290	•			290	25	–	165	175	125	0	Flat Lug (M5)	10	P24	•
ES 450	•			450	40	–	210	175	175	0	Flat Lug (19)	15	LB1	•
ES 650	•			650	56	–	278	175	190	0	Standard	21	L03	•
ES 900	•			900	80	–	350	175	190	0	Standard	27	L05	•
ES 950	•			950	85	–	350	175	235	1	Standard	30	D02	•
ES1000-6	•			1000	160 (6V)	–	245	190	275	0	Standard	29	GC2	•
ES1100-6	•			1100	200 (6V)	–	245	190	275	0	Threaded Insert	32	GC2	•
ES1200	•			1200	110	–	285	270	230	2	Standard	39	D07	•
ES1300	•			1300	120	–	350	175	290	0	Standard	39	D03	•
ES1350	•			1350	120	–	513	189	223	3	Standard	40	D04	•
ES1600	•			1600	140	–	513	223	223	3	Standard	47	D05	•
ES2400	•			2400	210	–	518	279	240	3	Standard	67	D06	•

EQUIPMENT

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES Wh*	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
ET 650				650	90	–	350	175	190	0	Standard	27	L05	
ET 700-6				700	195 (6V)	–	245	190	275	0	Standard	30	GC2	
ET 950				950	135	–	513	189	223	3	Standard	40	D04	
ET1300				1300	180	–	513	223	223	3	Standard	50	D05	
ET1600				1600	230	–	518	279	240	3	Standard	65	D06	

VINTAGE

CODE	TECHNOLOGY GEL	AGM Flat	AGM Orbital	PERFORMANCES Wh*	Capacity Ah (20h)	CCA A (EN)	DIMENSIONS L (mm)	W (mm)	H (mm)	TECHNICAL CHARACTERISTICS Polarity	Terminal	Weight (kg)	Box	DNV
Complementary range for old fitments.														
EU 72				–	72	620	491	111	249	1	Standard	16	3ET	
EU 77-6				–	77 (6V)	360	215	169	184	0	Standard	18	H02	
EU 80-6				–	80 (6V)	600	158	165	220	0	Standard	11	MO2	
EU 140-6				–	140 (6V)	900	257	175	236	0	Standard	19	MO4	
EU 165-6				–	165 (6V)	900	330	174	234	0	Standard	25	MO5	
EU 200-6				–	200 (6V)	1150	398	174	234	0	Double	28	MO6	
EU 220				–	220	950	450	395	280	1	Standard	55	W00	
EU 260-6				–	260 (6V)	1300	350	175	290	0	Standard	40	MO8	

*MCA = EC 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

To support distributors on battery dimensions and type recommendation, a CD-ROM is available to calculate Wh consumptions, series/parallel connections and required space for batteries.

Jet-Ski or Scooters often used as service vehicles are fit by the **EXIDE BIKE** offer.

CODE STRUCTURE

E M 1000

RANGE	RANGE NAME	ELECTRICAL UNIT	PERFORMANCE
E EXIDE	M START AGM	MCA*	1000 A
	S START	MCA*	1000 A
	P DUAL AGM	Wh*	1000 Wh
	R DUAL	Wh*	1000 Wh
	G EQUIPMENT GEL	Wh*	1000 Wh
	E EQUIPMENT	Wh*	1000 Wh
	T VINTAGE	C(20h)	100 Ah 6V

EXIDE MARINE

By Exide Technologies / www.exide.com

Exide Technologies SAS
5, allée des Pierres Mayettes 92636 Gennevilliers Cedex - France
Tél. : (33) 01 41 21 23 00 - Fax. : (33) 01 41 21 26 93
Société par Actions Simplifiée au capital de 38 524 860 €
R.C.S Nanterre B 682030896

DNV MARINE CERTIFIED BATTERIES

EXIDE MARINE

Ensure safer & longer trips by choosing the right battery

On board, safety and comfort during navigation depend on the electrical supply to boat equipment. Usually provided by batteries, the supply is capable of powering key operations such as engine start, radio/GPS supply and navigation lighting.

As efficient energy storage is crucial to keep the boat moving, EXIDE presents the new MARINE battery offer, able to cover all the energy needs of both professional installers and private users.

By choosing the right MARINE battery, the electrical supply will last longer, ensuring enhanced trip duration and comfort.

New MARINE premium batteries are also a preferred choice for boat builders. Thanks to DNV approval, it is simpler to get authority in accordance with European naval regulations for newly built boats.

EXIDE® MARINE

How to select the best battery solution in three steps

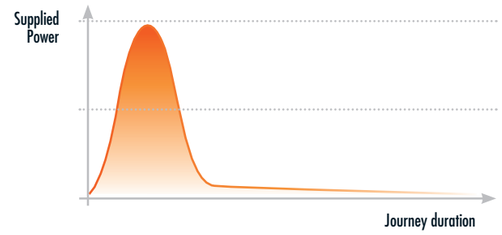
1. Identify the boat's energy needs
2. Identify the boat's electrical configuration to find the right battery combination
3. Select the best battery technology according to its conditions of use

1 Identify the boat's energy needs

Three basic energy needs are involved in marine battery uses

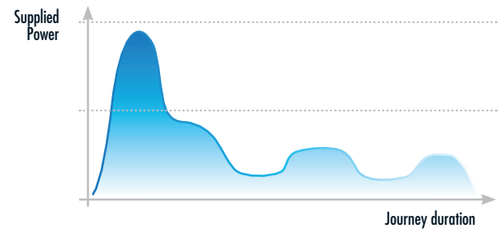
ENGINE START NEED

Power for 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*



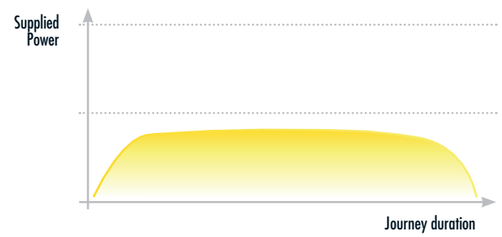
DUAL SUPPLY NEED

Power for starting together with the supply to other electrical equipment requires high peaks of power but 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 high levels consistently, 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 0°C
*Wh = Available Watt x hour at 20h rate from a battery, without exceeding its recommended depth of discharge

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

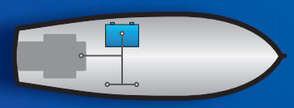
The boat's electrical configuration determines the battery combination

A. Engine only

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

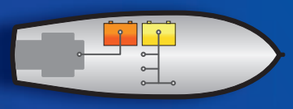
B. Engine & Equipment

Boats for which one unique bank of batteries has to supply power for engine start but also for electrical equipment. This configuration corresponds to Dual supply need.



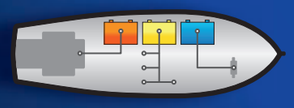
C. Engine + Equipment

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 consequence, 2 different battery solutions are required.



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 consequence, 3 different battery solutions are required.



Each energy need has its optimal battery option

ENGINE START NEED

START battery range is designed to supply high power for engine start when installed alone for basically equipped boats (case A) but can also be used when included in engine dedicated battery banks for the most sophisticated yachts (cases C&D). This engine start need keeps batteries normally charged during use 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 1400A, is the choice to cover all engine start needs from small outboards to big sterndrives.

START

DUAL SUPPLY NEED

DUAL battery range is designed to supply power for boats having one battery bank for all consumers (case B) but is also suitable for additional batteries directly applied to electrical winches, thrusters and trolling motors (case D). This dual supply need holds batteries partially discharged during use so DUAL 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.

DUAL

EQUIPMENT SUPPLY NEED

EQUIPMENT battery range is designed to supply power for boats with dedicated battery banks for equipment with applications such as navigation, emergency, safety and comfort (cases C&D). This equipment supply need keeps batteries partially or even deeply discharged during use so the EQUIPMENT special design, together with a good recharging procedure, is 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.

EQUIPMENT

*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

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

Battery conditions of use determine the right battery technology

ENGINE START NEED

2 technologies with specific features & benefits are available for engine start need.

START

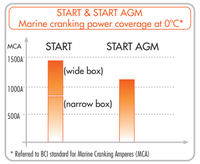
- Low maintenance
- Located in special container
- Upright mount

Technology:
Lead/Acid flooded in Ca/Ca alloy up to 850A or Sb/Ca above with plug venting

START AGM

- Absolutely maintenance free
- Suitable for long resting periods
- No location constraints (safe for cabin mount)
- Safe and clean (spark & spill-proof)
- Suitable for side mount
- High vibration & tilt resistant
- Up to 50% time for recharge saved

Technology:
AGM Flat plate or Orbital plate in Ca/Ca alloy with VRLA venting



DUAL SUPPLY NEED

2 technologies with specific features & benefits are available for dual supply need.

DUAL

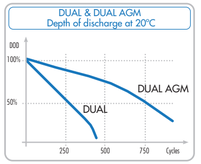
- Low maintenance
- Located in special container
- Spark arrestor & central degassing for safe gas conduction
- Upright mount
- Medium vibration & tilt resistant
- Top indicator for electrolyte & charge inspection

Technology:
Lead/Acid flooded in Sb/Ca alloy with central degassing

DUAL AGM

- Absolutely maintenance free
- Suitable for long resting periods
- No location constraints (safe for cabin mount)
- Safe and clean (spark & spill-proof)
- Suitable for side mount
- High vibration & tilt resistant
- Up to 50% time for recharge saved

Technology:
AGM Flat plate or Orbital plate in Ca/Ca alloy with VRLA venting



EQUIPMENT SUPPLY NEED

2 technologies with specific features & benefits are available for equipment supply need.

EQUIPMENT

- Low maintenance
- Located in special container
- Upright mount
- Medium vibration & tilt resistant

Technology:
Lead/Acid flooded in Sb alloy and glass mat separators with plug venting

EQUIPMENT GEL

- Absolutely maintenance free
- Suitable for long resting periods
- No location constraints (safe for cabin mount)
- Safe and clean (spark & spill-proof)
- Suitable for side mount
- High vibration & tilt resistant
- Up to 30% space for batteries saved

Technology:
GEL (jellified electrolyte) flat plate in Ca/Ca alloy with VRLA venting