



By Exide Technologies / www.exide.com

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On motorhomes & caravans, safety and comfort depend on an electrical supply to all equipment. This supply is usually provided by batteries, in charge of key operations such as food preservation, water supply, radio/GPS supply and room heating/cooling.

As efficient energy storage is crucial to keep the vehicle moving, EXIDE presents the new MULTIFIT battery offer, covering the energy storage needs of both professional installers and private users.

By choosing the right MULTIFIT battery for a motorhome or caravan, the electrical supply will last longer, ensuring enhanced trip duration and comfort.

Additionally, new MULTIFIT premium types are certified by DNV all across Europe, guaranteeing safety and manufacturing quality.



How to select the best battery in 3 steps

- Understand the conditions of use of the battery
- Select the best battery technology according to its use requirements
- Finalize your choice by calculating the energy required in Watt per hour

Understand the conditions of use of the battery



At the installation

Battery location

Most batteries need ventilation as well as isolation. During use they will give off a mix of hydrogen and oxygen gasses that, released to the air, could be hazardous for people and the environment. By using batteries with our "internal gas recombination" feature, minimal gas emissions are regulated by the valve (VRLA) so special ventilation or isolation capacity is not required. Also, special locations like inside the passenger room or under the driver seat create a safe environment for VRLA batteries

Mounting position





Often, a vehicle's layout will restrain the space available for batteries so they have to be installed on the side. By usin batteries with our "high inclination" feature it is safe to install them on the side (upside down position not recommensafe from the risks associated with vehicle tilting.

During service life

Maintenance





Traditionally, batteries require periodic inspections for water topping up, cleaning and recharge. This is someti arduous due to access difficulties, lack of time or inexperience. By using batteries with our "maintenance free" feature time dedicated to maintenance will be drastically reduced because there is no need to inspect electrolyte levels or to clean spillages. Self-discharge is also extremely low during resting periods, reducing the frequency for recharges.

Recharge-ability



The engine alternator usually recharges the battery during driving time. Nevertheless, to keep batteries at a full state of charge, you can undertake complementary recharges by using chargers plugged into the mains during parking time. By using batteries with our "faster recharge" feature (together with efficient chargers), you can reduce the time taken to complete a full recharge by up to 50%. Also, recharge from the alternator will become more efficient.

For vehicle upgrade

Energy reserve





Batteries fitted to motorhomes or caravans have the capacity to provide the total amount of energy (Watt x hour) required for a trip. So, when new equipment is installed or longer trips are foreseen, extra capacity will be needed to supply enough power. However, room for extra batteries is usually limited so extension is not feasible. By using batteries with our "compact size" feature, room dedicated to batteries can be optimised as either more energy will be stored in the same volume or the same amount of energy will require less volume, saving up to 30% of space.



Select the best battery technology according to its use requirements





At the installation **Battery** location

Mounting position

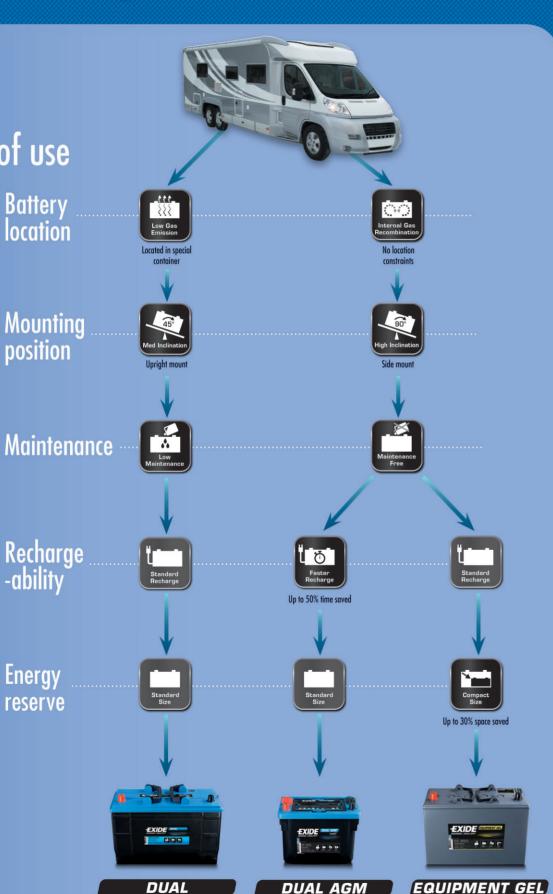
Recharge

Energy

reserve

During service life

For vehicle upgrade



Battery technologies provide energy storage options for all vehicles

EQUIPMENT GEL









Batteries designed to supply power for best-equipped motorhomes & caravans. Its construction provides high mounting flexibility (in passenger room, on the side, saving up to 30% of space), service advantages (absolutely maintenance free, suitable for long resting periods) and robustness (high vibration & tilt resistant, spill-proof, leak-proof). Built in Gel technology (jellified electrolyte) with Ca/Ca alloy and VRLA venting (valve regulated) covers a Wh* performance range from 450Wh to 1300Wh, making it a great choice for most modern and demanding recreational vehicles.

DUAL AGM









Batteries designed to supply power to the most popular range of motorhomes & caravans together with good starting power for engines. Its construction provides mounting flexibility (in passenger room, on the side), service advantages (absolutely maintenance free, suitable for long resting periods, saving up to 50% of recharge time) and robustness (high vibration & tilt resistant, spill-proof, leak-proof). Built in AGM technology (absorbed glass mat Flat plate or Orbital) with Ca/Ca alloy and VRLA venting (valve regulated) covers a Wh* performance range from 450Wh to 900Wh, making it a great choice for any kind of recreational vehicle.

DUAL









Batteries designed to supply power to traditional motorhomes & caravans. Its construction provides regular mounting conditions (safe gas conduction by central degassing & spark arrestor), good service conditions (low maintenance, easy electrolyte and charge inspection by SOCI) and robustness (medium vibration & tilt resistant, spill-proof). Built in Lead/Acid flooded technology with Sb/Ca alloy and central degassing, covers a Wh* performance range from 350Wh to 650Wh, making it a great choice for most classic recreational vehicles.



Finalize your choice by calculating the energy required in watt per hour

Start by adding device consumptions, i.e.

Device	Power consumption (W)	Daily running time (h)	Added energy to supply (W)x(h)=(Wh)				
Light Bulb	25	4	100				
Coffee machine	300		+ 300				
TV set	40		+ 120				
Water pump	35		+ 70				
Fridge	80		+ 480				
		TOTAL ADDITION	= 1.070				

Continue by applying a safety factor to cover overuse (suggested)

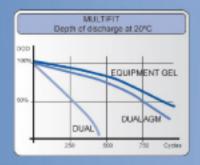
SAFETY FACTOR	x 1,2					
TOTAL REQUIRED	= 1.284					

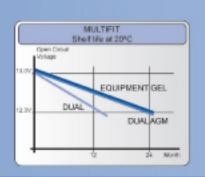
Finalize by selecting your battery set according to use requirements:

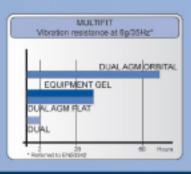
EQUIPMENT GEL	1 battery	ES1300	providing 1.	.300 Wh*	and weighting	391	κg
DUAL AGM	2 batteries	EP 900	providing 2x900=1	.800 Wh+	and weighting 2x32	= 64	κg
DUAL	3 batteries	ER 450	providing 3x450=1.	.350 Wh+	and weighting 3x23	= 69 k	cg

- When selected battery technology is not reaching the required Wh for a vehicle, either the number of batteries connected in paralleled has to be increased or the technology has to be upgraded to Equipment GEL
- To support distributors on battery dimensioning and type recommendation a CD-ROM is available to calculate for you Wh consumptions, series/parallel connections and required room for batteries.

"Wh = Available Watt x hour at 20th rate from a battery, without exceeding its recommended depth of decharge







Technical specifications



		TECHNOLOGY			SY Y	PERFORMANCES			OMENSIONS			TECHNICAL CHARACTERISTICS				14
		CODE	68.	ASM Flut	AGM Orbital	Wh.	Capacity An (20h)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal	Weight (kg)	Box	DINEW SERVED SERVED SERVED
ſ		ES 450	•			450	40	-	210	175	175	0	Flat Lug (19)	15	LB1	•
		ES 650	•			650	56	-	278	175	190	0	Standard	21	L03	•
1		ES 900	•			900	80	-	350	175	190	0	Standard	27	L05	•
1	ow.	ES 950	٠			950	85	-	350	175	235	- 1	Standard	30	D02	•
1		ES1300	•			1300	120	-	350	175	290	0	Standard	39	D03	•
	EQUIPMENT GEL	ES1350	٠			1350	120	-	513	189	223	3	Standard	40	D04	•
1		ES1600	•			1600	140	-	513	223	223	3	Standard	47	D05	•
L		E52400	٠			2400	210	-	518	279	240	3	Standard	67	D06	•
ſ	Marie S.	EP 450			٠	450	50	750	290	173	206	- 1	Standard + Threaded	19	634	•
1		EP 900		•		900	100	720	330	173	240	9	Standard + Threaded	32	631	•
	SERVICE SERVICE	EP1200		•		1200	140	700	513	189	223	3	Standard	45	D04	•
	DUAL AGM	EP1500		•		1500	180	900	513	223	223	3	Standard	55	D05	•
L		EP2100		•		2100	240	1200	518	279	240	3	Standard	72	D06	•
Ī	242	ER 350				350	80	510	260	175	225	1	Standard	19	026	
		ER 450				450	95	650	310	175	225	1	Standard	23	031	
		ER 550				550	115	760	350	175	235	1	Standard	29	D02	
	DUAL	ER 650				650	142	850	350	175	290	1	Standard	35	D08	

"Wn — Available Wott x hour at 20h rate from a battery, without exceeding its recommended depth of discharge



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

