

# Multifit Battery Solutions



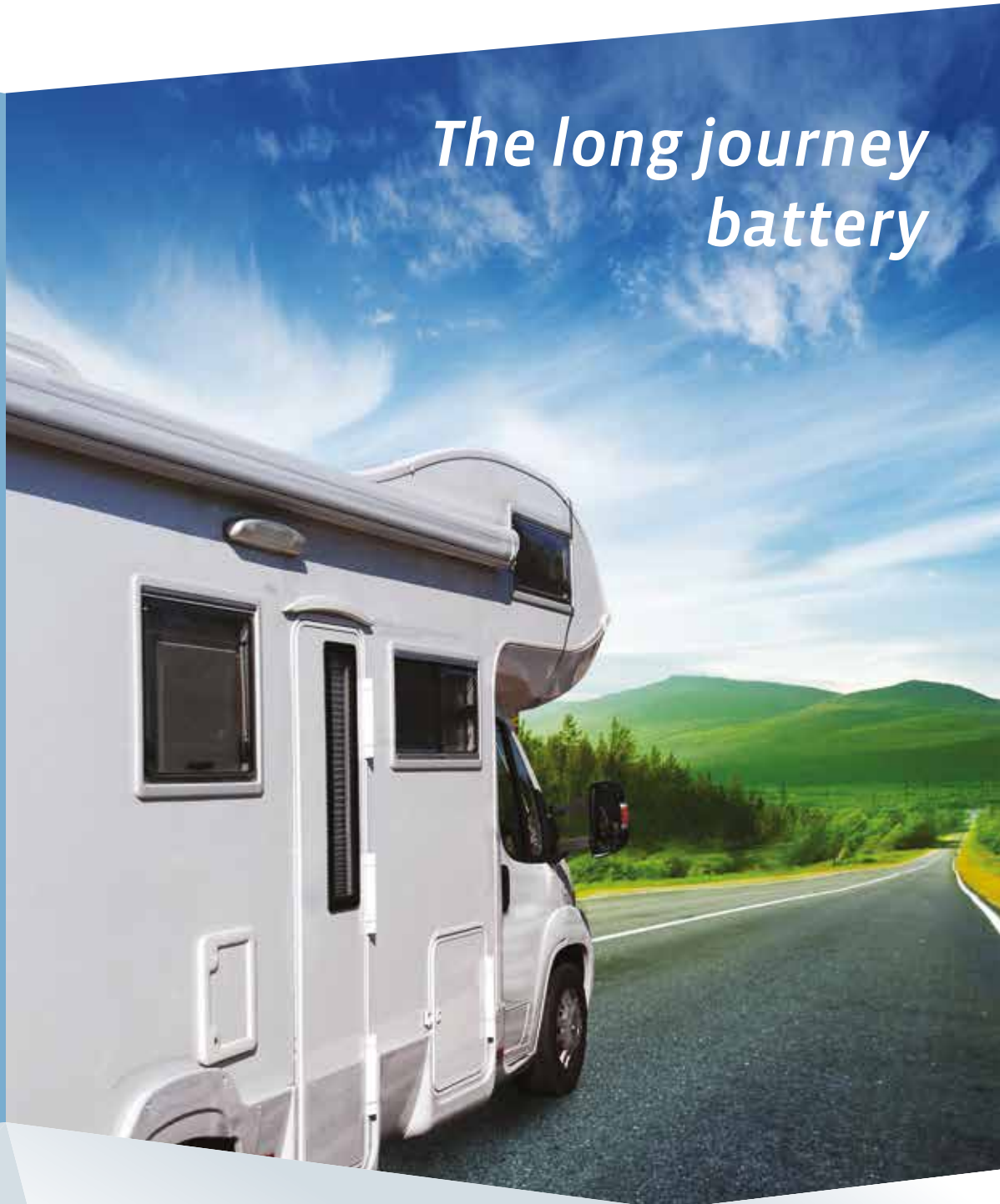
*The long journey  
battery*

Comprehensive  
battery range  
for all vehicle needs:

Equipment Gel

Dual AGM

AGM



Made in Europe  
by Exide Technologies  
Original Equipment  
Manufacturer



# Ensure safer & longer trips by choosing the right battery

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

Understand the conditions of use of the battery

1

Select the best battery technology according to its use requirements

2

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

3



# Understand the conditions of use of the battery

## At the installation

### Battery location



LOW GAS EMISSION



INTERNAL GAS RECOMBINATION

Most batteries need ventilation as well as isolation when installed in the vehicle, since during use they will give off a mix of hydrogen and oxygen gasses. By using batteries with our “internal gas recombination” feature, minimal gas emissions are regulated by the valve (VRLA) so special ventilation or isolation is not required. VRLA batteries can also be installed for locations like inside the passenger room or under the driver seat.

### Mounting position



MED INCLINATION



HIGH INCLINATION

Often, a vehicle’s layout will restrain the space available for batteries so they have to be installed on the side. By using batteries with our “high inclination” feature it is safe to install them on the side (upside down position not recommended) and there is no risk associated.

## During service life

### Maintenance



LOW MAINTENANCE



MAINTENANCE FREE

Traditionally, batteries require periodic inspections for water topping up, cleaning and recharge. This is sometimes 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



STANDARD RECHARGE



FASTER RECHARGE

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 needed to complete a full recharge by up to 50%. Also, recharge from the alternator will become more efficient.

## For vehicle upgrade

### Energy reserve



STANDARD SIZE



COMPACT SIZE

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	 LOW GAS EMISSION Located in special container	 INTERNAL GAS RECOMBINATION No location constraints
Mounting position	 MED INCLINATION Upright mount	 HIGH INCLINATION Side mount

## During service life

Maintenance	 LOW MAINTENANCE	 MAINTENANCE FREE	
Recharge-ability	 STANDARD RECHARGE	 FASTER RECHARGE Up to 50% time saved	 STANDARD RECHARGE

## For vehicle upgrade

Energy reserve	 STANDARD SIZE	 STANDARD SIZE	 COMPACT SIZE Up to 30% space saved
	Dual	Dual AGM	Equipment Gel



## The right battery for every need



INTERNAL GAS RECOMBINATION



HIGH INCLINATION



MAINTENANCE FREE



COMPACT SIZE



INTERNAL GAS RECOMBINATION



HIGH INCLINATION



MAINTENANCE FREE



FASTER RECHARGE



LOW GAS EMISSION



MED INCLINATION



LOW MAINTENANCE



TOP CHARGE INDICATOR

### 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 (electrolyte fixed in a gel) with 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 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 standard flooded technology with central degassing, covers a Wh\* performance range from 350Wh to 650Wh, making it a great choice for most classic recreational vehicles.

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

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

1. Start by calculating 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	1	+ 300
TV set	40	3	+ 120
Water pump	35	2	+ 70
Fridge	80	6	+ 480
<b>TOTAL ADDITION</b>			<b>= 1.070</b>

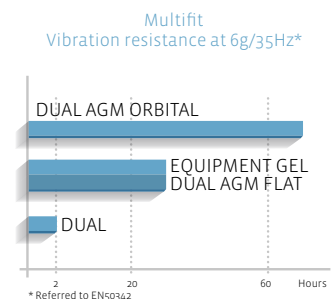
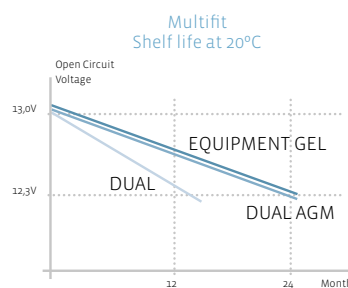
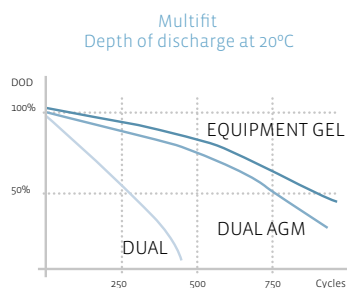
2. Apply a safety factor to cover overuse (recommended)

SAFETY FACTOR	x 1,2
<b>TOTAL REQUIRED</b>	<b>= 1.284</b>

3. Select your battery set according to the requirements

<b>EQUIPMENT GEL</b>	1 battery	ES1300	providing	1.300 Wh*	and weighing	39 kg
<b>DUAL AGM</b>	2 batteries	EP 900	providing 2x900=	1.800 Wh*	and weighing 2x32=	64 kg
<b>DUAL</b>	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 !

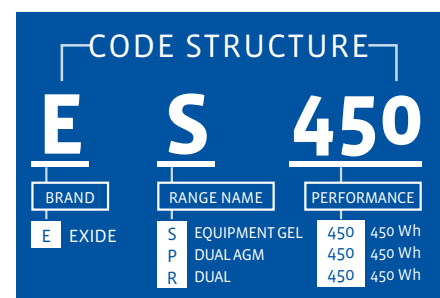
When selected battery technology does not achieve the required Wh for a vehicle, either the number of batteries connected in parallel has to be increased or the technology has to be upgraded to Equipment Gel

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

# Type List

	CODE	TECHNOLOGY			PERFORMANCES			DIMENSIONS			TECHNICAL CHARACTERISTICS				
		GEL	AGM Flat	AGM Orbital	Wh*	Capacity Ah (20h)	CCA A (EN)	L (mm)	W (mm)	H (mm)	Polarity	Terminal	Weight (kg)	Box	
<p>EQUIPMENT GEL</p>	ES290	•			290	25	–	166	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	190 (6V)	–	244	190	275	0	Standard	29	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	•	
<p>DUAL AGM</p>	EP 450			•	450	50	750	260	173	206	1	Standard + Threaded	19	G34	•
	EP500		•		500	60	680	242	175	190	0	Standard	18	L02	**
	EP600		•		500	70	760	278	175	190	0	Standard	21	L03	**
	EP650		•		650	75	775	270	173	222	1	Standard + Threaded	23	D26	**
	EP800		•		600	95	850	353	175	190	0	Standard	27	L05	**
	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	•	
<p>DUAL</p>	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	
	ER 660				660	140	750	513	189	223	3	Standard	38	D04	
<p>EQUIPMENT</p>	Complementary range for basic equipment needs														
	ET550				550	80	–	278	175	190	0	Standard	21	L03	
	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		

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



## Did you know?

Scooters or Jet-Ski, often used as service vehicles, are fit by the Exide Bike offer.

**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 fulfil the highest quality standards, while minimising 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.



## European Headquarter

Exide Technologies SAS  
5 allée des Pierres Mayettes,  
92636 Gennevilliers  
France  
Tel: +33 1 41 21 23 00  
Fax +33 1 41 21 27 15  
[www.exide.com](http://www.exide.com)