



acs-energy.nl

ACES ENERGY SP

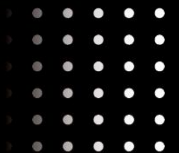
The ace in powerful and compact energy



Product Specification

Lightweight, powerful. Ready for your adventures

MovePower® The ultimate LiFeP04 Mover battery from ACES Energy – for caravans and trailers.





1 Specifications

ELECTRICAL

Voltage Category	12V
Nominal Voltage	12.8V
Capacity @ 0.2C	Min. 26 Ah, nominal 27 Ah
Nominal Energy @ 0.2C	346 Wh
Operational Voltage range	10-14.6V
Capacity vs. Ambient Temperature @0.2C	See figure 3
Self-Discharge rate	<3%/month; <15%/year
Internal Fuse	No
Cycle Life at 80% DOD and 1C (See figure 3)	2500
Parallel Connection	Up to 4 batteries
Series Connection	Not allowed
Communication Interface	Bluetooth
Communication Protocol CAN-bus	N/A

DISCHARGE

Maximum Continuous Current down to 20% SOC	150 A (1920 W)
Maximum Surge/Peak Current (for 5 seconds)	200 A (2560 W)
Max. Discharge Current Protection (after 30 seconds)	180 A (2304 W)
Over discharge Protection level	10 V
Recommended Discharge-End Voltage	11.2 V
Fast Short Circuit Protection	Yes

CHARGE

Maximum Charge Current (10-90%)	20 A
Recommended max. Charge Current	12 A
Maximum Charge Voltage (to 100%)	14.6 V
Float Voltage	13.6-13.8V
Charging Characteristic	CC/CV
Recommended ACES Charger	Internal charger: 14.4 V, 3 A

MECHANICAL

Dimensions (L x W x H); see drawing	229 x 186 x 126 mm
Weight	4.1 kg (including mounting frame)
Cell Type	Prismatic
Terminal size, torque, cable cross section	M8 ; 8-12 nm; recommended cable cross section $\geq 25\text{mm}^2$ DIN battery poles (17.5 mm negative,)

ENVIRONMENTAL

Discharge Operation Temperature and %RH	-20°C – 60°C; 5% – 85% RH (see figure 1)
Charge Operation Temperature and %RH	0°C – 50°C; 5% – 85% RH (see figure 2)
Storage Temperature	Up to 2 months -10°C – 40°C; Up to 6 months 0°C – 30°C
Storage Recommendation	5°C – 30°C; 5% – 75% RH
Operation Altitude	< 3000m
Protection IP Class	IP65

Note 1: All performances are at 25°C temperature unless otherwise stated



2 Features

Maximum Power, Minimal Weight

Experience full traction without additional ballast. Our LiFePO4 mover battery weighs up to 80% less than a comparable lead-acid battery while delivering the high peak current required by your mover, even on inclines or wet grass. The constant voltage output ensures consistent performance until the battery is fully depleted.

Easy and Quick Installation

Experience full traction without additional ballast. Our LiFePO4 mover battery weighs up to 80% less than a lead-acid battery, yet effortlessly delivers the high peak current your mover requires, even on slopes or wet grass. The constant voltage output ensures consistent performance until the battery is fully depleted.

Advanced BMS for Safety and Reliability

The integrated Battery Management System (BMS) continuously monitors and balances each cell. This guarantees maximum safety, optimal performance, and extended cycle life. Each battery undergoes individual testing for capacity, cell balance, and safety prior to shipment.

Always Informed with Bluetooth Connectivity

The integrated Battery Management System (BMS) continuously monitors and balances each cell. This ensures maximum safety, optimal performance, and extended cycle life. Each battery is individually tested for capacity, cell balance, and safety prior to delivery.



Gewicht besparing



Geïntegreerde BMS



Veiligste lithium technologie



Veiligheid



Hoge capaciteit



Geïntegreerde lader



3 Included in the box

- 1 × MVP27 Mover Battery Unit
- 1 × Mounting Bracket Assembly
- 1 × Power Switch with 2.0 m Connection Cable
- 1 × AC Power Cord (for integrated battery charger), 1.2 m length with EU plug
- 1 × Set of (DIN-compliant) Battery Terminals
- 2 × M8 Terminal Screws (for pole connection)
- 1 x User Manual



4 Safety Instructions

To ensure safe operation, the batteries must only be opened or repaired by ACES or by ACES-certified companies. If opened or repaired by unauthorized personnel, the warranty becomes void and ACES assumes no further liability for the battery's safety.

If the battery casing becomes damaged, for example due to an accident, contact ACES immediately. For transportation, always use the original packaging or packaging compliant with international UN regulations for dangerous goods, Class 9.

The battery must not be used in environments with high electrostatic or electromagnetic fields, nor near heat sources such as heaters, open flames, or extremely hot areas. Always operate the battery within the temperature limits specified in Figures 1 and 2 of the manual.

Do not continue to use the battery if its available capacity drops below 70%, as this indicates end-of-life and the unit must be properly disposed of. The battery is IP65-rated, meaning it is splash-proof but not suitable for underwater use.

Safety cannot be guaranteed if the battery is used outside the stated specifications. In addition, series connection is not permitted, as it may cause permanent damage or malfunction.

5 Usage Instructions

Before operating the battery, carefully read the user manual and technical specifications. Always fully charge the battery after each use. Leaving a nearly discharged battery unused for a long period can cause capacity loss and deep discharge, which may permanently damage the cells and is not covered by warranty.

It is recommended not to discharge the battery below 20% SOC (State of Charge) or below the specified voltage. An undervoltage protection level should be set within the connected application.

If the battery will not be used for more than one month, charge it to 50–80% SOC and store it at an ambient temperature between 5 °C and 30 °C. Disconnect or switch off the positive terminal to prevent deep discharge. During extended storage, check the SOC via the app at least every three months.




Regularly charge the battery to 100% to maintain accurate SOC readings and prevent cell imbalance.

For electrical connections, use M8 screws and cable lugs with 8 mm holes, tightened to a torque of approximately 8–10 Nm. Otherwise, the included DIN battery terminals can be used. Loose connections may cause overheating of cables and terminals. Ensure the cable cross-section is appropriate for the maximum continuous current, and use suitable cable boots for insulation.

6 Switch Operation

The built-in switch controls the battery's discharge — it simply turns the battery ON or OFF.

When the battery is not in use for an extended period, it must be **powered off completely**. This prevents unnecessary discharge and helps to extend the battery's service life. Ensure that the battery is stored according to the recommended storage conditions specified in this document.

Battery state	How to activate	Colour indication
Turn ON for 1 hour	Press the button	
Turn ON without time limit	Press & hold the button x seconds	
Turn OFF	Press the button (when the battery is on)	



7 Charge and discharge characteristics

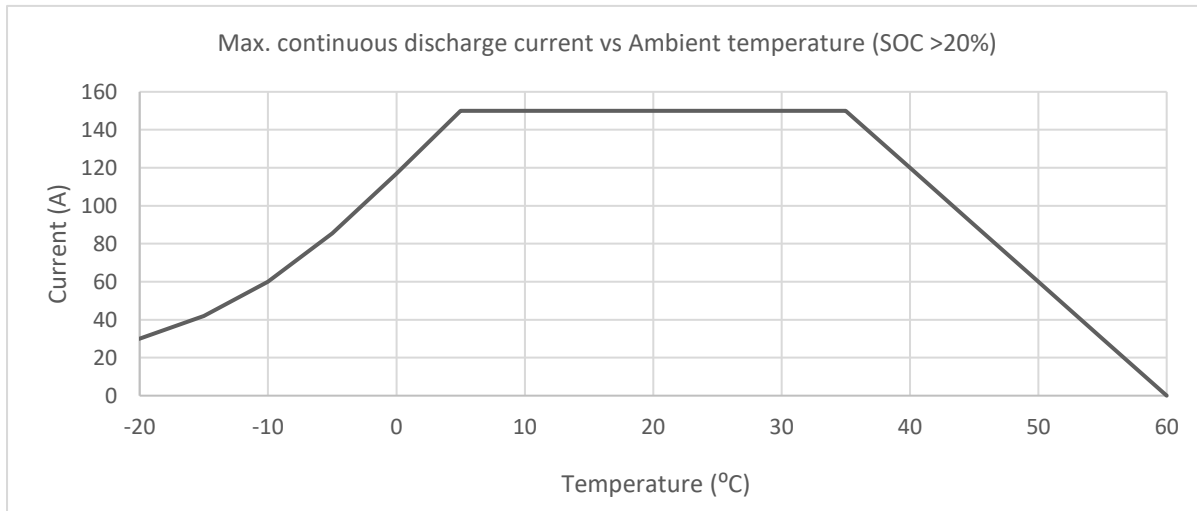


Fig. 1

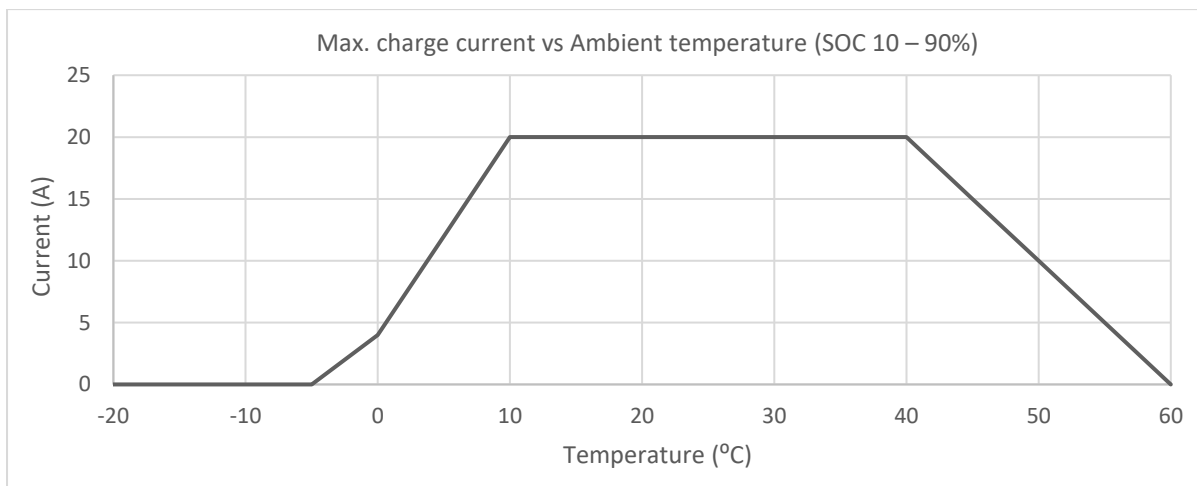


Fig. 2

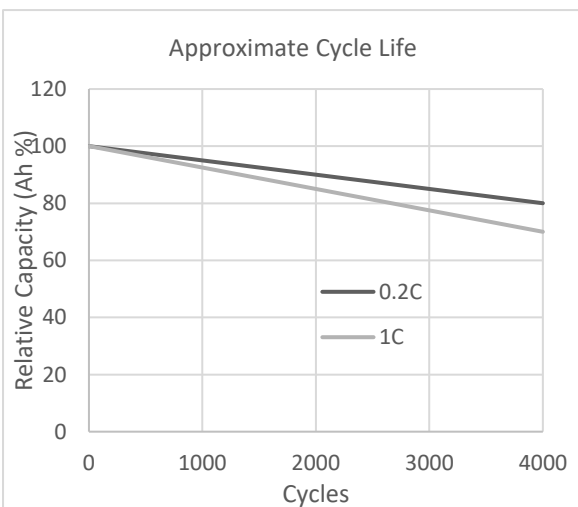


Fig. 3

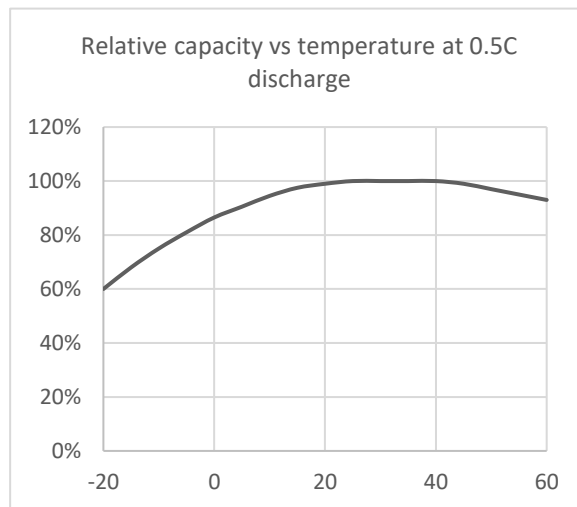
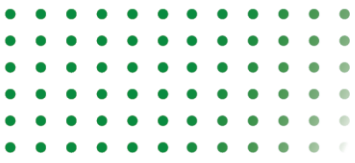


Fig. 4

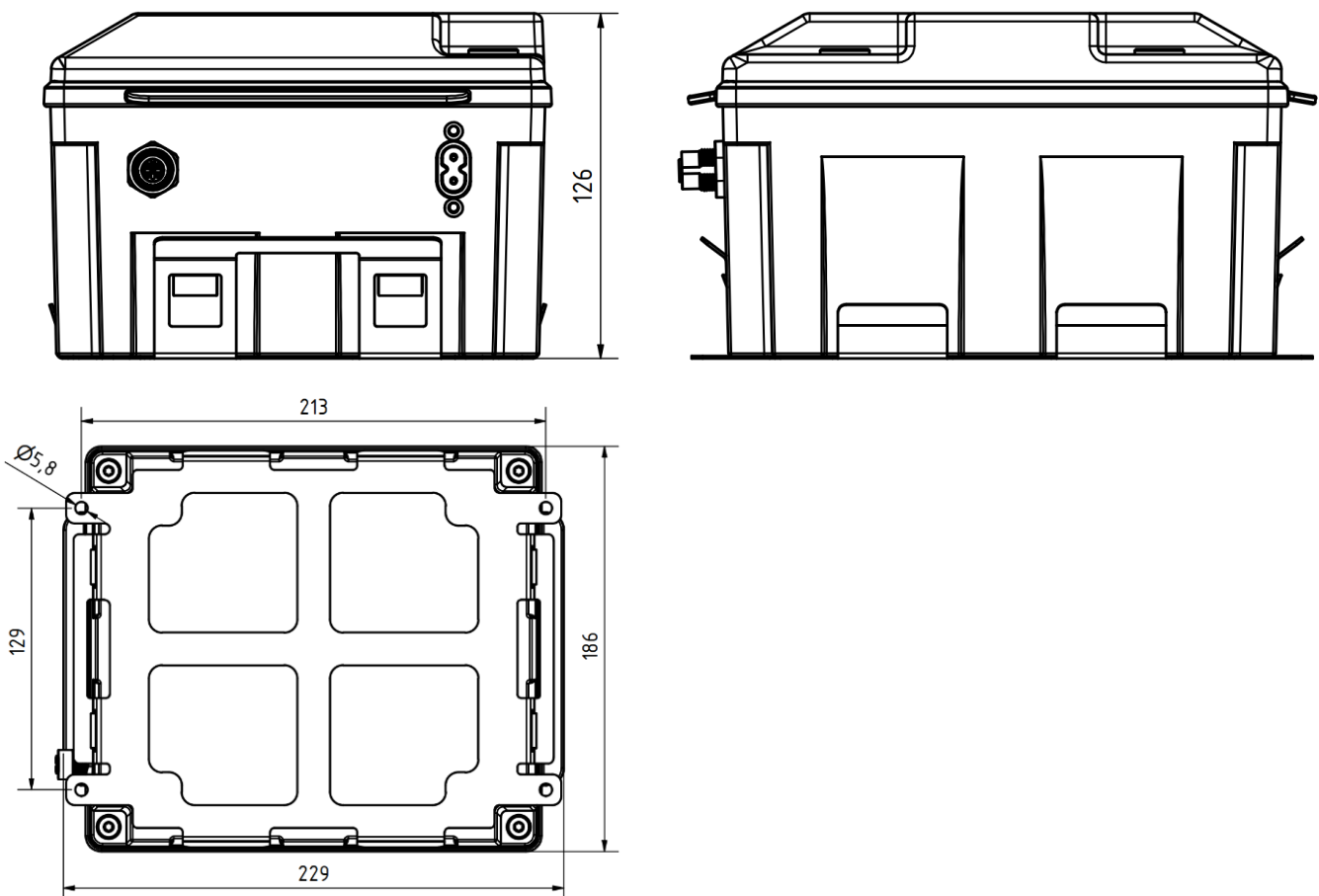


8 Certifications

Certification item	Applicable for
CE	Battery pack
UN38.3, MSDS	Cell and Pack
IEC62619, UL1642	Cell
ROHS	Cell

9 Dimensional drawings

The battery must always be installed on a solid, level surface. Wall-mounted or ceiling-mounted installation is not permitted. The battery should be securely fixed to the floor using appropriate mounting hardware to prevent movement or vibration during operation. Improper installation may result in damage or reduced performance.





ACES

Special Products
Energy Solutions

Thank you for your interest!

Stay powered up and enjoy worry-free travels with ACES Energy.



Address:

ACES Energy SP
Ambachtstraat 36
7622 AP Borne
Nederland



Email:

info@aces-energy.nl



Phone:

+31 747857701