



Electric vehicle battery expert 6 - EVFD-45 L



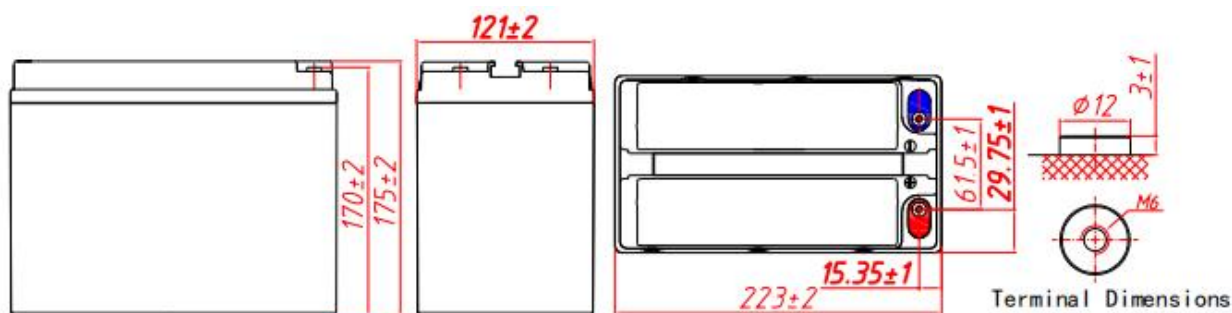
General Features

- High corrosion resistant performance: Pb-Ca multi-alloy grid
- High energy density and power density
- Optimized capability of instant high-current discharging
- Excellent charge acceptance ability
- Strong high and low temperature performance
- Low self-discharge rate



Dimension:223(L)×121(W) ×175(H)×175(TH)/(±3)

Unit: mm



Specification

Nominal Voltage	12V
Nominal Capacity	45Ah @ 3hour-rate to 1.75V per cell @25℃
Design life	5 years
Terminal	M6
Approx. Weight	Approx 12.55Kg±3% (27.7lbs±3%)
Container Material	ABS
Self discharge	3% of capacity declined per month at 25℃

Rated Capacity

20Hour Rate (2.75A to 10.5V)	55.0Ah
5Hour Rate (9.6A to 10.5V)	48.0Ah
3Hour Rate (15.0A to 10.5V)	45.0Ah

Operating Temperature

Discharge:	-20 ~50℃(-4~ 122°F)
Charge :	-20 ~50℃(-4~ 122°F)
Storage:	-20 ~50℃(-4~ 122°F)

Charge Method(25 °C)

Max charge current	6.75A
Float Use:	13.7-13.9V@25℃
Cycle Use :	14.7-14.9V,@25℃

Standards

Executive standard :GB/T32620-2016

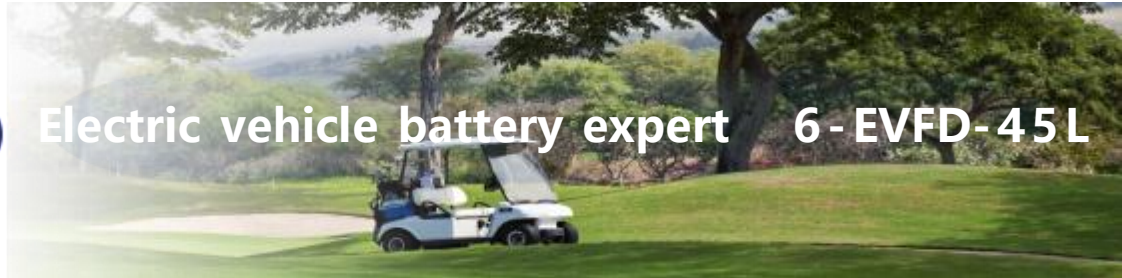
Applications

- Electric vehicle
- Electric wheelchair
- Electric scooter
- Electric play car for children
- Garbage truck
- Patrol car

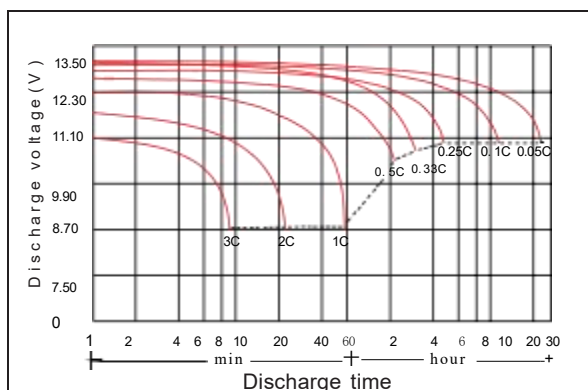
Attain Certificate



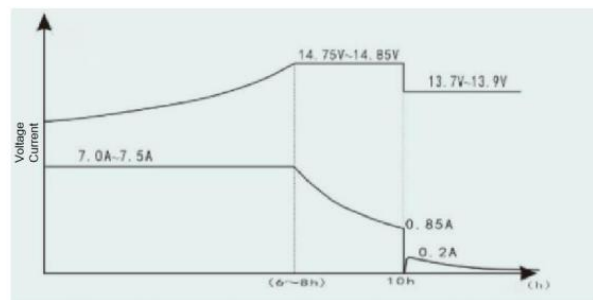
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.



Discharge characteristic

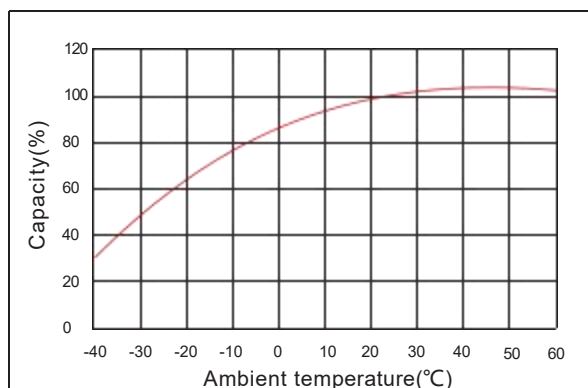


Charging characteristic

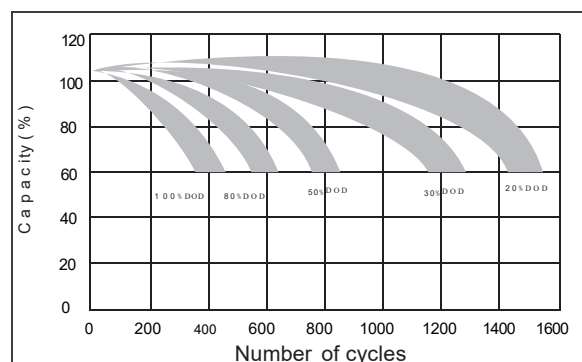


First stage: constant current 7.0-7.5A charge to voltage 14.8V;
Second stage: constant voltage 14.8±0.05V charge to current decrease to 800-850mA;
Third stage: trickle charge, voltage: 13.8±0.1V.

The effect of temperature on capacity



The effect of discharge depth on cycle life



Constant Current Discharge Characteristics Unit:A (25°C,77°F)

FV/Time	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	63.1	38.6	22.2	15.5	9.69	6.11	5.15	2.82
1.65V	61.7	38.3	22.0	15.4	9.68	6.05	5.10	2.80
1.70V	60.4	38.1	21.8	15.3	9.65	5.99	5.05	2.78
1.75V	52.0	36.0	21.5	15.0	9.60	5.96	5.00	2.75
1.80V	50.1	35.5	19.9	14.5	9.19	5.94	4.95	2.64
1.85V	49.9	33.9	18.9	13.7	8.63	5.67	4.80	2.59

Constant Power Discharge Characteristics Unit: W/cell (25°C ,77°F)

FV/Time	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	113.8	73.1	42.0	29.5	18.31	11.88	9.94	5.57
1.65V	112.5	72.5	41.6	29.1	18.46	11.75	9.81	5.53
1.70V	112.5	71.9	41.5	29.4	18.41	11.69	9.69	5.50
1.75V	96.4	68.4	41.3	28.9	18.43	11.62	9.63	5.45
1.80V	95.6	68.7	38.9	27.9	17.81	11.56	9.50	5.24
1.85V	95.3	65.6	37.1	26.6	16.94	11.19	9.38	5.19