PowerStar
Industrial Batteries, State of the Art Technology

6-EVF-135B ▶ 12V135Ah

EV series is specially designed for frequent discharge deep cycle,the series battery offers reliable performance in high load situations and could provide competitive cycle performance.Suitable for Electric Vehicle and Golf cart; Industrial equipment,Floor machines, Marine, RV, and no- idle solutions.

▶ Specification

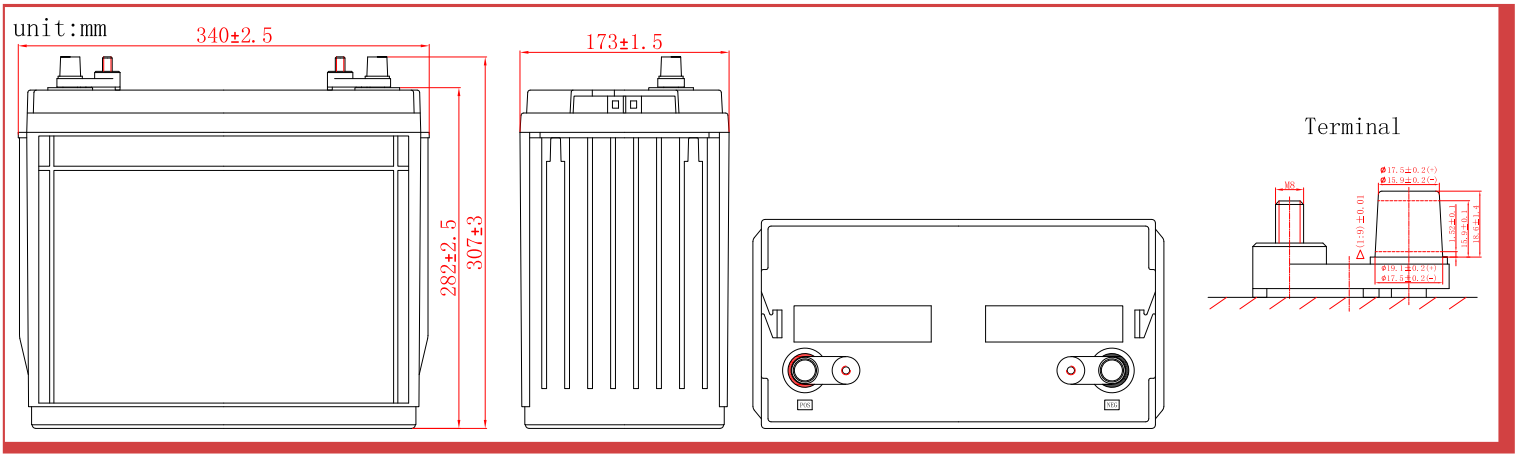
Cells Per Unit	6
Voltage Per Unit	12
Capacity	135Ah @ 10hr-rate to 1.8V per cell @25°C (77°F)
Weight	Approx. 40 kg(88 lbs) - Tolerance±3%
Maximum Discharge Current	1200A (5sec)
Internal Resistance	Approx. 4.5mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	36A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	Battery can be stored for more than 6 months at 25°C (77° F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	car terminal and M8 nut & bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

Certified by ISO 9001, ISO14001 and OHSAS18001.

▶ Dimensions :

Unit: mm

Overall Height (H)	Container height (h)	Length (L)	Width (W)
307±3	282±2.5	340±2.5	173±1.5



Constant Current Discharge Characteristics Unit:A (25℃,77℉)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	142.3	104.7	85.7	37.0	24.9	16.8	13.84	7.38
1.67	139.7	102.8	81.6	35.9	24.3	16.7	13.82	7.36
1.7	137.8	101.6	80.6	35.7	24.2	16.7	13.80	7.34
1.75	133.0	98.8	78.1	35.0	23.8	16.5	13.72	7.27
1.8	126.8	94.6	76.4	33.7	23.1	16.2	13.50	7.16
1.85	118.6	87.9	70.4	31.2	21.5	15.4	12.97	6.92

Constant Power Discharge Characteristics Unit:W (25℃,77℉)

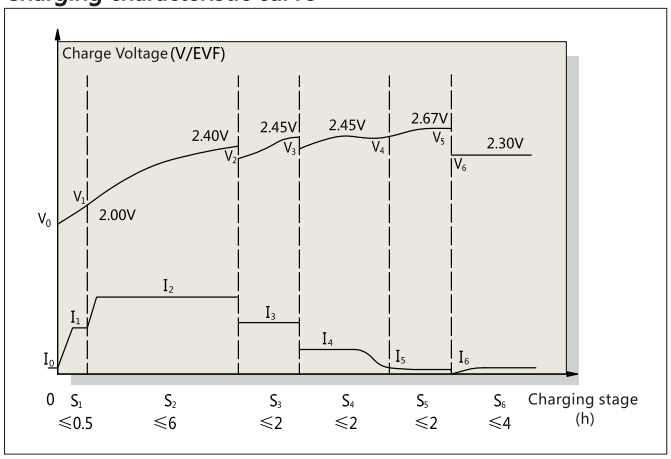
F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	258.2	193.5	159.7	70.5	48.1	32.8	27.07	14.53
1.67V	251.2	188.2	152.2	68.4	47.1	32.6	27.02	14.45
1.7V	243.7	184.3	150.8	67.9	46.9	32.4	26.95	14.40
1.75V	230.1	178.4	147.1	66.6	46.3	32.0	26.72	14.27
1.8V	213.1	174.7	145.0	64.3	45.1	31.5	26.31	14.09
1.85V	190.5	158.7	132.8	60.1	42.3	30.4	25.51	13.69

Ratings presented herein are subject to revision without notice. Please refer to www.henglivn.com to confirm the latest version.

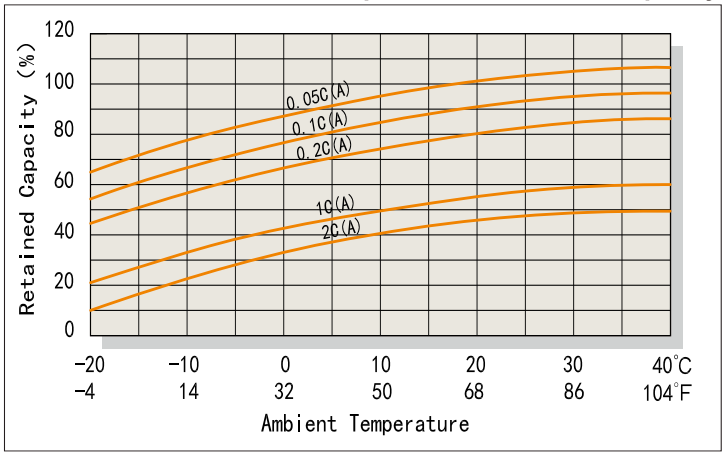
6-EVF-135B

12V135Ah

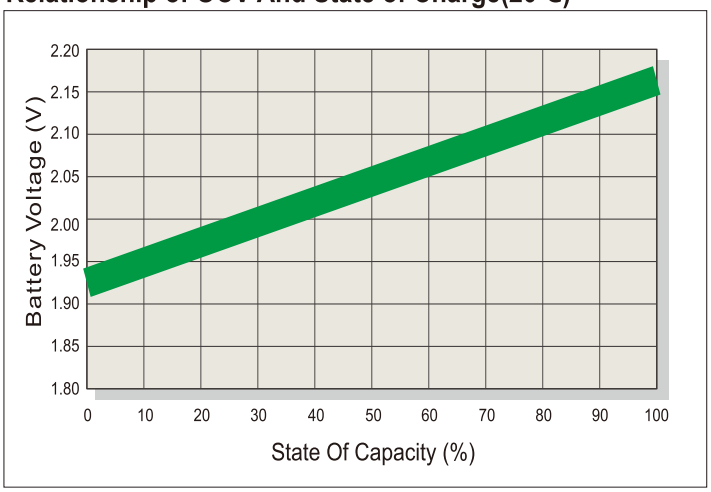
Charging characteristic curve



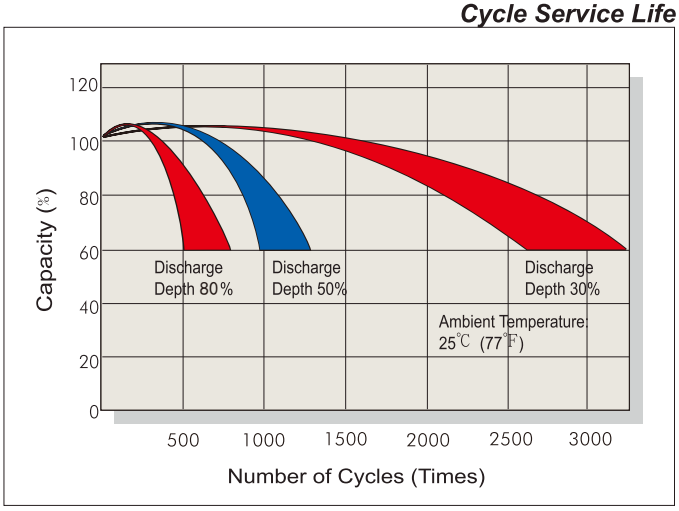
Temperature Effects on Capacity



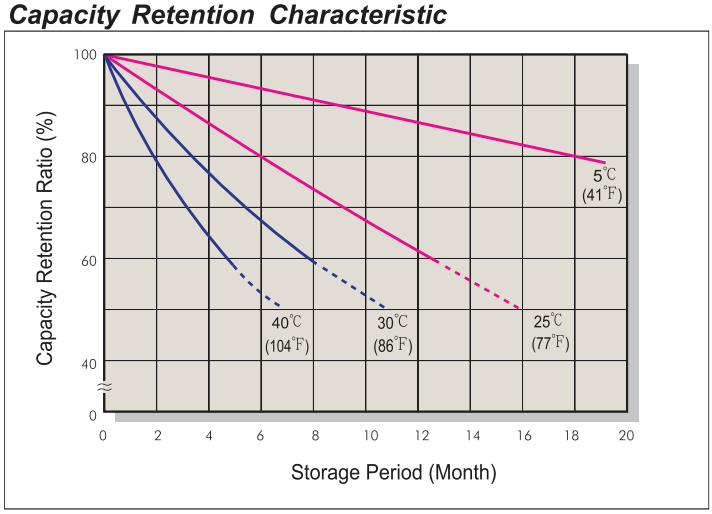
Relationship of OCV And State of Charge(20℃)



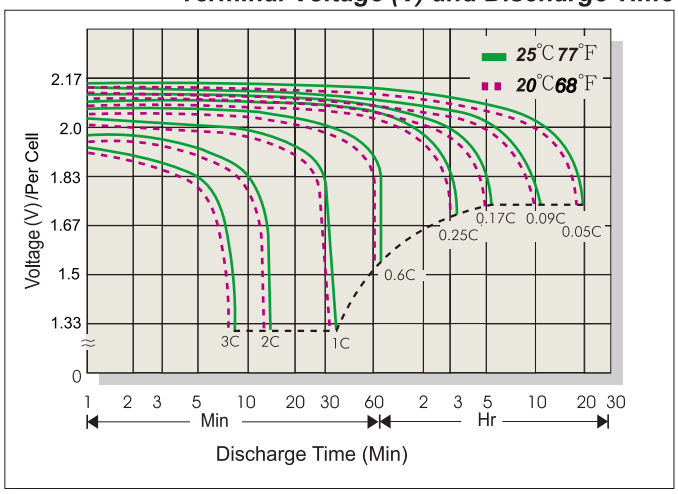
Cycle Service Life



Capacity Retention Characteristic



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25℃(77℉)	2.45	2.40~2.50	0.3C
Standby	25℃(77℉)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Effect of temperature on capacity (20HR)

Temperature	Dependency of Capacity (20HR)
40 ℃	102%
25 ℃	100%
0 ℃	85%
-15 ℃	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%