



# EVH series EVH 12240



## Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.  
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

### General

### Design for Cyclic Applications

#### 【Design Life】

350 cycles @ 100%DOD at 25°C  
1800 cycles @ 30%DOD at 25°C

#### 【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)  
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)

#### 【Certification】

IEC 60254-1:2005 / IEC60254-2:2008

#### 【Equalization Charging Voltage】

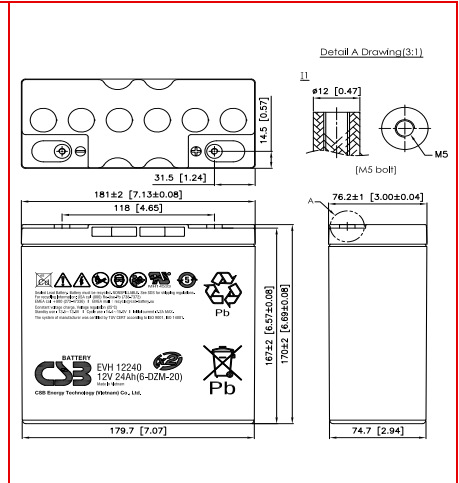
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### 【Self Discharge】

Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F);  
Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

### Specification

|                            |   |                                  |
|----------------------------|---|----------------------------------|
| Nominal Voltage            | 12V (6 cells per unit)                          |                                  |
| Nominal Capacity           | 24 Ah @20hr-rate to 1.75V per cell @25°C (77°F) |                                  |
| Weight                     | Approx. 7.55 Kg (16.64 lbs)                     |                                  |
| Maximum Discharge Current  | 320 A (5sec)                                    |                                  |
| Internal Resistance        | Approx. 8.6 mΩ                                  |                                  |
| Short Circuit Current      | --  |                                  |
| Maximum Charge Current     | 7.20 A  |                                  |
| Terminal types             | I1 terminal to accept M5 bolt                   |                                  |
| Terminal tightening torque | 30.4±6.1 Kgf-cm / 26.4±5.3 Lbf-in / 3.0±0.6 N·m |                                  |
| Container Material         | ABS (UL 94-HB)                                  |                                  |
| Dimensions                 | Length (L)                                      | 181.0±2.0 mm      7.13±0.08 inch |
|                            | Width (W)                                       | 76.2±1.0 mm      3.00±0.04 inch  |
|                            | Container Height (h)                            | 170.0±2.0 mm      6.69±0.08 inch |
|                            | Overall Height (H)                              | 170.0±2.0 mm      6.69±0.08 inch |



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

| F.V/Time | 30MIN | 45MIN | 60MIN | 90MIN | 2HR  | 3HR  | 4HR  | 5HR  | 6HR  | 8HR  | 10HR | 20HR |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|
| 1.60V    | 29.9  | 22.0  | 17.7  | 13.0  | 10.3 | 7.50 | 5.84 | 4.84 | 3.83 | 3.16 | 2.57 | 1.31 |
| 1.67V    | 29.6  | 21.7  | 17.5  | 12.9  | 10.2 | 7.44 | 5.83 | 4.78 | 3.80 | 3.15 | 2.56 | 1.30 |
| 1.70V    | 29.4  | 21.6  | 17.4  | 12.8  | 10.1 | 7.41 | 5.82 | 4.77 | 3.79 | 3.14 | 2.55 | 1.29 |
| 1.75V    | 29.0  | 21.3  | 17.2  | 12.7  | 10.0 | 7.32 | 5.74 | 4.73 | 3.74 | 3.09 | 2.52 | 1.28 |
| 1.80V    | 28.4  | 21.1  | 17.0  | 12.5  | 9.98 | 7.16 | 5.65 | 4.64 | 3.69 | 3.06 | 2.49 | 1.27 |
| 1.85V    | 27.0  | 20.2  | 16.2  | 11.9  | 9.56 | 6.85 | 5.44 | 4.47 | 3.53 | 2.91 | 2.34 | 1.17 |

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

| F.V/Time | 30MIN | 45MIN | 60MIN | 90MIN | 2HR | 3HR  | 4HR  | 5HR  | 6HR  | 8HR  | 10HR | 20HR |
|----------|-------|-------|-------|-------|-----|------|------|------|------|------|------|------|
| 1.60V    | 346   | 257   | 208   | 154   | 123 | 88.9 | 69.9 | 58.6 | 46.4 | 38.3 | 31.4 | 16.2 |
| 1.67V    | 343   | 257   | 207   | 153   | 122 | 88.7 | 69.8 | 57.6 | 45.9 | 38.1 | 31.2 | 16.1 |
| 1.70V    | 340   | 256   | 206   | 152   | 121 | 87.9 | 69.1 | 57.4 | 45.7 | 38.0 | 31.0 | 16.0 |
| 1.75V    | 338   | 255   | 205   | 151   | 120 | 87.3 | 68.4 | 56.9 | 45.4 | 37.8 | 30.7 | 15.9 |
| 1.80V    | 331   | 247   | 199   | 147   | 118 | 85.1 | 67.1 | 55.9 | 44.7 | 37.2 | 30.3 | 15.7 |
| 1.85V    | 313   | 240   | 193   | 142   | 115 | 82.9 | 65.3 | 54.4 | 43.4 | 36.1 | 29.6 | 15.4 |

Please refer to the official site for the latest rating confirmation. URL: [www.csb-battery.cn](http://www.csb-battery.cn)

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### Sales Offices

希世比能源科技股份有限公司  
CSB Energy Technology Co., Ltd.

#### BUSINESS HEADQUARTERS

Tel: +886-2-2880-5600  
Fax: +886-2-2888-3300

#### USA OFFICE

Tel: +1-817-244-7777 / 1-(800)3-CSB-USA (272872)  
Fax: +1-817-244-4445

#### EUROPE (EMEA) OFFICE

Tel: +31(0)180-418-140  
Fax: +31(0)180-418-327

Recognized under UL 1989,  
and certified by ISO 9001, 14001, 45001, 50001.



#### TAIPEI OFFICE

Tel: +886-2-2880-5600  
Fax: +866-2-2888-3300