



# HR series HR 1227W



## 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 Standby Power Applications

#### 【Design Life】

Up to 5 Years in Standby Service at 25°C  
Eurobat (20°C) : 3-5 YEARS STANDARD COMMERCIAL

#### 【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)

#### 【Float Charging Voltage】

13.5 ~ 13.8 VDC/Unit at 25°C (77°F)

#### 【Equalization Charging Voltage】

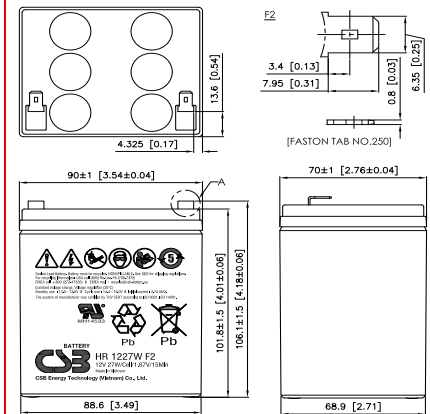
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

#### 【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 Design according with IEC 61056-1/2:2012

Nominal Voltage	12V (6 cells per unit)	
Nominal Capacity	27W @15min-rate to 1.67V per cell @25°C (77°F)	
Weight	Approx. 1.97 Kg (4.34 lbs)	
Maximum Discharge Current	100/130A (5sec)	
Internal Resistance	Approx. 19.9 mΩ	
Short Circuit Current	424A	
Maximum Charge Current	2.7A	
Terminal types	F1/F2 -Faston Tab187/250	
Terminal tightening torque	--	
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request	
Dimensions	Length (L)	90.0±1.0 mm      3.54±0.04 inch
	Width (W)	70.0±1.0 mm      2.76±0.04 inch
	Container Height (h)	101.8±1.5 mm      4.01±0.06 inch
	Overall Height (H)	106.1±1.5 mm      4.18±0.06 inch



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

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	55.4	36.5	31.2	27.5	22.1	18.7	13.6	10.9	7.88	5.71	4.55	3.23
1.67V	50.4	34.3	29.8	26.5	21.4	18.3	13.5	10.8	7.83	5.66	4.49	3.18
1.70V	45.6	32.2	28.2	25.3	20.8	17.8	13.1	10.7	7.77	5.62	4.47	3.16
1.75V	41.0	29.9	26.6	24.2	20.0	17.2	12.8	10.6	7.68	5.57	4.43	3.13
1.80V	36.4	27.5	24.7	22.7	18.9	16.3	12.4	10.3	7.49	5.45	4.35	3.08
1.85V	31.7	24.8	22.5	20.7	17.4	15.2	11.7	9.59	7.11	5.20	4.16	2.96

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

F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
1.60V	503	383	338	305	254	219	163	127	92.4	66.3	52.4	37.4
1.67V	469	358	318	288	242	211	162	126	91.6	66.0	52.3	37.3
1.70V	455	347	308	280	236	206	161	125	91.3	65.8	52.2	37.1
1.75V	428	327	293	268	229	200	158	124	90.3	65.2	51.8	36.8
1.80V	403	309	278	255	218	192	153	120	88.2	64.2	51.3	36.7
1.85V	377	290	261	240	208	184	144	114	84.4	61.6	49.2	35.1

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

Issued: 200927

### 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

#### SHENZHEN OFFICE (CHINA)

Tel: +86-755-8831-6488/6775/6075  
Fax: +86-755-8831-6548

#### EUROPE (EMEA) OFFICE

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

#### SHANGHAI OFFICE (CHINA)

Tel: +86-21-5046-1622/0833/0094  
Fax: +86-21-5046-1046

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



#### TAIPEI OFFICE

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

#### BEIJING OFFICE (CHINA)

Tel: +86-10-6597-8065/8165/8265  
Fax: +86-10-6597-8565