



HRL series HRL 12330W



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 10 Years in Standby Service at 25°C
Eurobat (20°C) : >12 YEARS VERY LONG LIFE

【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】

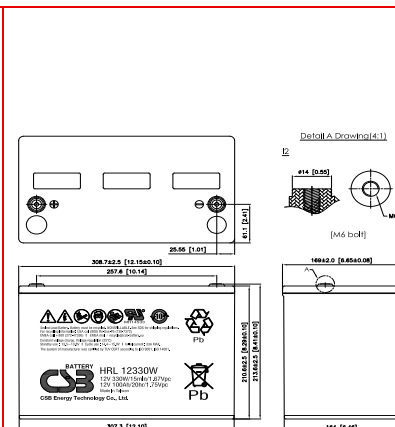
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

【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 60896-21/22:2004

Nominal Voltage	12V (6 cells per unit)	
Nominal Capacity	330W @ 15min-rate to 1.67V per cell @25°C (77°F) 100AH@ 20hour-rate to 1.75V per cell @ 25°C (77°F)	
Weight	Approx. 29.60 Kg (65.24 lbs)	
Maximum Discharge Current	800A (5sec)	
Internal Resistance	Approx. 3.50 mΩ	
Short Circuit Current	2386A	
Maximum Charge Current	33.0A	
Terminal types	I2 thread lead alloy terminal to accept M6 bolt	
Terminal tightening torque	51.7±10.3 Kgf·cm / 44.9±9.0 Lbf·in / 5.10±1.0 N·m	
Container Material	PP (UL 94-HB) & Flame Retardant (94-V0) available upon request	
Dimensions	Length (L)	308.7±2.5 mm 12.15±0.10 inch
	Width (W)	169.0±2.0 mm 6.65±0.08 inch
	Container Height (h)	210.6±2.5 mm 8.29±0.10 inch
	Overall Height (H)	213.6±2.5 mm 8.41±0.10 inch



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

F.V/Time	2MIN	5MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN	5HR	10HR	20HR
1.60V	530	409	271	202	162	119	86.0	68.4	49.6	18.7	10.0	5.16
1.67V	482	369	256	196	158	117	85.1	67.9	49.4	18.6	9.91	5.12
1.70V	454	350	248	191	155	116	84.4	67.5	49.3	18.5	9.86	5.10
1.75V	405	317	230	181	149	112	82.6	66.4	48.9	18.2	9.74	5.06
1.80V	337	273	206	168	139	106	79.1	64.1	47.7	17.8	9.51	4.97
1.85V	252	234	180	150	125	97.1	73.2	59.9	45.1	17.0	9.09	4.77

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

F.V/Time	2MIN	5MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN	5HR	10HR	20HR
1.60V	4597	3930	2870	2187	1772	1318	972	784	578	217	117	61.4
1.67V	4397	3761	2737	2131	1738	1304	965	779	576	216	116	61.0
1.70V	4285	3597	2656	2093	1713	1292	958	775	575	216	116	60.9
1.75V	4043	3300	2485	2009	1656	1260	941	764	571	214	115	60.5
1.80V	3660	2993	2276	1883	1564	1204	907	742	559	210	113	59.6
1.85V	2976	2589	2042	1676	1416	1116	850	700	534	202	108	57.6

Please refer to the official site for the latest rating confirmation. URL: www.csb-battery.com

Issued: 201012

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: +866-2-2888-3300

BEIJING OFFICE (CHINA)

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