



HRL series HRL 12280W



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】

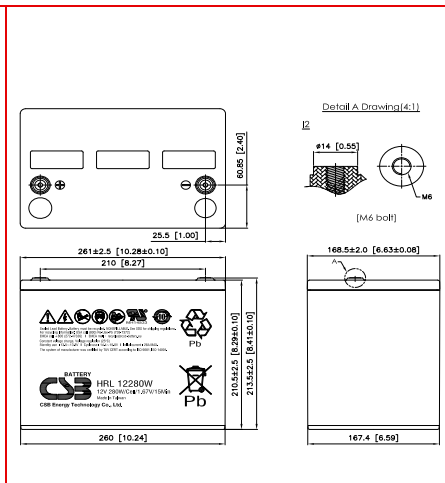
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

【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	280W @15min-rate to 1.67V per cell @25°C (77°F)	
Weight	Approx. 25.80 Kg (56.86 lbs)	
Maximum Discharge Current	800A (5sec)	
Internal Resistance	Approx. 3.50 mΩ	
Short Circuit Current	2576A	
Maximum Charge Current	28.0A	
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)	261.0±2.5 mm 10.28±0.10 inch
	Width (W)	168.5±2.0 mm 6.63±0.08 inch
	Container Height (h)	210.5±2.5 mm 8.29±0.10 inch
	Overall Height (H)	213.5±2.5 mm 8.41±0.10 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	404	334	318	287	237	216	167	137	103	76.0	59.9	44.6
1.67V	345	305	283	258	217	200	155	128	98.3	72.9	57.7	42.1
1.70V	312	293	266	244	207	192	149	124	96.3	71.2	55.6	40.6
1.75V	288	254	236	218	188	175	141	117	91.3	68.5	53.8	38.5
1.80V	249	219	207	194	171	161	131	111	85.4	63.7	50.1	36.3
1.85V	215	190	178	169	152	145	122	105	81.3	59.7	47.3	34.7

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	4363	3522	3354	3039	2519	2304	1788	1476	1110	822	648	485
1.67V	3807	3150	3036	2778	2347	2166	1700	1417	1079	804	636	466
1.70V	3570	3013	2880	2650	2263	2100	1643	1384	1060	792	618	454
1.75V	3244	2780	2615	2422	2095	1955	1575	1326	1023	780	600	436
1.80V	2833	2476	2329	2176	1913	1800	1493	1274	980	738	581	422
1.85V	2468	2093	2016	1914	1735	1656	1408	1212	938	694	550	404

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

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



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