



# HRL Series

## HRL 12200W Datasheet

12V Top Terminal VRLA-AGM



Valve Regulated Lead Acid (VRLA) Battery

Maintenance-Free, Absorbent Glass Mat (AGM) Technology for Efficient Gas Recombination of up to 99%

Pure Lead Construction and Proprietary Elements

Designed for High-Rate UPS, Float Service Standby Power Applications

Built in Accordance with IEC 60896-21/22:2004 and UL1989 Recognized (MH14533)



### Specifications

Voltage (Vdc)	12
Nominal Capacity (1.67 VPC @25°C)	200W @15min-rate
Watts Per Cell (30-Sec 1.67 VPC @ 25°C)	--
Watts Per Cell (5-Min 1.67 VPC @ 25°)	385
Watts Per Cell (15-Min 1.67 VPC @ 25°)	218
Max Charge Current (A)	20.0
Max Discharge Current (A)	400
Short Circuit Current (A)	1509
Internal Resistance (mΩ)	Approx. 5.50
Terminal Type	I2 thread lead alloy terminal to accept M6 bolt
Terminal 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
Weight (kg. / lb., Approx.)	17.30 / 38.13
Length (L) (mm / in)	228.0±2.5 / 8.98±0.10
Width (W) (mm / in)	138.4±1.5 / 5.45±0.06
Height (H) (mm / in)	206.3±2.5 / 8.12±0.10
Design Life	Up to 10 Years in Standby Service at 25°C Eurobat (20°C): >12 Years Very Long Life
Operating Temperature	Nominal: 25°C (77°F) Discharge: -15°C - 50°C (5°F-122°F) Charge/Storage: -15°C - 40°C (5°F - 104°F)
Float Charging Voltage	13.5 - 13.8 Vdc/battery 25°C (77°F)
Eq. Charging Voltage	14.4 - 15.0 Vdc/battery 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).



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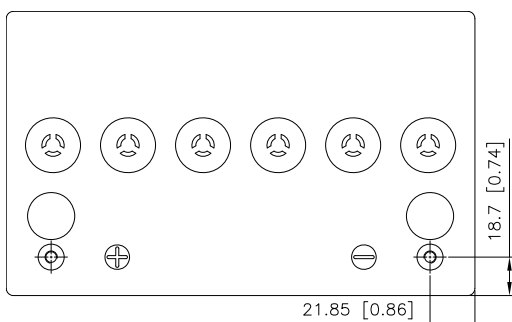
12V Top Terminal VRLA-AGM

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

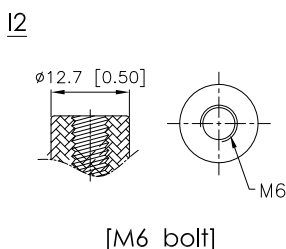
F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
10.02V (1.67 VPC)	279	232	218	205	177	157	118	97.0	71.2	52.0	41.2	29.5
10.50V (1.75 VPC)	233	197	192	176	156	141	111	92.0	68.2	50.7	40.3	29.1
10.80V (1.80 VPC)	198	172	165	156	140	126	102	85.2	64.6	48.7	38.9	28.2

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

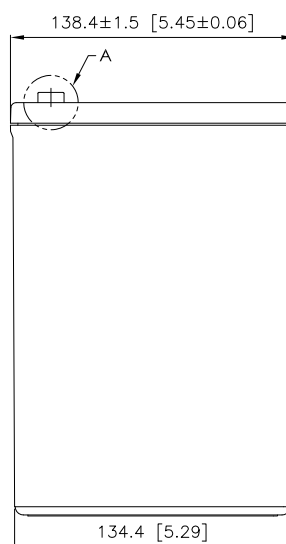
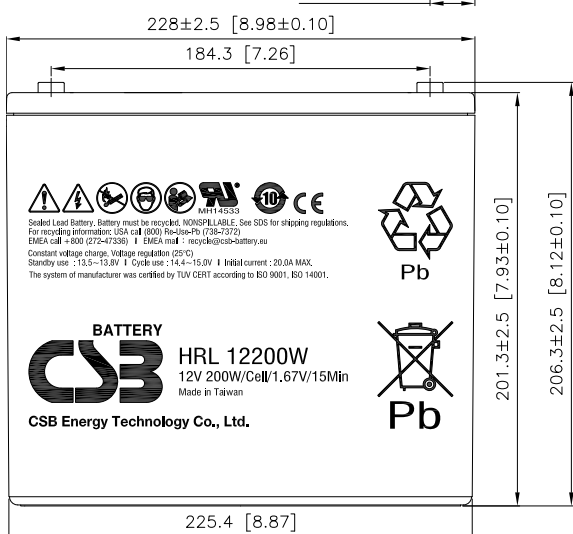
F.V/Time	2MIN	4MIN	5MIN	6MIN	8MIN	10MIN	15MIN	20MIN	30MIN	45MIN	60MIN	90MIN
10.02V (1.67 VPC)	2861	2395	2306	2127	1874	1666	1308	1083	809	600	475	342
10.50V (1.75 VPC)	2458	2120	2022	1904	1717	1523	1232	1027	772	585	464	335
10.80V (1.80 VPC)	2231	1889	1840	1765	1562	1409	1158	959	738	564	452	326



Detail A Drawing(3:1)



[M6 bolt]



Sealed Lead Battery. Battery must be recycled. NONSPILLABLE. See SDS for shipping regulations.  
 For recycling information: USA call 1(800) 954-2869 (7:30-7:37)  
 EMEA call +800 (272-47336) | EMEA mail: recycle@csb-battery.eu

**BATTERY**  
  
**HRL 12200W**  
 12V 200W/Cell/1.67V/15Min  
 Made in Taiwan  
 CSB Energy Technology Co., Ltd.

