



HRL series

HRL 12150W 12V 155W



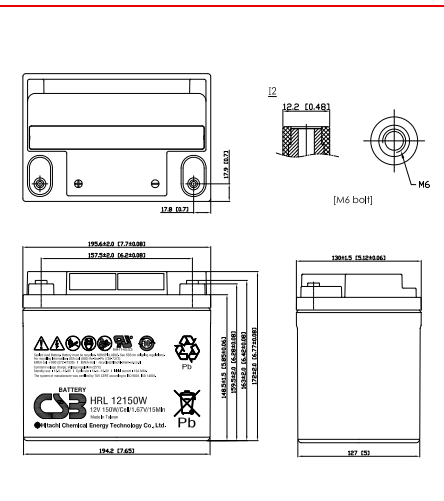
Valve Regulated Lead Acid Battery

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

Design for Standby Power Applications

| | |
|---|---|
| <p>【Design Life】 Up to 10 Years in Standby Service at 25°C Eurobat (20°C) : 10-12 years, Long Life</p> <p>【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)</p> | <p>【Float Charging Voltage】 13.5 ~ 13.8 VDC/Unit at 25°C (77°F)</p> <p>【Equalization Charging Voltage】 14.4 ~ 15.0 VDC/Unit at 25°C (77°F)</p> <p>【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).</p> |
|---|---|

| Specification | | Design according with IEC 61056-1/2:2012 | |
|---------------------------|---|--|----------------|
| Nominal Voltage | 12V (6 cells per unit) | | |
| Nominal Capacity | 155W @15min-rate to 1.67V per cell @25°C (77°F) | | |
| Weight | Approx. 11.75 Kg (25.90 lbs) | | |
| Maximum Discharge Current | 225A (5sec) | | |
| Internal Resistance | Approx. 7.30 mΩ | | |
| Short Circuit Current | 1116A | | |
| Maximum Charge Current | 15.0A | | |
| Terminal types | I2 thread lead alloy terminal to accept M6 bolt | | |
| Terminal hardware Torque | 138.6 Kgf-cm / 120.3 lbf-in / 13.58 N-m | | |
| Container Material | ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request | | |
| Dimensions | Length (L) | 195.6±2.0 mm | 7.70±0.08 inch |
| | Width (W) | 130.0±1.5 mm | 5.12±0.06 inch |
| | Container Height (h) | 172.0±2.0 mm | 6.77±0.08 inch |
| | Overall Height (H) | 172.0±2.0 mm | 6.77±0.08 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 | -- | -- | 169 | 153 | 127 | 116 | 86.7 | 69.6 | 50.4 | 36.4 | 28.9 | 20.8 |
| 1.67V | -- | -- | 152 | 139 | 116 | 107 | 82.2 | 66.3 | 48.4 | 35.3 | 28.6 | 20.5 |
| 1.70V | -- | -- | 144 | 132 | 112 | 103 | 80.0 | 64.7 | 47.5 | 34.8 | 28.4 | 20.4 |
| 1.75V | -- | -- | 132 | 122 | 104 | 96.8 | 76.0 | 62.0 | 45.7 | 33.6 | 27.8 | 20.0 |
| 1.80V | -- | -- | 119 | 111 | 96.2 | 90.0 | 71.1 | 58.4 | 43.8 | 32.2 | 26.8 | 19.5 |
| 1.85V | -- | -- | 107 | 100 | 88.0 | 82.8 | 67.0 | 55.1 | 41.7 | 30.9 | 25.0 | 18.6 |

| 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 | -- | -- | 1794 | 1636 | 1373 | 1263 | 968 | 788 | 577 | 421 | 335 | 244 |
| 1.67V | -- | -- | 1624 | 1494 | 1275 | 1182 | 935 | 753 | 559 | 415 | 334 | 239 |
| 1.70V | -- | -- | 1549 | 1430 | 1228 | 1143 | 916 | 737 | 548 | 409 | 332 | 236 |
| 1.75V | -- | -- | 1422 | 1321 | 1149 | 1075 | 877 | 704 | 530 | 399 | 325 | 231 |
| 1.80V | -- | -- | 1302 | 1217 | 1069 | 1006 | 825 | 675 | 507 | 383 | 314 | 226 |
| 1.85V | -- | -- | 1188 | 1118 | 996 | 943 | 773 | 639 | 486 | 364 | 296 | 222 |

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

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Sales Offices
日立化成能源科技股份有限公司
 Hitachi Chemical Energy Technology Co., Ltd.

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

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, 8831-6775
 Fax: +86-755-8831-6075

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

SHANGHAI OFFICE (CHINA)
 Tel: +86-21-5046-1622, 5046-0833
 Fax: +86-21-5046-1046

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

BEIJING OFFICE (CHINA)
 Tel: +86-10-5820-5336, 5820-5338
 Fax: +86-10-5820-3053

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

