



HRL series HRL 1234W



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 8 Years in Standby Service at 25°C
Eurobat (20°C) : 10/12 YEARS 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】

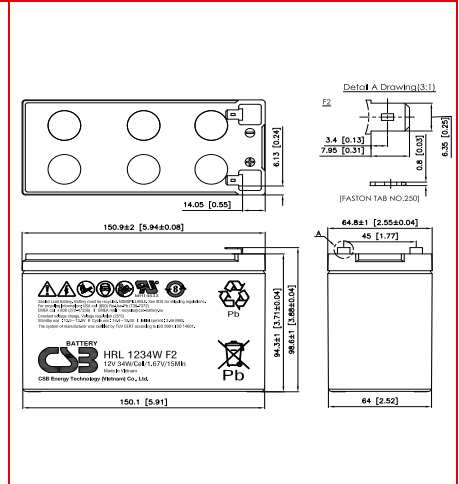
14.4 ~ 15.0 VDC/Unit at 25°C (77°F)

【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 61056-1/2:2012

| | | | |
|----------------------------|---|--------------|----------------|
| Nominal Voltage | 12V (6 cells per unit) | | |
| Nominal Capacity | 34W @15min-rate to 1.67V per cell @25°C (77°F) | | |
| Weight | Approx. 2.70 Kg (5.95 lbs) | | |
| Maximum Discharge Current | 130A (5sec) | | |
| Internal Resistance | Approx. 17.0 mΩ | | |
| Short Circuit Current | 367A | | |
| Maximum Charge Current | 3.4A | | |
| Terminal types | F2 terminal -Faston Tab 250 | | |
| Terminal tightening torque | -- | | |
| Container Material | ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request | | |
| Dimensions | Length (L) | 150.9±2.0 mm | 5.94±0.08 inch |
| | Width (W) | 64.8±1.0 mm | 2.55±0.04 inch |
| | Container Height (h) | 94.3±1.0 mm | 3.71±0.04 inch |
| | Overall Height (H) | 98.6±1.0 mm | 3.88±0.04 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 | 77.1 | 50.2 | 43.1 | 37.9 | 30.7 | 25.9 | 18.8 | 14.8 | 10.7 | 7.59 | 5.97 | 4.26 |
| 1.67V | 69.6 | 48.0 | 41.7 | 36.9 | 30.2 | 25.6 | 18.6 | 14.7 | 10.6 | 7.56 | 5.95 | 4.25 |
| 1.70V | 66.0 | 46.6 | 40.8 | 36.2 | 29.7 | 25.4 | 18.5 | 14.6 | 10.5 | 7.55 | 5.94 | 4.24 |
| 1.75V | 60.0 | 43.6 | 38.5 | 34.6 | 28.7 | 24.6 | 18.2 | 14.4 | 10.4 | 7.48 | 5.90 | 4.22 |
| 1.80V | 53.2 | 39.8 | 35.5 | 32.3 | 27.0 | 23.4 | 17.5 | 14.0 | 10.2 | 7.32 | 5.79 | 4.16 |
| 1.85V | 45.8 | 35.3 | 31.9 | 29.0 | 24.8 | 21.4 | 16.4 | 13.2 | 9.69 | 6.99 | 5.55 | 4.00 |

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 | 754 | 530 | 464 | 412 | 339 | 290 | 215 | 171 | 125 | 89.4 | 70.9 | 51.1 |
| 1.67V | 699 | 514 | 452 | 404 | 334 | 287 | 213 | 170 | 124 | 89.2 | 70.7 | 51.0 |
| 1.70V | 689 | 503 | 443 | 398 | 330 | 284 | 212 | 169 | 123 | 89.0 | 70.6 | 50.9 |
| 1.75V | 639 | 477 | 424 | 383 | 321 | 278 | 209 | 167 | 122 | 88.3 | 70.2 | 50.7 |
| 1.80V | 582 | 441 | 397 | 359 | 306 | 266 | 203 | 163 | 120 | 86.8 | 69.1 | 50.1 |
| 1.85V | 515 | 400 | 359 | 329 | 283 | 247 | 191 | 155 | 115 | 83.4 | 66.6 | 48.5 |

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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