# HRL Series

## HRL12200W Datasheet

12V Top Terminal VRLA-AGM

| Specifications | |
|---|---|
| Voltage (Vdc) | 12 |
| 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)<br>Discharge: -15°C - 50°C (5°F-122°F)<br>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). |




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, UL1973 Listed (MH66728) and UL1989 Recognized (MH14533)

Certified by TUV NORD according to ISO 9001:2015

MH14533

CERTIFIED MH66728

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12V Top Terminal VRLA-AGM

| Constant Current Discharge Characteristics Per Battery: Amperes (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 Per Battery: Watts (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 |

