



# HRL Series

## HRL12390W Datasheet

12V Top Terminal VRLA-AGM

### Specifications

|  |   |
|--|---|
| Voltage (Vdc)                              | 12  |
| Watts Per Cell<br>(30-Sec 1.67 VPC @ 25°C) | --  |
| Watts Per Cell<br>(5-Min 1.67 VPC @ 25°)   | 700   |
| Watts Per Cell<br>(15-Min 1.67 VPC @ 25°)  | 414   |
| Max Charge Current (A)                     | 39.0  |
| Max Discharge Current (A)                  | 800   |
| Short Circuit Current (A)                  | 2779  |
| Internal Resistance (mΩ)                   | Approx. 3.00  |
| 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.)                | 33.00 / 72.73   |
| Length (L) (mm / in)                       | 343.0±2.5 / 13.50±0.10  |
| Width (W) (mm / in)                        | 170.0±2.0 / 6.69±0.08   |
| Height (H) (mm / in)                       | 216.9±2.5 / 8.54±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<br>25°C (77°F)  |
| Eq. Charging Voltage                       | 14.4 - 15.0 Vdc/battery<br>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





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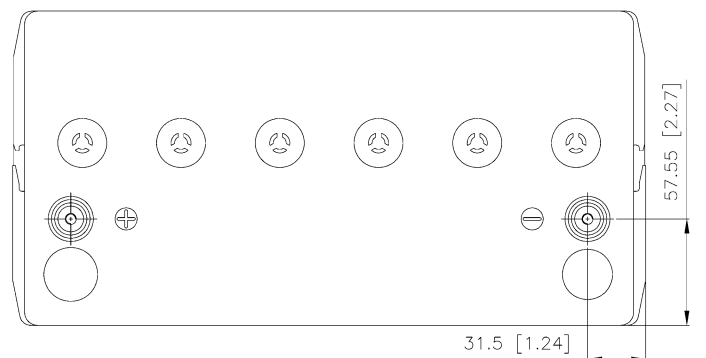
12V Top Terminal VRLA-AGM

### 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) | 532  | 456  | 416  | 386  | 334  | 298   | 230   | 186   | 138   | 99.6  | 78.9  | 56.8  |
| 10.50V (1.75 VPC) | 463  | 384  | 354  | 330  | 296  | 266   | 212   | 174   | 132   | 96.1  | 76.7  | 55.7  |
| 10.80V (1.80 VPC) | 382  | 330  | 310  | 296  | 266  | 239   | 197   | 163   | 125   | 91.8  | 73.8  | 54.2  |

### 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) | 5312 | 4557 | 4197 | 3919 | 3518 | 3141  | 2483  | 2039  | 1545  | 1130  | 906   | 663   |
| 10.50V (1.75 VPC) | 4583 | 3970 | 3736 | 3555 | 3190 | 2861  | 2348  | 1943  | 1488  | 1098  | 885   | 653   |
| 10.80V (1.80 VPC) | 4044 | 3587 | 3451 | 3253 | 2893 | 2641  | 2215  | 1843  | 1423  | 1059  | 858   | 639   |



Detail A Drawing(4:1)

