



VRLA Rechargeable Battery

EB20-12



FEATURES

- Absorbent Glass Mat technology for efficient gas recombination
- Maintenance free(no water topping-up required)
- No free acid(Non-spillable battery)
- Can be used in any orientation(excluding used inverted)
- The battery is designed for high power & high cyclic usage
- Low self-discharge rate, lower than 3% capacity loss per month

APPLICATION

- UPS
- E-bike
- Wheelchairs
- Lawn Mowers
- Golf-Carts
- Electrical Scooter



SPECIFICATIONS

| | |
|-----------------------------|--|
| Nominal Voltage | 12 V |
| Nominal Capacity | 20Ah @ 20 hour rate F.V.(1.75V/cell) |
| Approx. Weight | 6450g(14.22lbs.) |
| Terminals | B1 (Fitting M5 bolt & nut) I1 is optional |
| Internal Resistance | ≤ 11mΩ (Fully Charged) |
| Max. Discharge Current | 300 A (5 sec.) |
| Max. Charge Current | 6.0 A |
| Operating Temperature Range | Charge : 0°C~40°C(32°F~104°F) Discharge : -20°C~50°C(-4°F~122°F) Storage. : -20°C~40°C(-4°F~104°F) |
| Container Material | Standard: ABS(UL 94-HB) EB20-12 Optional: Flame Retardant ABS(UL 94-V0) EB20-12FR |



- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

| DIMENSION(mm/inch) | OUTER DIMENSIONS | TERMINAL TYPE |
|--|------------------|---|
| Length 181±1.5 (7.13±0.06) | | <p>Terminal Hardware Initial Torque: B1(2.5Nm±5%), I1(4.0Nm±5%)</p> |
| Width 76±1.5 (2.99±0.06) | | |
| Container Height 166±1.5 (6.54±0.06) | | |
| Total Height 166±1.5 (6.54±0.06) | | |

Constant power discharge characteristics at 25 °C/77 °F Unit: W

| F.V. (V/cell) \ Discharge Time | 10 Min | 15 Min | 30 Min | 40 Min | 1 Hr | 2 Hr | 3 Hr | 5 Hr | 10 Hr | 20 Hr |
|--------------------------------|--------|--------|--------|--------|-------|------|------|------|-------|-------|
| 1.80V | 538.5 | 436.1 | 274.2 | 217.4 | 162.8 | 85.5 | 70.1 | 44.4 | 22.44 | 11.76 |
| 1.75V | 583.5 | 456.8 | 285.1 | 225.4 | 167.5 | 87.8 | 71.5 | 44.9 | 22.80 | 12.00 |
| 1.70V | 604.8 | 470.6 | 291.2 | 229.7 | 170.3 | 88.7 | 72.0 | 45.2 | 22.92 | 12.12 |
| 1.65V | 619.3 | 481.6 | 295.5 | 233.0 | 172.6 | 89.6 | 72.5 | 45.6 | 23.04 | 12.24 |
| 1.60V | 631.6 | 490.8 | 298.3 | 235.4 | 174.5 | 90.0 | 73.0 | 45.7 | 23.04 | 12.24 |
| 1.50V | 643.9 | 500.9 | 301.1 | 237.7 | 176.3 | 90.5 | 73.4 | 45.7 | 23.04 | 12.24 |

Constant current discharge characteristics at 25 °C/77 °F Unit: A

| F.V. (V/cell) \ Discharge Time | 10 Min | 15 Min | 30 Min | 40 Min | 1 Hr | 2 Hr | 3 Hr | 5 Hr | 10 Hr | 20 Hr |
|--------------------------------|--------|--------|--------|--------|-------|------|------|------|-------|-------|
| 1.80V | 47.4 | 37.9 | 23.2 | 18.4 | 13.68 | 7.13 | 5.84 | 3.70 | 1.87 | 0.98 |
| 1.75V | 51.4 | 39.7 | 24.2 | 19.0 | 14.07 | 7.31 | 5.96 | 3.74 | 1.90 | 1.00 |
| 1.70V | 53.2 | 40.9 | 24.7 | 19.4 | 14.31 | 7.39 | 6.00 | 3.77 | 1.91 | 1.01 |
| 1.65V | 54.5 | 41.9 | 25.0 | 19.7 | 14.50 | 7.46 | 6.04 | 3.80 | 1.92 | 1.02 |
| 1.60V | 55.6 | 42.7 | 25.3 | 19.9 | 14.66 | 7.50 | 6.08 | 3.81 | 1.92 | 1.02 |
| 1.50V | 56.7 | 43.6 | 25.5 | 20.1 | 14.82 | 7.54 | 6.12 | 3.81 | 1.92 | 1.02 |

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.
A/2 REV. Jul. 2013