



VRLA Rechargeable Battery

EP33-12 Handle Type



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 heavy duty cyclic application
- Low self-discharge rate, lower than 3% capacity loss per month

APPLICATION

- UPS
- Golf-Carts
- Wheelchairs
- Lawn Mowers



SPECIFICATIONS

| | |
|-----------------------------|---|
| Nominal Voltage | 12 V |
| Nominal Capacity | 33Ah @ 20 hour rate F.V.(1.75V/cell) |
| Approx. Weight | 11500g(25.36lbs.) |
| Terminals | B7 (Fitting M6 bolt & nut) I2 is optional |
| Internal Resistance | ≤9mΩ (Fully Charged) |
| Max. Discharge Current | 495 A (5 sec.) |
| Max. Charge Current | 9.9 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) EP33-12 Optional: Flame Retardant ABS(UL 94-V0) EP33-12FR |

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

| DIMENSION(mm/inch) | OUTER DIMENSIONS | TERMINAL TYPE |
|---|------------------|------------------------|
| Length 210±1.5 (8.27±0.06) | | Terminal B7 |
| Width 129±1.5 (5.08±0.06) | | Terminal I2 |
| Container Height 168±1.5 (6.61±0.06) | | [M6 BOLT & NUT] |
| Total Height B7:179±2.0 (7.05±0.08) I2:168±2.0 (6.61±0.08) | | [M6 BOLT] |

Terminal Hardware Initial Torque: B7/I2(5.5Nm±5%)

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

| F.V. (V/cell) \ Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr | 10 Hr | 20 Hr |
|--------------------------------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1.80V | 1075.0 | 808.0 | 654.3 | 393.6 | 228.2 | 96.2 | 66.50 | 37.05 | 19.38 |
| 1.75V | 1245.0 | 875.4 | 685.0 | 408.7 | 234.8 | 98.1 | 67.40 | 37.62 | 19.80 |
| 1.70V | 1320.0 | 907.0 | 705.7 | 417.7 | 239.0 | 99.0 | 67.90 | 37.81 | 19.89 |
| 1.65V | 1381.0 | 928.7 | 722.2 | 423.8 | 242.3 | 99.9 | 68.40 | 37.90 | 19.94 |
| 1.60V | 1424.0 | 947.1 | 736.4 | 428.1 | 244.7 | 100.4 | 68.40 | 37.90 | 19.94 |

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

| F.V. (V/cell) \ Discharge Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 3 Hr | 5 Hr | 10 Hr | 20 Hr |
|--------------------------------|-------|--------|--------|--------|------|------|------|-------|-------|
| 1.80V | 96.8 | 71.1 | 56.9 | 33.4 | 19.2 | 8.02 | 5.54 | 3.09 | 1.62 |
| 1.75V | 114.2 | 77.1 | 59.6 | 34.6 | 19.7 | 8.18 | 5.62 | 3.14 | 1.65 |
| 1.70V | 121.1 | 79.8 | 61.4 | 35.4 | 20.1 | 8.25 | 5.66 | 3.15 | 1.66 |
| 1.65V | 126.7 | 81.8 | 62.8 | 35.9 | 20.4 | 8.33 | 5.70 | 3.16 | 1.66 |
| 1.60V | 130.6 | 83.4 | 64.0 | 36.3 | 20.6 | 8.37 | 5.70 | 3.16 | 1.66 |

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.