



EV12-60 (12V 60Ah)

Miton
ACCU'S EN BATTERIJEN**Specifications**

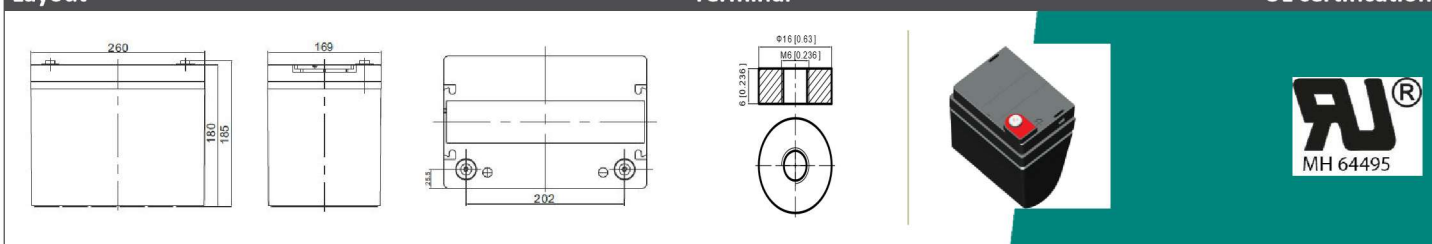
| | |
|-------------------------------|--|
| Cells Per Unit | 6 |
| Voltage Per Unit | 12 |
| Nominal Capacity | 60Ah@10hr-rate to 1.80V per cell @25°C |
| Weight | Approx. 20 Kg (Tolerance±3.0%) |
| Dimensions | Length 260 mm |
| | Width 169 mm |
| | Height 180 mm |
| | Total Height 185 mm |
| Internal Resistance | Approx. 6.5 mΩ |
| Terminal | T6 |
| Layout | 1 |
| Max. Discharge Current | 600A (5 sec) |
| Cold Cranking Ampere (CCA) | 390A |
| Max. Charging Current | 18.0A |
| Reference Capacity | C3 46.5AH |
| | C5 52.5AH |
| | C10 60.0AH |
| | C20 63.6AH |
| Float Charging Voltage | 13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell |
| Cycle Use Voltage | 14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell |
| Operating Temp. Range | Discharge: -20°C~60°C |
| | Charge: 0°C~50°C |
| | Storage: -20°C~60°C |
| Nominal Operating Temp. Range | 25°C±5°C |
| Self Discharge | Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using. |
| Container Material | A.B.S. UL94-HB, UL94-V0 Optional. |

**Description and Features**

VRLA EV Series is specially designed for frequent discharge in deep cycle applications. EV batteries offer reliable performance in high load situations and have a high cycle durability due to the specially designed active material, strong grids and thick plate construction. The addition of carbon ensures faster full recharging of the battery and longer battery life. This stable and durable battery is completely sealed and maintenance free.

Features

- Absorbent Glass Mat technology
- Long service life – 50% more cycles than VRLA AGM
- Faster full recharging – quick use of application
- Suitable for (deep) cycle applications

Layout**Terminal****UL certification****Constant Current Discharge Characteristics: A (25°C)**

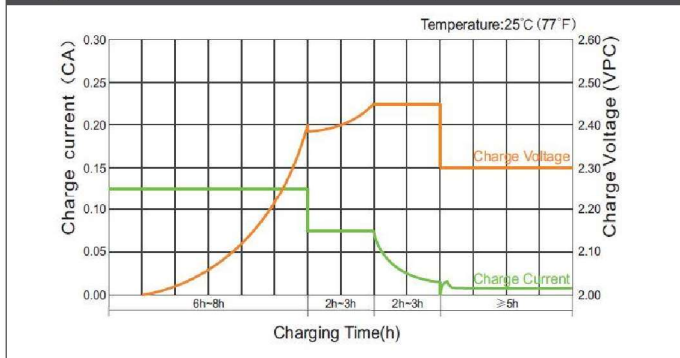
| F.V/Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 2 Hr | 3 Hr | 4 Hr | 5 Hr | 8 Hr | 10 Hr | 20 Hr |
|----------|-------|--------|--------|--------|------|------|------|------|-------|------|-------|-------|
| 1.60V | 201.8 | 152.3 | 114.6 | 67.0 | 37.0 | 21.9 | 16.9 | 13.3 | 11.3 | 7.61 | 6.33 | 3.31 |
| 1.65V | 194.5 | 143.9 | 109.5 | 64.3 | 35.8 | 21.2 | 16.4 | 13.0 | 11.0 | 7.53 | 6.25 | 3.26 |
| 1.70V | 185.0 | 132.5 | 102.6 | 61.5 | 34.6 | 20.5 | 16.0 | 12.6 | 10.7 | 7.41 | 6.16 | 3.22 |
| 1.75V | 172.9 | 121.3 | 95.5 | 58.8 | 33.3 | 19.8 | 15.5 | 12.3 | 10.5 | 7.31 | 6.08 | 3.18 |
| 1.80V | 157.5 | 109.8 | 88.2 | 56.2 | 32.1 | 19.0 | 15.0 | 11.9 | 10.21 | 7.19 | 6.00 | 3.15 |
| 1.85V | 138.6 | 89.7 | 73.2 | 48.4 | 28.7 | 17.5 | 13.9 | 11.1 | 9.52 | 6.75 | 5.65 | 2.99 |

Constant Power Discharge Characteristics: Wpc (25°C)

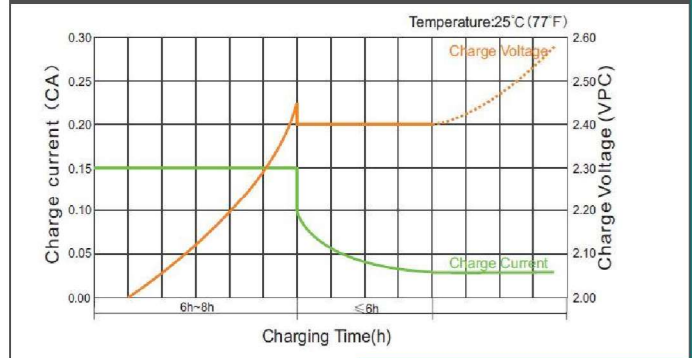
| F.V/Time | 5 Min | 10 Min | 15 Min | 30 Min | 1 Hr | 2 Hr | 3 Hr | 4 Hr | 5 Hr | 8 Hr | 10 Hr | 20 Hr |
|----------|-------|--------|--------|--------|------|------|------|------|------|------|-------|-------|
| 1.60V | 347.4 | 258.9 | 200.3 | 121.7 | 69.6 | 41.4 | 32.4 | 25.6 | 21.8 | 14.9 | 12.4 | 6.52 |
| 1.65V | 343.7 | 249.3 | 194.3 | 118.1 | 67.6 | 40.3 | 31.5 | 25.0 | 21.4 | 14.7 | 12.3 | 6.43 |
| 1.70V | 330.6 | 233.8 | 184.7 | 114.0 | 65.8 | 39.2 | 30.8 | 24.4 | 20.9 | 14.5 | 12.1 | 6.36 |
| 1.75V | 314.4 | 217.8 | 174.4 | 110.1 | 63.8 | 38.0 | 30.0 | 23.8 | 20.4 | 14.4 | 12.0 | 6.29 |
| 1.80V | 291.5 | 200.6 | 163.3 | 106.3 | 61.7 | 36.8 | 29.2 | 23.2 | 20.0 | 14.2 | 11.9 | 6.23 |
| 1.85V | 261.0 | 166.9 | 137.5 | 92.4 | 55.7 | 33.9 | 27.1 | 21.7 | 18.7 | 13.3 | 11.2 | 5.92 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C10 should reach 95% after the first cycle and 100% after the third cycle.

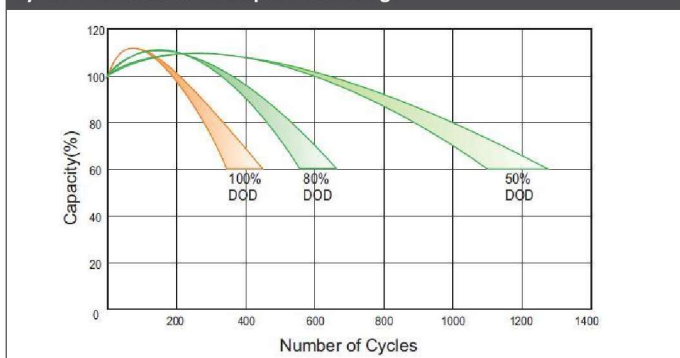
Charge Characteristic Curve For Cycle Use (IIUU)



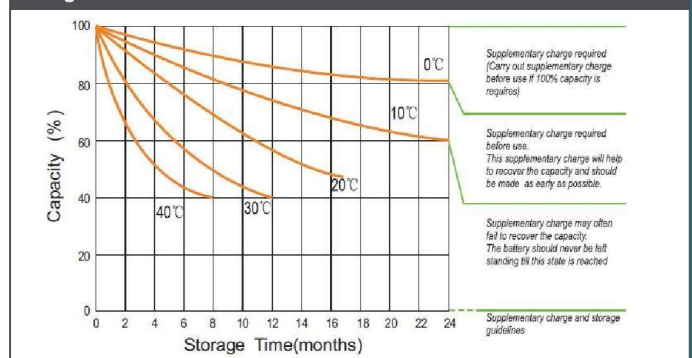
Charge Characteristic Curve For Cycle Use (IUI)



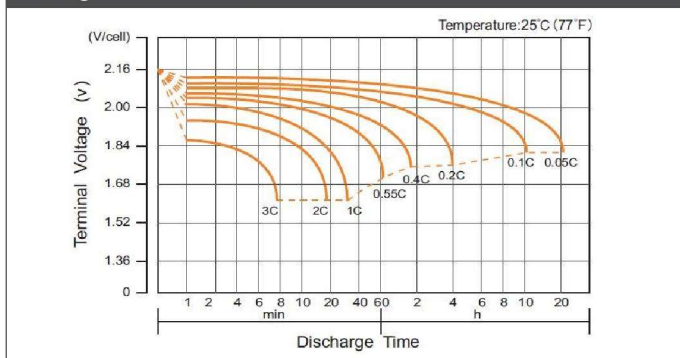
Cycle Life In Relation To Depth Of Discharge



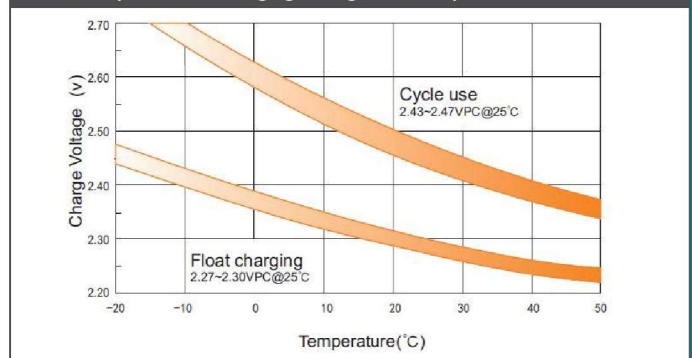
Storage Characteristics



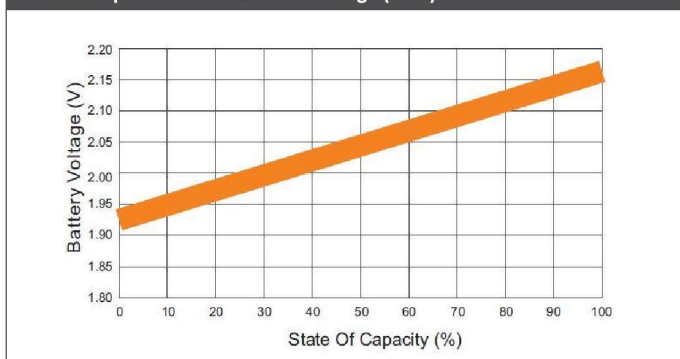
Discharge Characteristics Curve



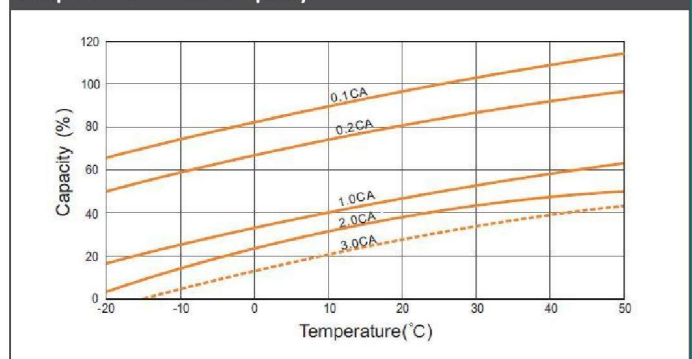
Relationship Between Charging Voltage And Temperature



Relationship Of OCV And State Of Charge (20°C)



Temperature Effects On Capacity



(Note) All above information shall be changed without prior notice, Landport Batteries reserves the right to explain and update the latest information.