

TECHNICAL DATA SHEET

DGY12-200EV

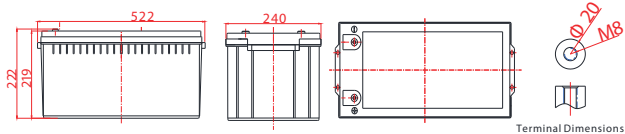


General Features

- > Nanosilica colloidal electrolyte and high tin positive plate alloy design to enhance battery performance
- > Relatively rich electrolyte, high temperature and low temperature performance is superior
- > Long cycle life, excellent deep cycle discharge ability
- > Excellent charge acceptance ability
- > Precision sealing technology
- > Long life



Dimension: 522(L) × 240(W) × 219(H) × 222(TH) Unit: mm



Applications

- > Electric vehicle
- > Electric wheelchair
- > Electric scooter
- > Electric play car for children
- > Garbage truck
- > Patrol car

Specification

| | |
|------------------------|---|
| Nominal Voltage | 12V |
| Nominal Capacity | 200Ah |
| Design life | 10 years |
| Terminal | M8 |
| Approx. Weight | Approx 62.5kg (137.8lbs) |
| Container Material | ABS |
| Rated Capacity | 214Ah 20Hour Rate (10.7 A to 10.5V) |
| | 201 Ah 10Hour Rate (20.1 A to 10.5V) |
| | 178.5Ah 5Hour Rate (35.7 A to 10.5V) |
| Internal resistance | Full charged at 25°C: 3.2 mΩ |
| Max. Discharge Current | 2400A(5S) |
| Operating Temperature | Discharge: -40 ~60°C (-40 ~ 140°F) |
| | Charge: -20 ~50°C (-4 ~ 122°F) |
| | Storage: -20 ~50°C (-4 ~ 122°F) |
| Charge Method (25 °C) | Charge current: Max.40.0 A |
| | Float Charge: 13.5-13.8V, recom. 13.8V(-18mV/ °C) Cycle charge: 14.28-14.4V, recom. 14.4V(-30mV/ °C) |
| Self discharge | 3% of capacity declined per month at 25°C |

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Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

| FV/Time | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|---------|-------|-------|-----|------|------|------|------|------|------|
| 1.60V | 367 | 223 | 132 | 75.7 | 54.9 | 36.9 | 24.2 | 20.7 | 10.9 |
| 1.65V | 356 | 220 | 131 | 75.3 | 54.4 | 36.5 | 24.0 | 20.5 | 10.8 |
| 1.70V | 348 | 216 | 130 | 74.7 | 53.6 | 36.1 | 23.8 | 20.3 | 10.7 |
| 1.75V | 337 | 214 | 128 | 73.6 | 53.0 | 35.7 | 23.6 | 20.1 | 10.7 |
| 1.80V | 314 | 205 | 125 | 72.2 | 52.6 | 34.8 | 23.4 | 20.0 | 10.6 |
| 1.85V | 280 | 187 | 116 | 68.6 | 49.6 | 33.0 | 22.5 | 19.3 | 10.5 |

Constant Power Discharge Characteristics Unit: W/cell (25°C, 77°F)

| FV/Time | 15min | 30min | 1h | 2h | 3h | 5h | 8h | 10h | 20h |
|---------|-------|-------|-----|-----|------|------|------|------|------|
| 1.60V | 647 | 404 | 250 | 143 | 104 | 69.9 | 47.1 | 39.8 | 21.5 |
| 1.65V | 636 | 400 | 248 | 143 | 103 | 69.5 | 46.7 | 39.4 | 21.4 |
| 1.70V | 628 | 400 | 246 | 142 | 103 | 69.0 | 46.5 | 39.0 | 21.3 |
| 1.75V | 624 | 398 | 244 | 141 | 102 | 68.6 | 46.1 | 38.6 | 21.2 |
| 1.80V | 590 | 389 | 242 | 141 | 102 | 67.8 | 45.7 | 38.2 | 21.1 |
| 1.85V | 527 | 357 | 225 | 135 | 96.6 | 64.7 | 44.2 | 37.6 | 20.9 |

Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

Charger recommendations

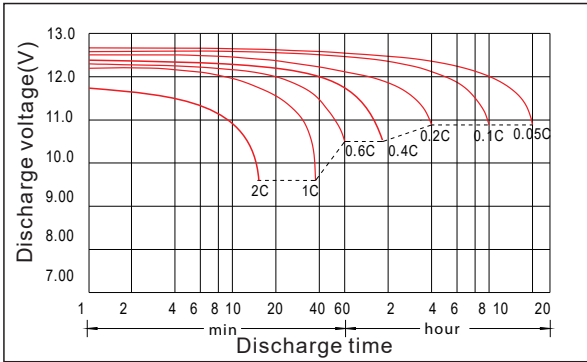
| Type of charger | Zivan | AQHF WP | AQHF24-30FC G2 |
|------------------|-----------------|------------|----------------|
| Matching profile | AGM =BA1+CU2 | AMG SLA | AGM |

Max. charging current 2.4Vpc

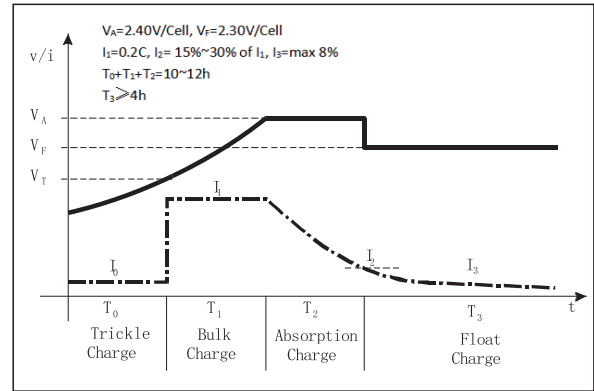
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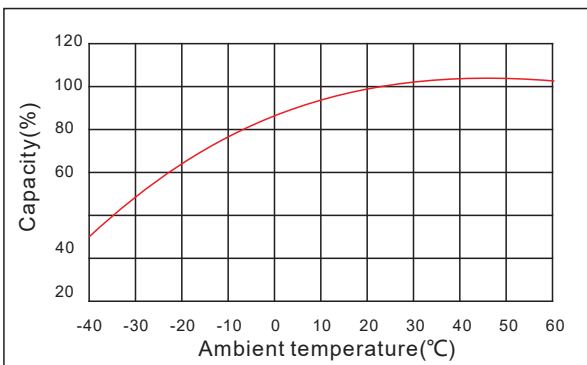
Discharge characteristic



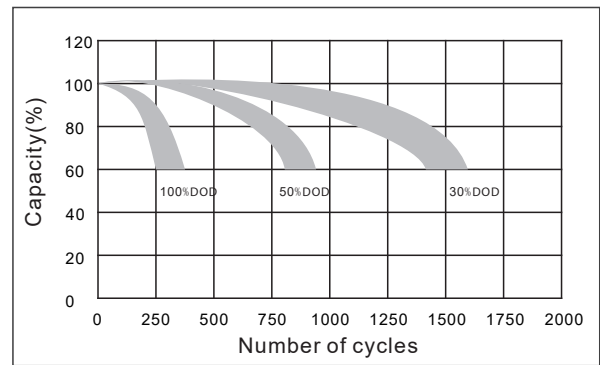
Charging characteristic



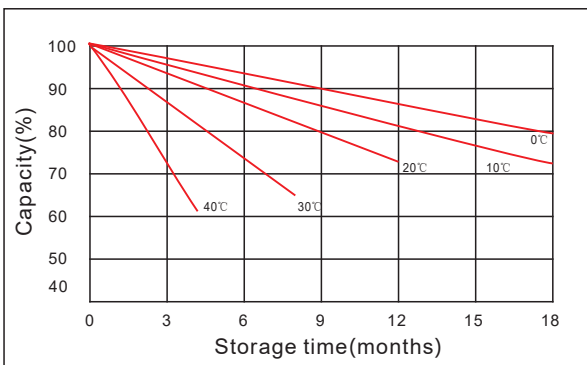
The effect of temperature on capacity



The effect of discharge depth on cycle life



Curves of self-discharge



Curves of open circuit voltage vs. capacity

