



Holy Enterprise Limited

FL.2, No.12 North Ave.1, Industrial Rd. East, Gusan, Guzhen, Zhongshan, Guangdong, China

Specification

6FM-45DC 12V45AH/20HR

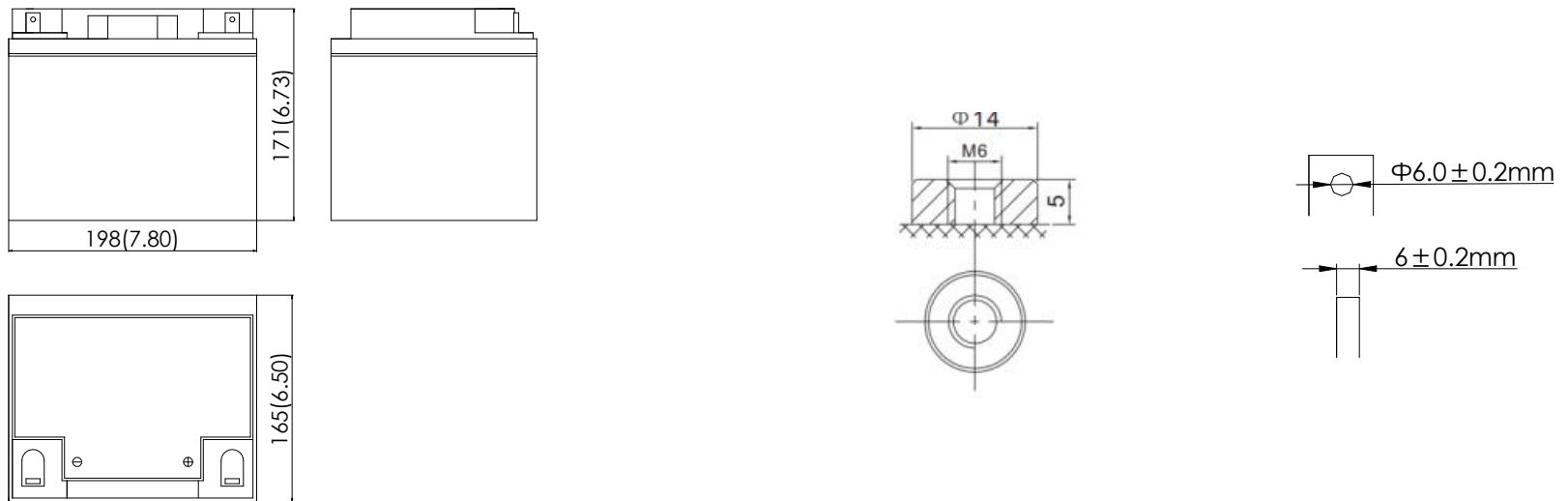
| | |
|--------------------------------|--|
| Cells Per Unit | 6 |
| Voltage Per Unit | 12 |
| Capacity | 45AH@20hr-rate to 1.8V per cell @ 25°C |
| Weight | Approx.13.5kg (Tolerance±3%) |
| Max. Discharge Current | 450 A(5sec) |
| Internal Resistance | Approx 11 mΩ |
| Operating Temperature Range | Discharge: -20°C~50°C Charge: 0°C~40°C Storage: -20°C~50°C |
| Normal Operating Temperature | 25±3°C |
| Float Charging Voltage | 2.25 to 2.27 VDC/unit Average at 25°C |
| Maximum Charging Current | 12.0A |
| Equalization and Cycle service | 2.35 to 2.40 VDC /unit Average at 25°C |
| Terminal | Terminal: NB/B |



Application

Uninterruptible Power System;
Communication Equipments;
Solar Power Systems;
Solar Power Street Light;
Wind Power Systems

Dimension: 198(L) ×165 (W) ×171 (H) (Total 171 mm)



Constant Current Discharge Characteristics: A(25°C)

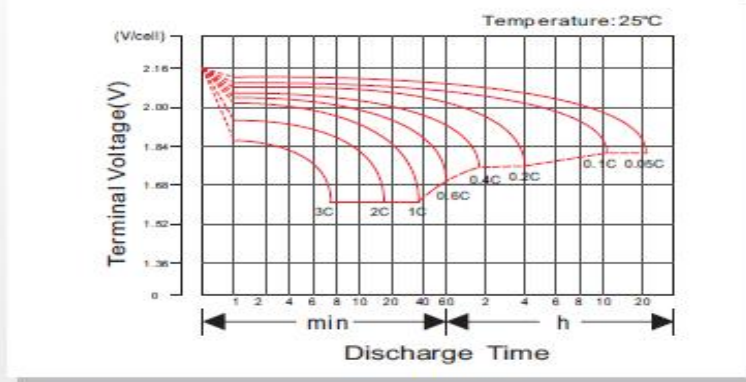
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 60MIN | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|------------|-------|--------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|
| 1.80V/cell | 115.2 | 85.74 | 73.23 | 49.62 | 27.90 | 16.79 | 11.57 | 9.59 | 8.08 | 5.520 | 4.589 | 2.361 |
| 1.75V/cell | 127.6 | 94.03 | 79.44 | 50.48 | 28.58 | 17.10 | 11.89 | 9.82 | 8.23 | 5.614 | 4.635 | 2.408 |
| 1.70V/cell | 142.1 | 101.90 | 83.43 | 50.87 | 28.85 | 17.23 | 11.94 | 9.91 | 8.33 | 5.661 | 4.681 | 2.454 |
| 1.65V/cell | 146.4 | 105.60 | 84.76 | 51.83 | 29.12 | 17.36 | 12.03 | 9.96 | 8.37 | 5.707 | 4.727 | 2.500 |
| 1.60V/cell | 150.8 | 111.00 | 86.54 | 52.74 | 29.25 | 17.49 | 12.08 | 10.01 | 8.42 | 5.745 | 4.773 | 2.547 |

Constant Power Discharge Characteristics: W/Unit(25°C)

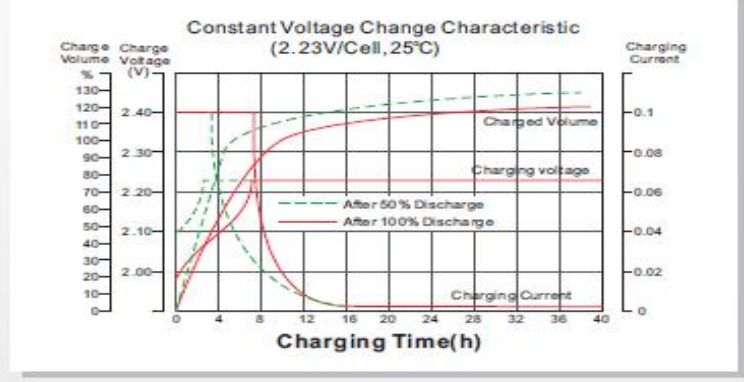
| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 60MIN | 2HR | 3HR | 4HR | 5HR | 8HR | 10HR | 20HR |
|------------|------|--------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|
| 1.80V/cell | 1278 | 957.8 | 809.2 | 567.1 | 325.5 | 199.8 | 138.7 | 115.1 | 96.93 | 66.24 | 55.07 | 28.34 |
| 1.75V/cell | 1403 | 1039.0 | 875.5 | 576.4 | 331.6 | 202.4 | 142.6 | 117.7 | 98.71 | 67.37 | 55.62 | 28.89 |
| 1.70V/cell | 1542 | 1116.0 | 917.8 | 580.4 | 334.6 | 203.8 | 143.2 | 118.9 | 99.90 | 67.93 | 56.17 | 29.45 |
| 1.65V/cell | 1559 | 1146.0 | 928.3 | 584.5 | 337.2 | 205.1 | 143.8 | 119.1 | 100.20 | 68.37 | 56.67 | 30.00 |
| 1.60V/cell | 1591 | 1182.0 | 943.4 | 591.8 | 338.0 | 206.2 | 143.7 | 119.3 | 100.50 | 68.71 | 57.03 | 30.53 |

All mentioned values are average values.

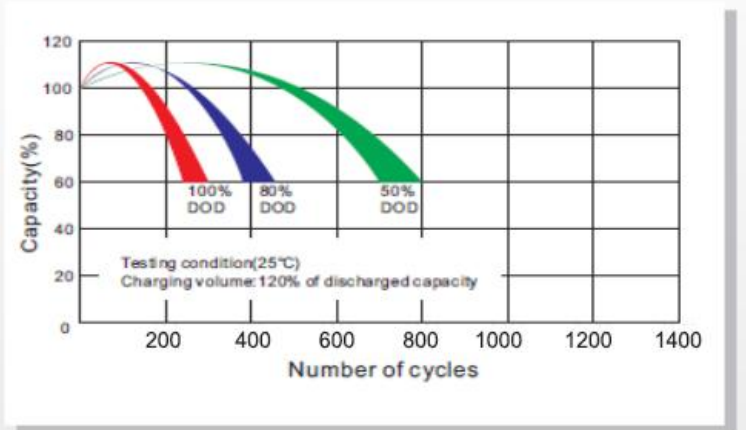
Discharge Characteristics Curve



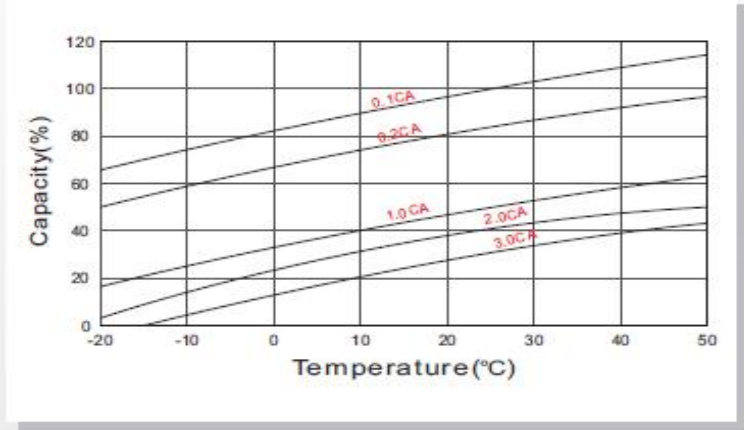
Charging Characteristics Curve



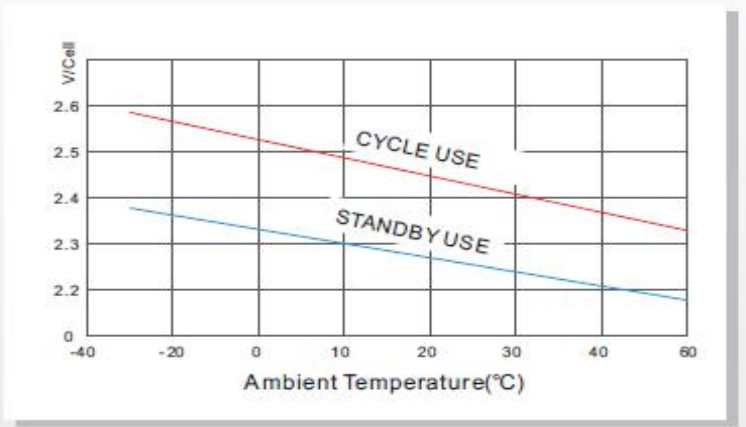
Cycle life in relation to depth of Discharge



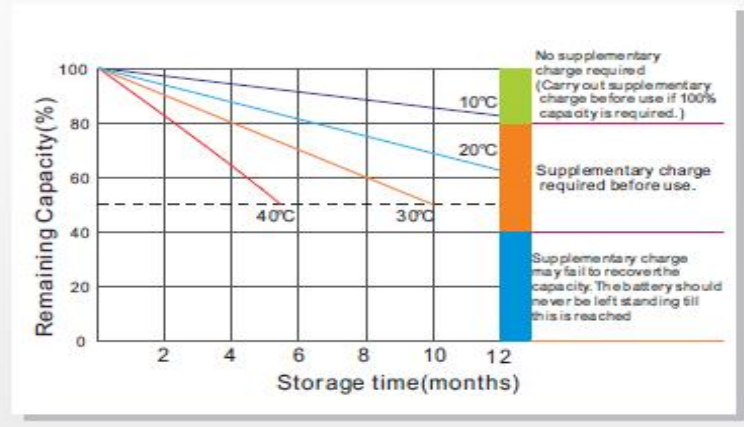
Temperature effects on Capacity



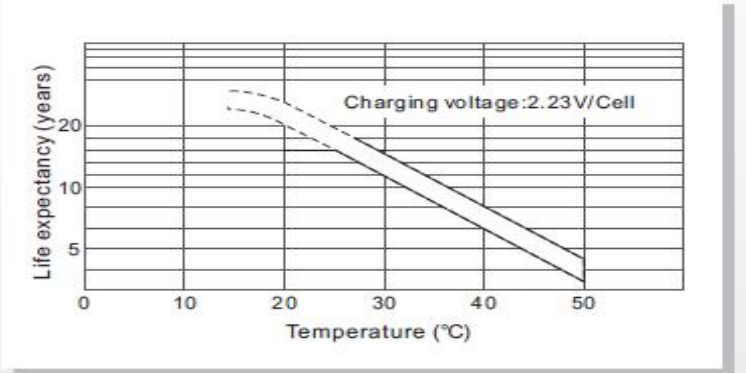
Relationship between charging voltage and temperature



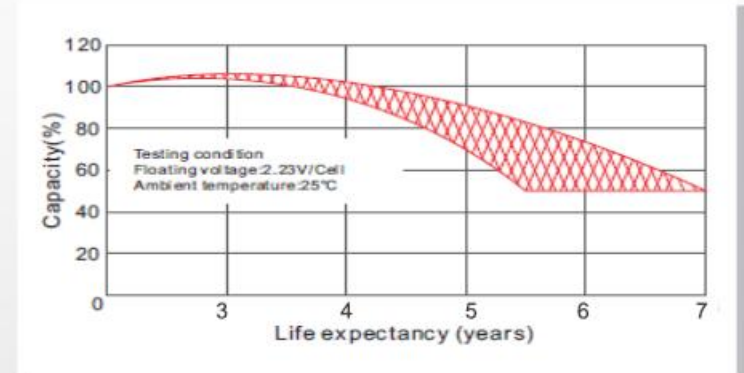
Self-discharge Characteristics



Temperature effects on Float life



Life Characteristics of Standby use



Maintenance & Cautions

- ※ Every month, recommend inspection every battery voltage;
- ※ Every three months, recommend equalization charge once;
Equalization charge method:
Discharge: 100% rate capacity discharge;
Charge: Max. Current 0.3CA, constant voltage 2.35-2.4V/Cell;
- ※ Effect of temperature on float charge voltage: -3mV/Cell;

CONTACT Us

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