

Valve Regulated Lead-Acid (VRLA) Battery

Specifications

| | | |
|---|--------------|---|
| Nominal Voltage | | 12 V |
| Capacity (25°C) | 20HR(10.5V) | 9Ah |
| | 10HR(10.5V) | 8.4Ah |
| | 1HR(9.60V) | 5.8Ah |
| Dimension | Length | 151 ± 2mm |
| | Width | 65 ± 2mm |
| | Height | 100 ± 2mm |
| | Total Height | 106 ± 2mm |
| Approx. Weight | | 2.40kg ± 5% |
| Terminal type | | T1/T2 |
| Internal resistance (Fully charged, 25°C) | | Approx. 19mΩ |
| Capacity affected by temperature (20HR) | 40°C | 102% |
| | 25°C | 100% |
| | 0°C | 85% |
| | -15°C | 65% |
| Self-discharge (25°C) | 3 month | Remaining Capacity: 91% |
| | 6 month | Remaining Capacity: 82% |
| | 12 month | Remaining Capacity: 65% |
| Nominal operating temperature | | 25°C ± 3°C (77°F ± 5°F) |
| Operating temperature range | Discharge | -15°C ~ 50°C (5°F ~ 122°F) |
| | Charge | -10°C ~ 50°C (14°F ~ 122°F) |
| | Storage | -20°C ~ 50°C (-4°F ~ 122°F) |
| Float charging voltage(25°C) | | 13.60 to 13.80V Temperature compensation: -18mV/°C |
| Cyclic charging voltage(25°C) | | 14.50 to 14.90V Temperature compensation: -30mV/°C |
| Maximum charging current | | 2.7A |
| Terminal material | | Copper |
| Maximum discharge current | | 135A(5 sec.) |
| Designed floating life(20°C) | | 5 years+ |

- ◆ Absorbent glass mat technology;
- ◆ Recognized by UL & CE;
- ◆ ABS container.

Constant Current Discharge Characteristics (A, 25°C)

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 10HR | 20HR |
|----------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| 1.60V | 35.5 | 23.15 | 17.08 | 9.89 | 5.71 | 3.37 | 2.45 | 1.95 | 1.65 | 0.9 | 0.46 |
| 1.65V | 34.22 | 22.47 | 16.64 | 9.67 | 5.61 | 3.32 | 2.42 | 1.93 | 1.63 | 0.89 | 0.46 |
| 1.70V | 32.56 | 21.56 | 16.05 | 9.38 | 5.47 | 3.26 | 2.37 | 1.89 | 1.6 | 0.88 | 0.46 |
| 1.75V | 30.41 | 20.39 | 15.28 | 9.01 | 5.28 | 3.17 | 2.32 | 1.85 | 1.57 | 0.86 | 0.45 |
| 1.80V | 27.71 | 18.9 | 14.3 | 8.52 | 5.04 | 3.05 | 2.24 | 1.8 | 1.52 | 0.84 | 0.44 |

Constant Power Discharge Characteristics (Watt, 25°C)

| F.V/Time | 5MIN | 10MIN | 15MIN | 30MIN | 1HR | 2HR | 3HR | 4HR | 5HR | 10HR | 20HR |
|----------|-------|-------|-------|-------|-------|------|------|------|------|------|------|
| 1.60V | 61.11 | 39.95 | 30.31 | 18.23 | 10.85 | 6.49 | 4.75 | 3.8 | 3.22 | 1.79 | 0.94 |
| 1.65V | 60.47 | 39.79 | 30.14 | 18.09 | 10.76 | 6.44 | 4.72 | 3.77 | 3.2 | 1.77 | 0.93 |
| 1.70V | 58.16 | 38.62 | 29.32 | 17.65 | 10.52 | 6.33 | 4.65 | 3.72 | 3.15 | 1.75 | 0.92 |
| 1.75V | 55.31 | 37.17 | 28.33 | 17.12 | 10.22 | 6.19 | 4.55 | 3.65 | 3.1 | 1.72 | 0.91 |
| 1.80V | 51.27 | 35.04 | 26.88 | 16.36 | 9.8 | 5.99 | 4.42 | 3.55 | 3.02 | 1.69 | 0.89 |

Note: The above characteristics data can be obtained within three charge/discharge cycles.

12V Voltage 9Ah Capacity 5years+ Design Life



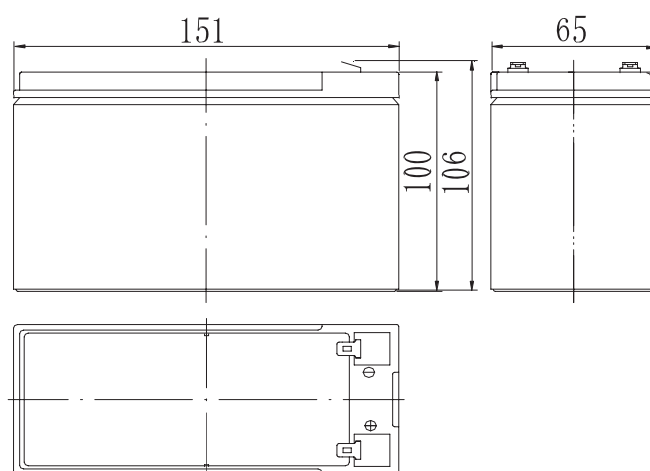
ISO9001



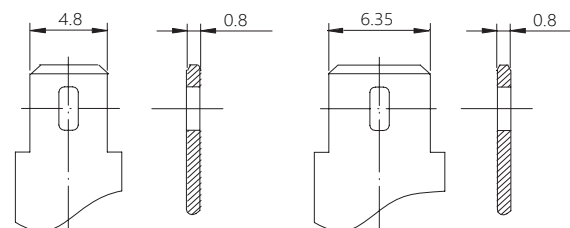
ISO14001



Dimensions



Terminal

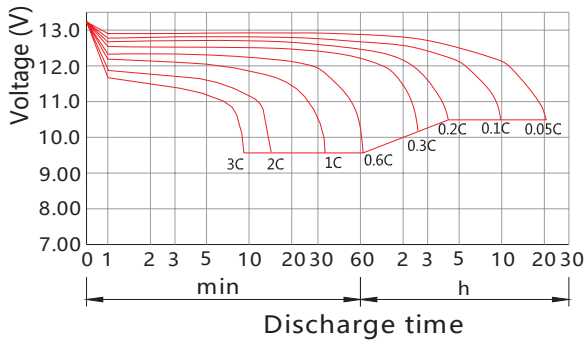


Terminal T1

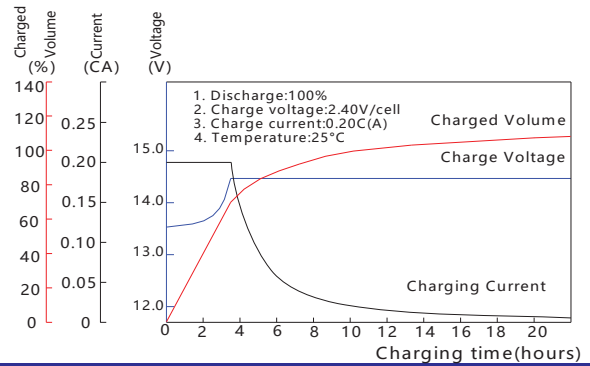
Terminal T2

KS12-9AH (12V9Ah)

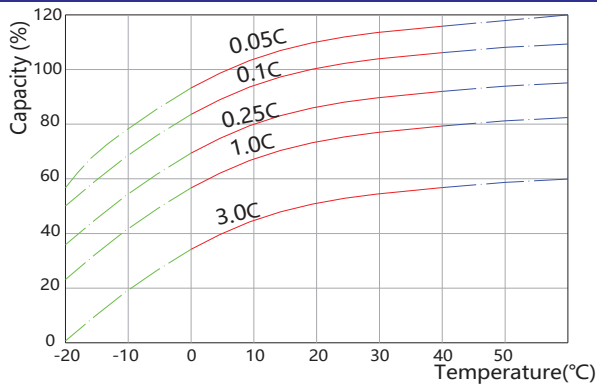
Discharge Characteristics(25°C)



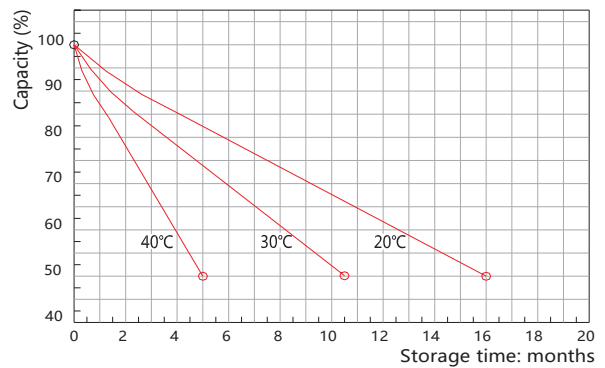
Charging Characteristics(25°C)



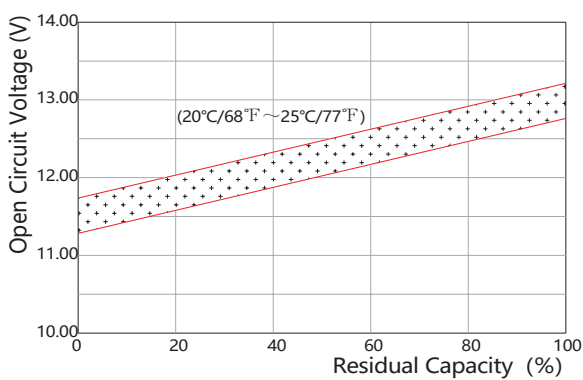
Effect of Temperature on Capacity



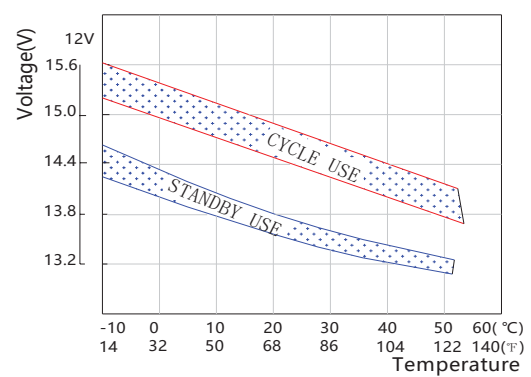
Self-discharge Characteristics



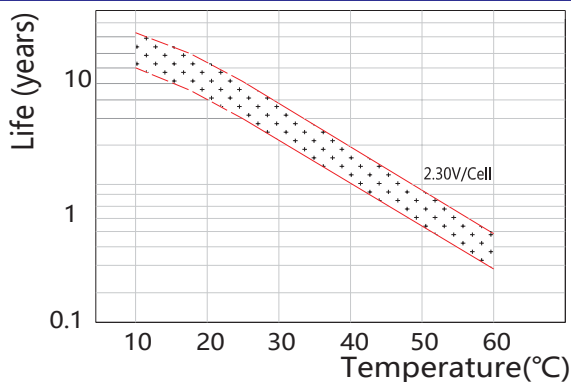
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)

