

KBL121200 12V 120Ah



The KAISE LONG LIFE Series 10 years has been designed for different applications, such as UPS, electric and telecommunications applications that require a long useful life.



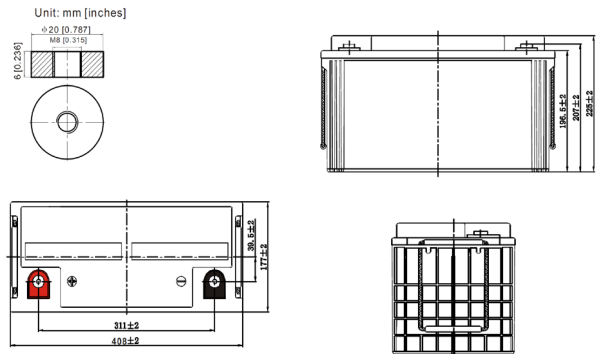
Performance Characteristics

| | | |
|-------------------------------|---|-----------------------------------|
| Nominal Voltage | 12V | |
| Dimensions | Length (mm / inch) | 408 / 16.1 |
| | Width (mm / inch) | 177 / 6.97 |
| | Height (mm / inch) | 225 / 8.86 |
| | Total Height (mm / inch) | 225 / 8.86 |
| Approx. Weight (Kg / lbs) | 37.6 / 82.9 | |
| Design Life | 10 years | |
| Terminal | M8 | |
| Container Material | ABS | |
| Rated Capacity | 128.4Ah / 6.42A | (20hr, 1.80V / cell, 25°C / 77°F) |
| | 120Ah / 12.0A | (10hr, 1.80V / cell, 25°C / 77°F) |
| | 104.5Ah / 20.9A | (5hr, 1.75V / cell, 25°C / 77°F) |
| | 74.4Ah / 74.4A | (1hr, 1.60V / cell, 25°C / 77°F) |
| Max. Discharge Current | 1300A (5s) | |
| Internal Resistance | Approx 4.0 mΩ | |
| Operating Temp. Range | Discharge : -15 ~ 50°C (5 ~ 122°F) | |
| | Charge : 0 ~ 40°C (32 ~ 104°F) | |
| | Storage : -15 ~ 40°C (5 ~ 104°F) | |
| Nominal Operating Temp. Range | 25 ± 3°C (77 ± 5°F) | |
| Cycle Use | Initial Charging Current less than 36A. | |
| | Voltage: 14.40VPC ~ 15.0VPC at 25°C (77°F) | |
| | Temp. Coefficient: -30mV/°C | |
| Standby Use | No limit on Initial Charging Current Voltage. | |
| | 13.5VPC~13.8VPC at 25° C (77°F) | |
| | Temp. Coefficient: -20mV/°C | |
| Capacity affected by | 40°C (104°F) | 103% |
| | 25°C (77°F) | 100% |
| | 0°C (32°F) | 86% |
| Self Discharge | Fully charged Kaise Long Life Series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter. | |

Constant Current Discharge (Amperes) a 77°F (25°C)

| Volts/cell | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|------------|-------|-------|-------|------|------|------|------|------|
| 1.80V | 160.7 | 132.6 | 94.4 | 60.5 | 30.0 | 20.4 | 12.0 | 6.42 |
| 1.75V | 182.5 | 149.4 | 102.5 | 66.0 | 31.2 | 20.9 | 12.3 | 6.58 |
| 1.70V | 206.1 | 165.8 | 112.0 | 69.8 | 32.8 | 22.1 | 12.8 | 6.75 |
| 1.65V | 221.3 | 177.5 | 118.1 | 72.2 | 34.2 | 22.8 | 13.2 | 6.96 |
| 1.60V | 243.5 | 194.4 | 126.1 | 74.4 | 35.0 | 23.3 | 13.4 | 7.07 |

Dimensions and Terminal (Unit: mm (inches))



Applications

- UPS
- Telecommunications equipment
- Solar energy systems
- Cable TV
- Power station
- Marine equipment
- Military equipment
- Emergency power systems
- Railway systems

Certifications

ISO 9001:2008 ISO 14001:2008



Discharge Current vs. Discharge Voltage

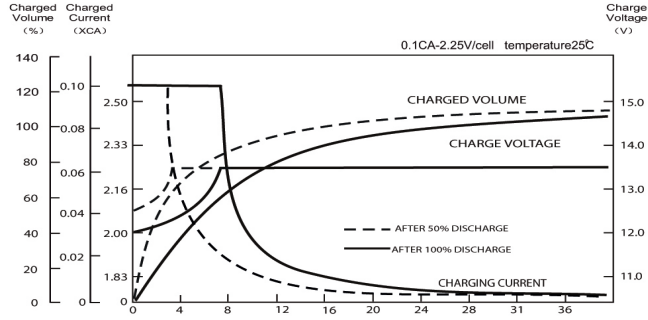
| Final discharge voltage V/CELL | 1.8 | 1.75 | 1.7 | 1.6 |
|--------------------------------|----------------|-------------------------|--------------------------|--------------|
| Discharge current (A) | $I \leq 0.1CA$ | $0.25CA \geq I > 0.1CA$ | $0.55CA \geq I > 0.25CA$ | $I > 0.55CA$ |

Constant Power Discharge (Watts per cell) at 77°F (25°C)

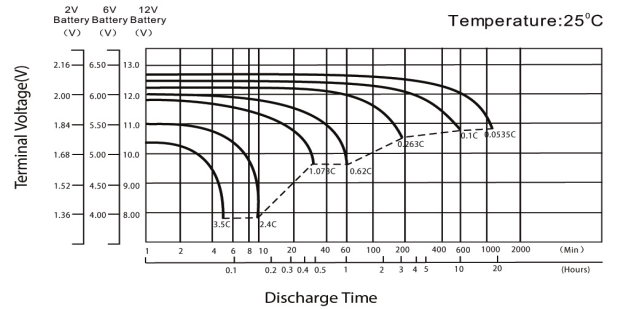
| Volts/cell | 10min | 15min | 30min | 1h | 3h | 5h | 10h | 20h |
|------------|-------|-------|-------|-------|------|------|------|------|
| 1.80V | 296.5 | 246.7 | 179.0 | 117.4 | 58.7 | 40.2 | 24.0 | 12.8 |
| 1.75V | 331.4 | 274.7 | 192.9 | 127.4 | 60.9 | 41.0 | 24.6 | 13.1 |
| 1.70V | 365.9 | 300.6 | 209.5 | 134.4 | 63.9 | 43.3 | 25.5 | 13.5 |
| 1.65V | 389.4 | 319.4 | 219.2 | 138.0 | 66.2 | 44.5 | 26.2 | 13.9 |
| 1.60V | 418.7 | 344.1 | 232.3 | 141.4 | 67.6 | 45.5 | 26.7 | 14.1 |

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

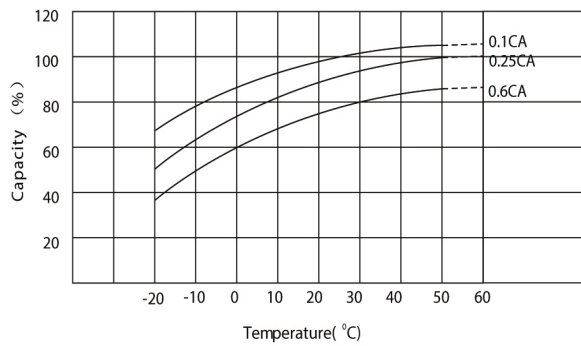
Charging Characteristics (float use)



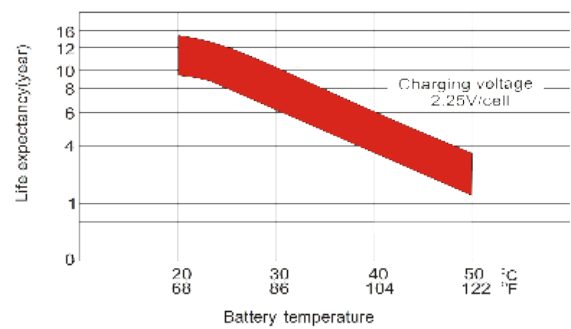
Cycle Life in Relation to Depth of Discharge



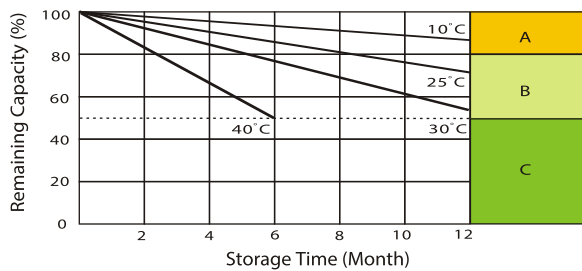
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



- A** No supplementary charge required (carry out supplementary charge before use if 100% capacity is required)
- B** Supplementary charge required before use. Optional charging way a below:
 1. Charged for above 3 days at limited current 0.25 CA and constant voltage 2.25V / cell.
 2. Charged for above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
 3. Charged for 8-10 hours at limited current 0.05 CA.
- C** Supplementary charge often fail to recover the capacity. The battery should never be left standing till this is reached.

NOTA IMPORTANTE: Las especificaciones presentadas en este documento están sujetos a revisión sin previo aviso.

