

KBC122000 12V 200Ah



The Kaise cyclic batteries were developed for deep discharges with very heavy non-porous battery plates to withstand major discharging and charging cycles (deep cycle). These batteries use different chemistry combinations for the plates with active paste material and a slightly stronger than normal electrolyte, which allows for a much longer life in deep cycle applications.

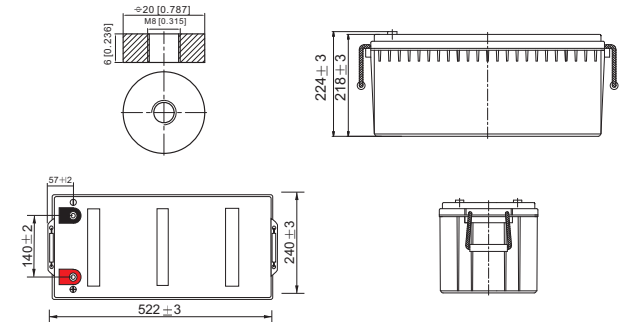
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	522 / 20.55
	Width (mm / inch)	240 / 9.45
	Height (mm / inch)	218 / 8.58
	Total Height (mm / inch)	224 / 8.81
Approx Weight	(Kg / lbs) 62.2 / 137.1	
Design Life	10 years	
Terminal	M8	
Container Material	ABS	
Rated Capacity	200Ah / 20.0A	(10hr, 1.80V / cell, 25°C / 77°F)
	120.7Ah / 120.7A	(1hr, 1.70V / cell, 25°C / 77°F)
	86.8Ah / 347.2A	(15min, 1.70V / cell, 25°C / 77°F)
Max. Discharge Current	2000A (5s)	
Internal Resistance	Approx 2.7mΩ	
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 60.0A	
	Voltage: 14.4V - 15.0V at 25°C (77°F)	
	Temp. Coefficient: -30mV/°C	
Standby Use	No limit on Initial Charging Current	
	Voltage: 13.5V ~ 13.8V at 25°C (77°F)	
	Temp. Coefficient: -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Fully charged Kaise Deep Cycle 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.	

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

Volts/cell	15min	30min	1h	3h	5h	10h	20h
1.80V	297.7	182.8	111.9	52.0	34.2	20.0	10.72
1.75V	325.2	189.8	117.0	53.0	35.1	20.2	10.82
1.70V	347.2	197.5	120.7	54.5	36.0	20.4	11.02
1.65V	369.2	208.4	124.8	56.8	37.0	20.8	11.16
1.60V	394.8	220.0	129.2	58.5	38.2	21.0	11.22

Dimensions and Terminal (Unit: mm (inches))



Applications

- Solar power systems
- Electric wheel chairs
- Golf carts
- Maritime equipment
- Power plants
- Railway systems
- Telecommunications systems
- Cable TV systems
- Emergency power systems

Certifications

ISO 9001 / ISO 14001



Discharge Current vs. Discharge Voltage

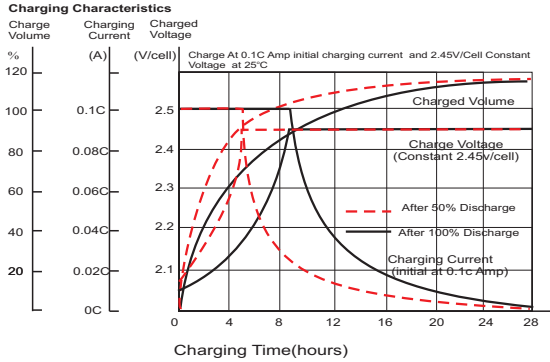
Final discharge voltage V/CELL	1.8	1.75	1.7	1.6
Discharge current (A)	I ≤ 0.1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

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

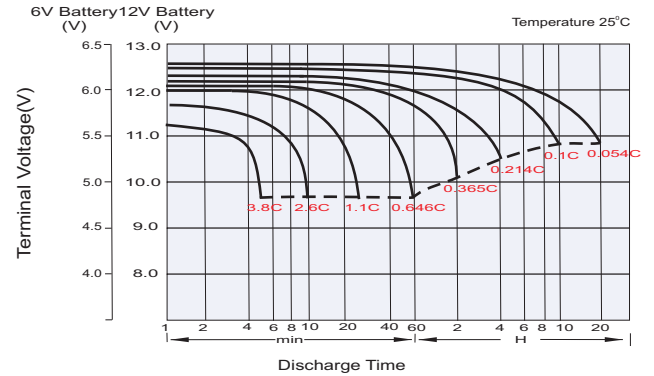
Volts/cell	15min	30min	1h	2h	3h	5h
1.80V	552.9	347.1	215.8	131.1	101.2	66.9
1.75V	598.1	358.5	224.9	135.6	102.8	68.6
1.70V	633.9	371.7	231.5	140.7	105.4	70.1
1.65V	669.7	390.3	238.5	144.2	109.6	72.0
1.60V	707.6	408.1	244.9	148.1	112.4	74.0

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

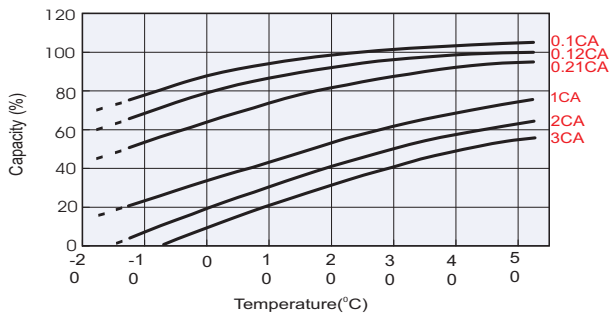
Charging Characteristics (cycle use)



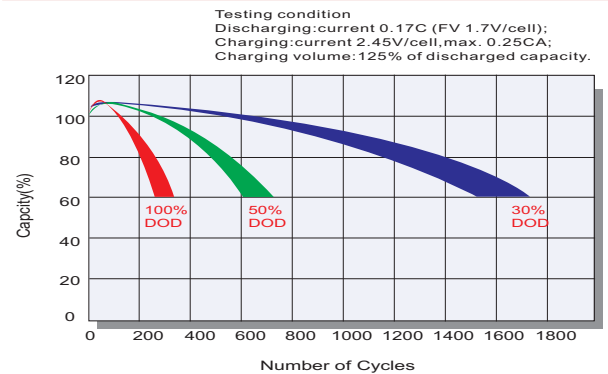
Discharge Characteristics



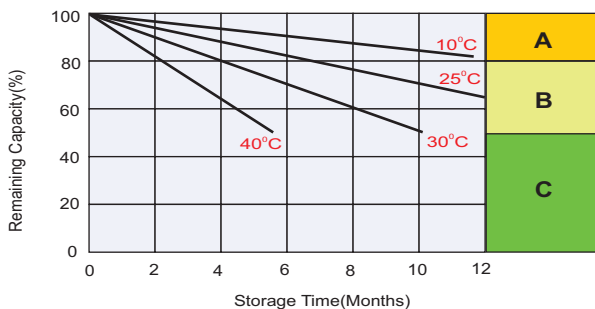
Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



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 as below:
 1. Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
 2. Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
 3. Charged for 8-10hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
 The battery should never be left standing till this is reached.

IMPORTANT NOTE: The specifications presented herein are subject to revision without notice.

