KBL121000 12V 100Ah

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.

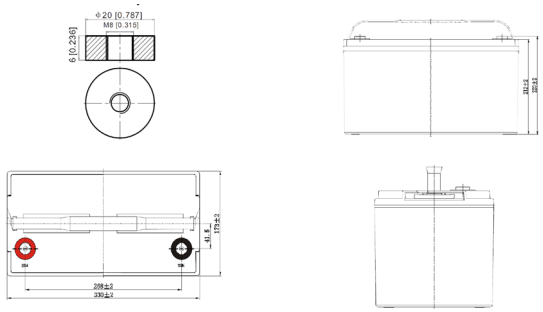
Performance Characteristics

Nominal Voltage	12V	
Dimensions	Length (mm / inch)	330 / 12.99
	Width (mm / inch)	173 / 6.81
	Height (mm / inch)	212 / 8.35
	Total Height (mm / inch)	220 / 8.66
Approx. Weight	(Kg / lbs)	31.5 / 69.5
Design Life	11 years	
Terminal	M11	
Container Material	ABS	
Rated Capacity	107.0 Ah / 5.35A	(20hr ,1.80V / cell, 25ºC / 77ºF)
	100 Ah / 10.0A	(10hr ,1.80V / cell, 25ºC / 77ºF)
	87.0 Ah / 17.4A	(5hr, 1.75V / cell, 25ºC / 77ºF)
	62.0 Ah / 62.0A	(1hr, 1.60V / cell, 25ºC / 77ºF)
Max. Discharge Current	1200A (5s)	
Internal Resistance	Approx 4.9 mΩ	
Operating Temp.Range	Discharge : -15 ~ 50ºC (5 ~ 104ºF)	
	Charge : 0 ~ 40ºC (32 ~ 104ºF)	
	Storage : -15 ~ 40ºC (5 ~ 104ºF)	
Nominal Operating Temp. Range	25 ± 3ºC (77 ± 5ºF)	
Cycle Use	Initial Charging Current less than 30.0A.	
	Voltage: 14.4VPC ~ 15.0VPC at 25ºC (77ºF)	
	Temp. Coefficient: -30mV/ºC	
Standby Use	No limit on Initial Charging Current Voltage.	
	13.5VPC~13.8VPC at 25º C (77ºF)	
	Temp. Coefficient: -20mV/ºC	
Capacity affected by Temperature	40ºC (104ºF)	103%
	25ºC (77ºF)	100%
	0ºC (32ºF)	86%
Self Discharge	Fully charged Kaise Long Life Series batteries may be stored for up to 6 months at 25ºC (77ºF) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Constant Current Discharge (Amperes) at 77ºF (25ºC)

Volts/cell	15min	30min	1h	3h	5h	10h	20h
1.80V	110.5	78.6	50.5	25.0	17.0	10.0	5.35
1.75V	124.5	85.5	55.0	26.0	17.4	10.3	5.49
1.70V	138.2	93.3	58.2	27.4	18.4	10.7	5.63
1.65V	147.9	98.5	60.2	28.5	19.0	11.0	5.80
1.60V	162.0	105.1	62.0	29.2	19.4	11.2	5.89

Dimensions and Terminal (Unit: mm (inches))



Applications

UPS
Telecomunications 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 ≤ 0,1CA	0.25CA ≥ I > 0.1CA	0.55CA ≥ I > 0.25CA	I > 0.55CA

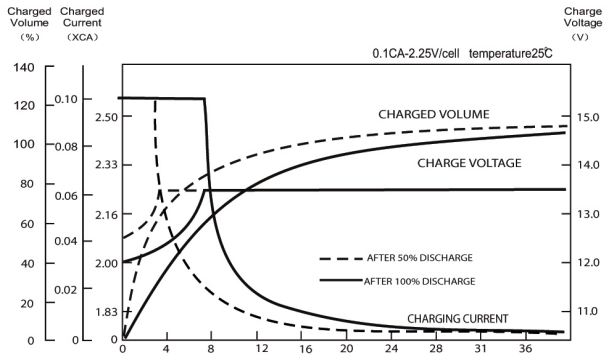
Constant Power Discharge (Watts per cell) at 77ºF (25ºC)

Volts/cell	10min	15min	30min	1h	3h	5h	10h	20h
1.80V	247.1	205.6	149.2	97.8	49.0	33.5	20.0	10.7
1.75V	276.2	228.9	160.8	106.1	50.7	34.2	20.5	10.9
1.70V	304.9	250.5	174.6	112.0	53.3	36.1	21.2	11.2
1.65V	324.5	266.2	182.7	115.0	55.2	37.1	21.8	11.6
1.60V	348.9	286.8	193.6	117.8	56.4	37.9	22.2	11.7

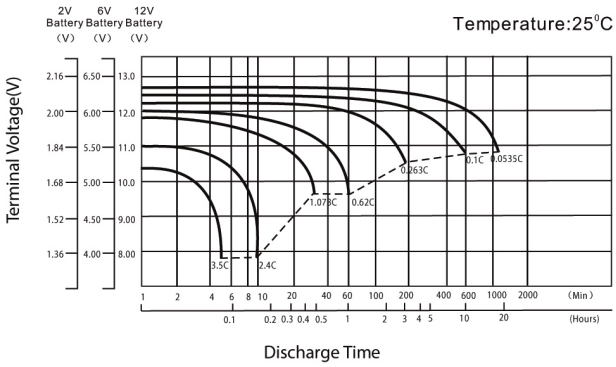
(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.

KBL121000 12V 100Ah

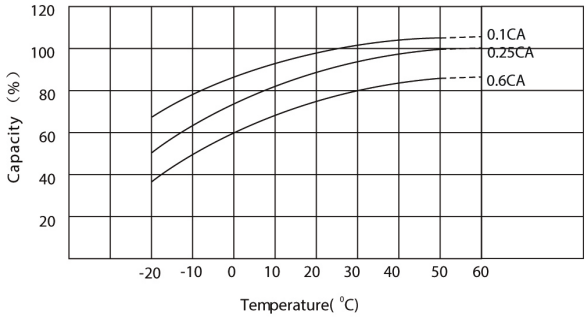
Charging Characteristics (float use)



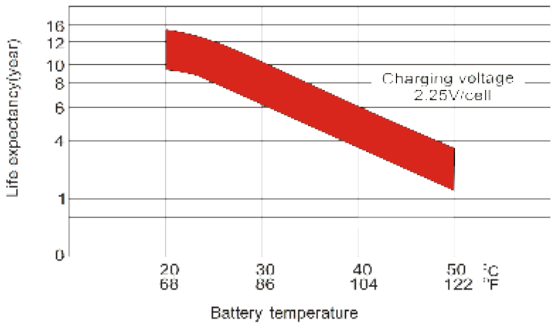
Discharge Characteristics



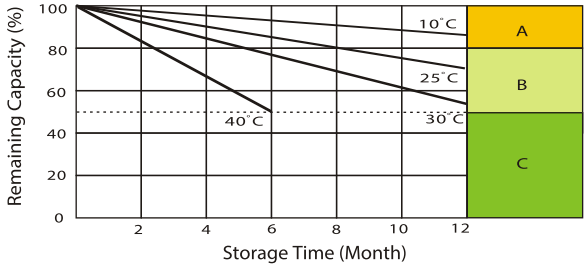
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics



A No supplementary charge required
(carrry 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 fo above 20 hours limited current 0.25CA and constant voltage 2.45V / cell.
3. Charged for 8-10 hours ar 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.

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

2018/V1/L