

MK12-870W 12V250Ah

introduce



MK12-800W is a high power valve-regulated sealed lead-acid battery. The most suitable for high-rate discharge requirements of the UPS, EPS and other emergency backup power equipment and uninterruptible power supply equipment. As with all Baace batteries, all are rechargeable, highly efficient, leak proof and maintenance free.



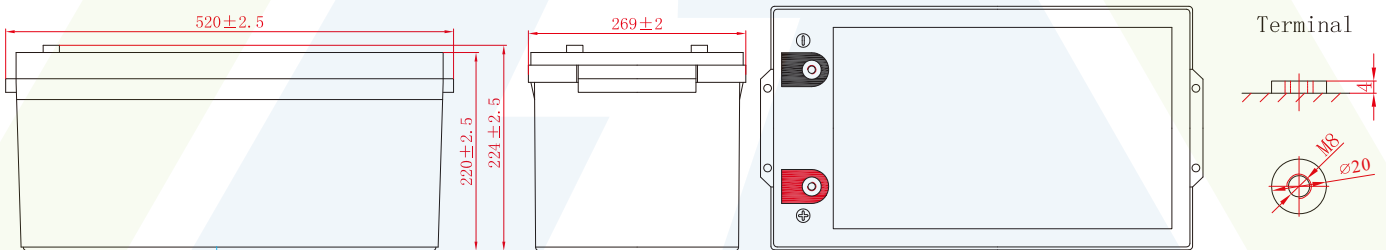
MK-manufactured **VRLA** (Absorbent **G**lass **M**at type) batteries are UL-recognized components under UL2000.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	870W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 77kg(169.8lbs)
Maximum Discharge Current	2500A (5sec)
Internal Resistance	Approx. 2.7mΩ
Operating Temperature Range	Discharge: -15°C~50°C (5°F~122°F) Charge: -15°C~40°C (5°F~104°F) Storage: -15°C~40°C (5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	62.5A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	Baace Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of(UL 94-V0) can be available upon request.

Dimensions :	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit: mm	224±2.5	220±25	520±2.5	269± 2

Unit: mm



Constant Current Discharge Characteristics Unit:A(25°C/77°F)

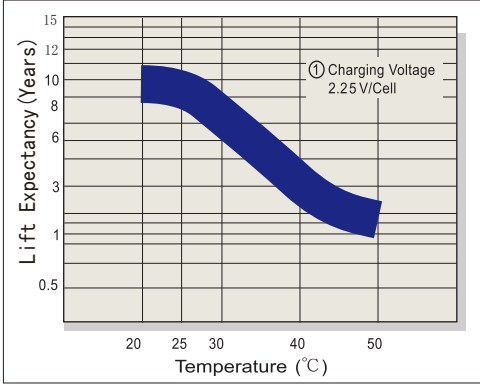
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	573	507	442	371	316	246	157	117	89
1.80V	623	546	481	397	331	260	163	120	94
1.75V	669	583	519	421	346	270	167	124	98
1.70V	713	616	554	443	356	279	170	126	99
1.67V	747	641	576	457	370	288	175	130	100
1.60V	810	683	615	482	395	300	182	136	102

Constant Power Discharge Characteristics Unit: W/cell(25°C/77°F)

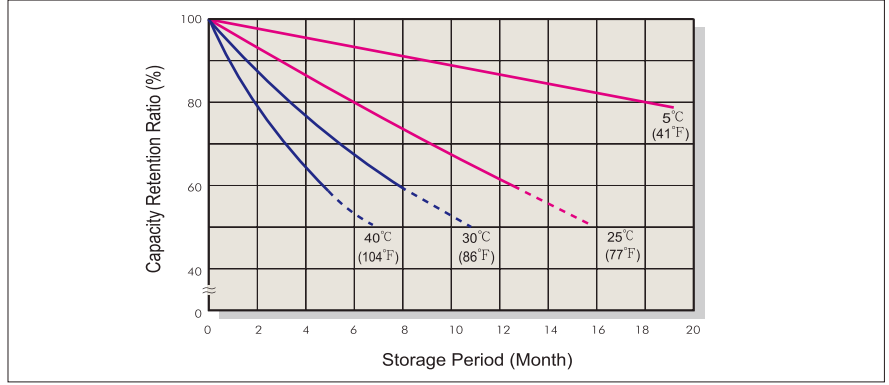
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	1111	991	876	710	625	499	316	235	188
1.80V	1186	1050	936	750	649	516	323	239	194
1.75V	1260	1103	992	800	674	530	329	243	197
1.70V	1326	1154	1046	848	695	542	334	247	200
1.67V	1368	1185	1073	870	709	547	337	250	201
1.60V	1459	1246	1128	898	732	558	342	255	203

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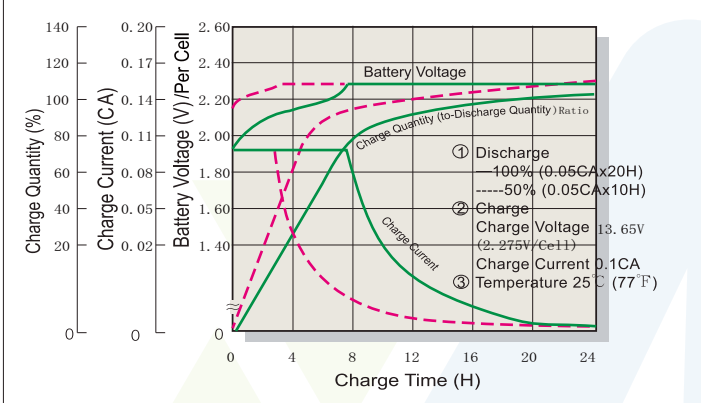
Trickle(or Float)Design Life



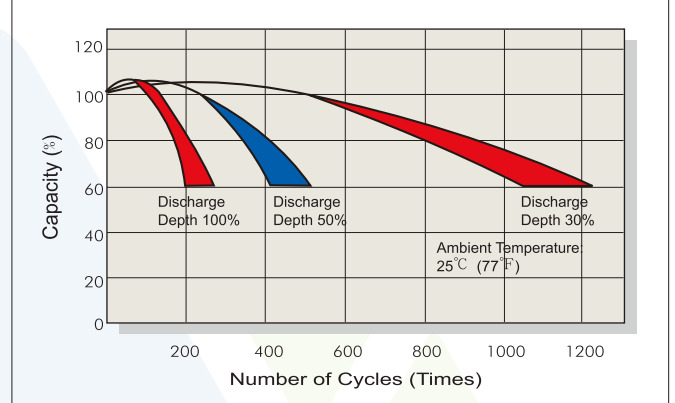
Capacity Retention Characteristic



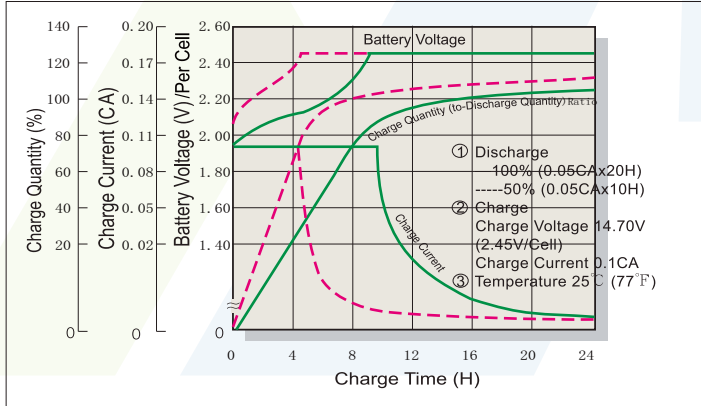
Battery Voltage and Charge Time for Standby Use



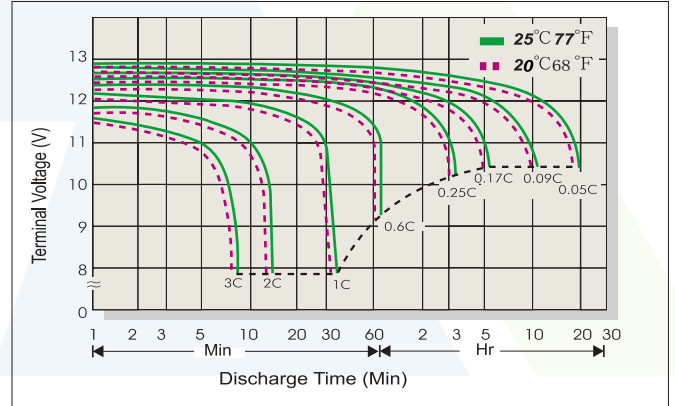
Cycle Service Life



Battery Voltage and Charge Time for Cycle Use



Terminal Voltage (V) and Discharge Time



Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.25C
Standby	25°C (77°F)	2.275	2.25~2.30	

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C

Effect of temperature on capacity (10HR)

Temperature	Dependency of Capacity (10HR)
40 °C	103%
25 °C	100%
0 °C	85%
-15 °C	65%

Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%

