

MK12-620W 12V180Ah



introduce

MK12-620W 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.



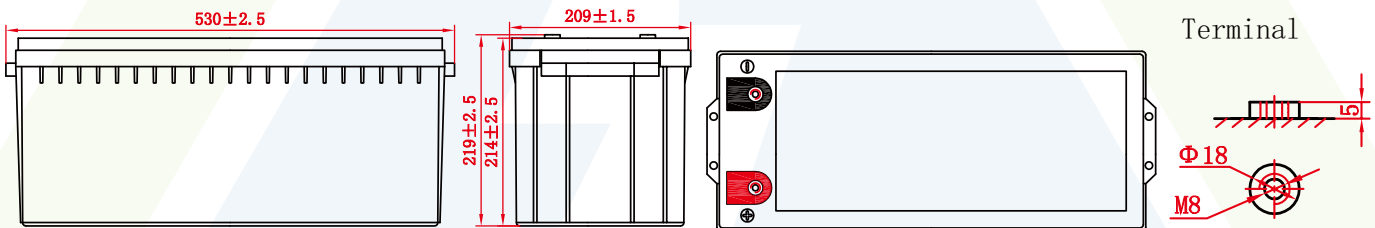
MK-manufactured **VRLA** (Absorbent **G**lass **M**at type) batteries are UL-recognized components under UL2000.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	620W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 55.5 kg(122.4bs)
Maximum Discharge Current	1800A (5sec)
Internal Resistance	Approx. 3.7mΩ
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	45A
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	219±2.5	214±2.5	530±2.5	209±1.5

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	440	378	323	269	229	179	115	84.7	63.6
1.80V	472	407	353	288	240	189	118	87.8	67.2
1.75V	507	434	380	305	251	196	121	90.2	69.5
1.70V	540	459	405	321	259	203	123	92.1	70.2
1.67V	566	477	422	332	269	209	127	94.8	71.6
1.60V	613	508	450	350	287	218	132	98.2	72.7

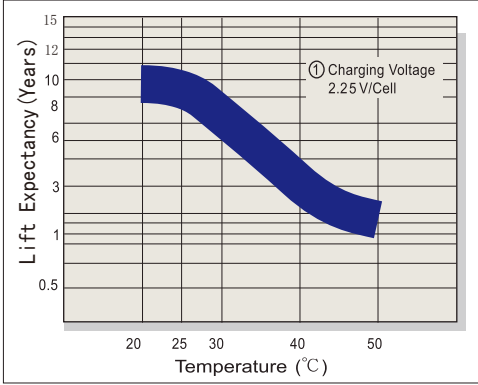
Constant Power Discharge Characteristics Unit: W/cell(25°C/77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	842	739	641	471	453	362	230	170	134
1.80V	898	782	685	522	471	375	234	174	138
1.75V	953	820	726	570	490	385	239	177	140
1.70V	1003	859	765	605	505	393	242	180	142
1.67V	1034	882	785	620	514	397	245	182	143
1.60V	1103	927	825	640	531	405	248	186	144

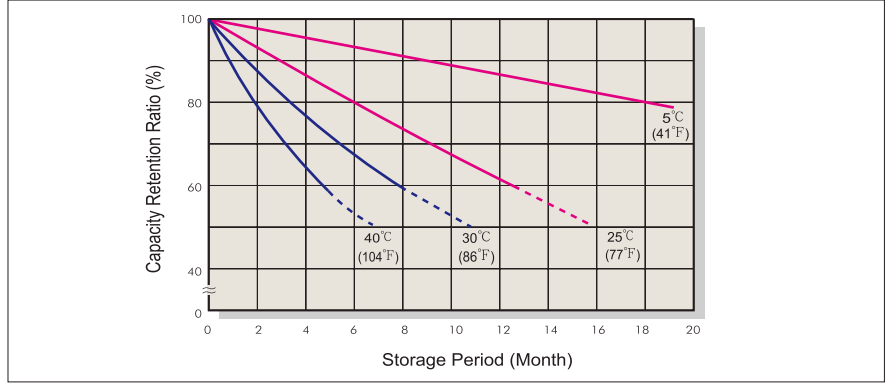
MK Lead acid high power battery series

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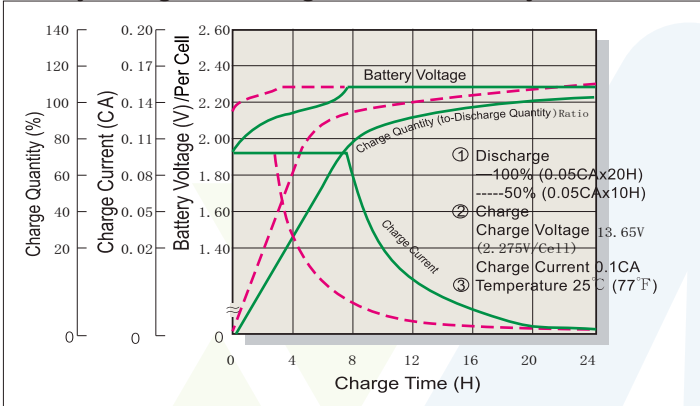
Trickle(or Float)Design Life



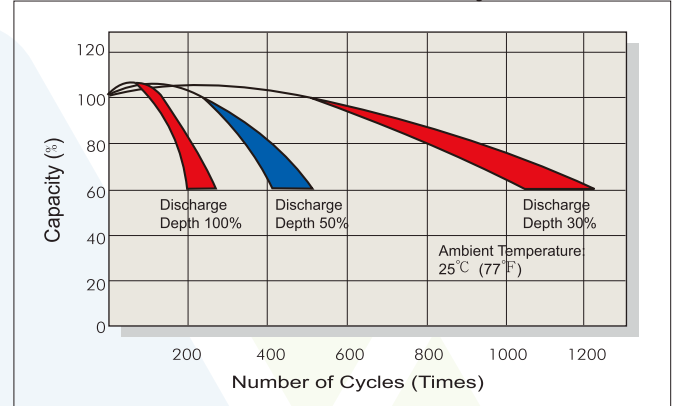
Capacity Retention Characteristic



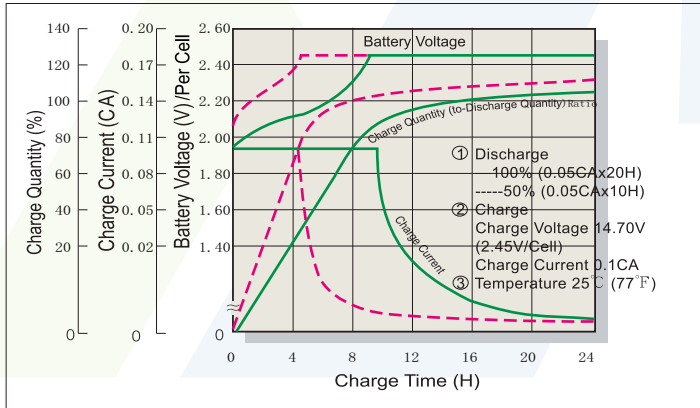
Battery Voltage and Charge Time for Standby Use



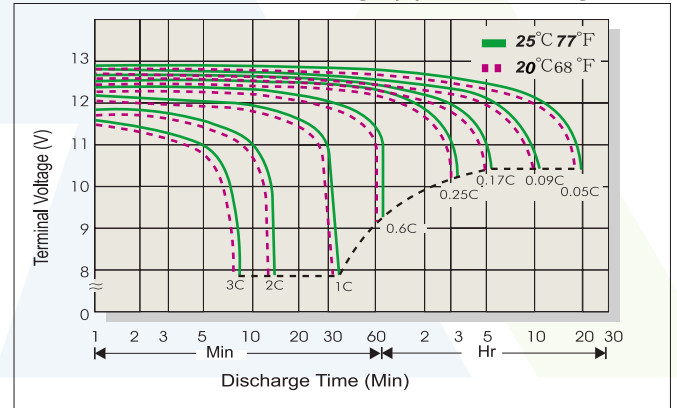
Cycle Service Life



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%