

# MK12-780W 12V200Ah



## introduce

MK12-780W 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.



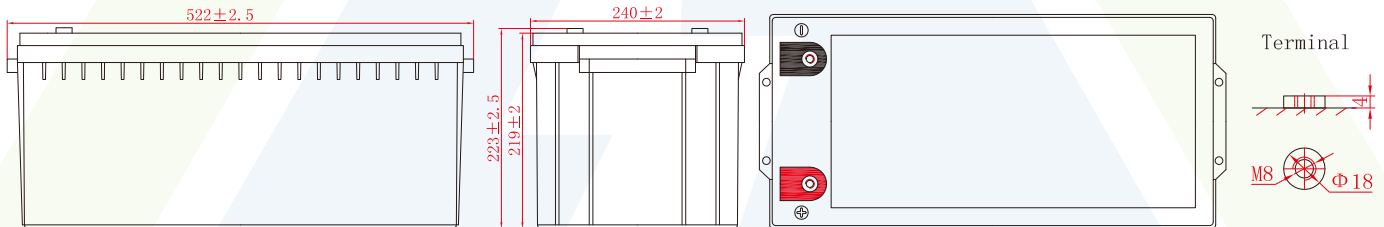
MK-manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL2000.

## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	780W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 67.5kg(148.8bs)
Maximum Discharge Current	2000A (5sec)
Internal Resistance	Approx. 3.2mΩ
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	50A
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 :	<b>Overall Height (H)</b>	<b>Container height (h)</b>	<b>Length (L)</b>	<b>Width (W)</b>
Unit: mm	223±2.5	219±2	522±2.5	240±2

Unit: mm



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

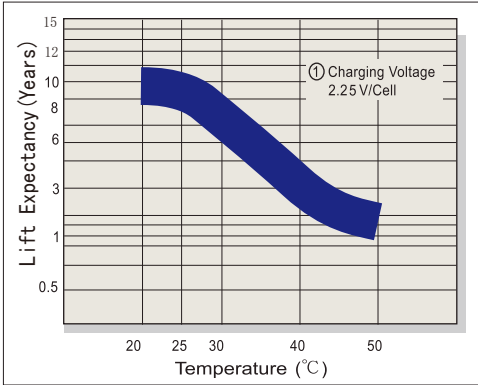
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	512	444	381	317	270	211	135	100	80.0
1.80V	555	480	416	340	284	223	139	104	84.6
1.75V	597	511	449	360	296	232	143	106	87.4
1.70V	637	541	478	379	306	240	146	109	88.3
1.67V	667	563	498	392	318	246	149	111	90.0
1.60V	723	600	531	413	338	257	156	117	91.4

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

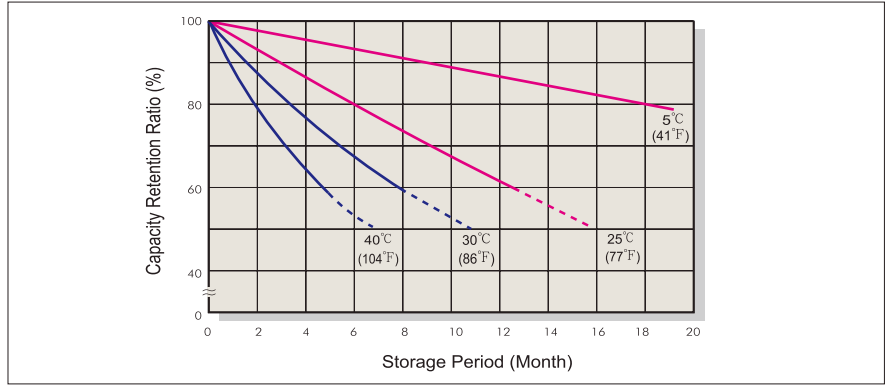
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	991	870	756	593	535	427	271	201	168
1.80V	1059	921	808	657	556	441	276	205	174
1.75V	1124	967	857	718	578	454	282	208	177
1.70V	1184	1013	904	761	596	464	286	212	179
1.67V	1221	1040	927	780	607	468	289	215	180
1.60V	1302	1094	974	805	627	478	293	219	182

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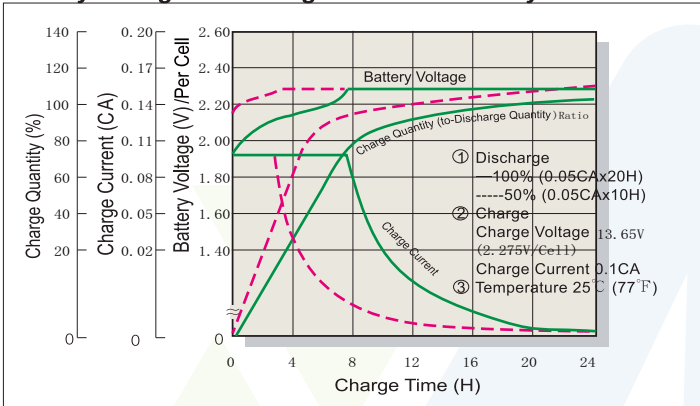
**Trickle(or Float)Design Life**



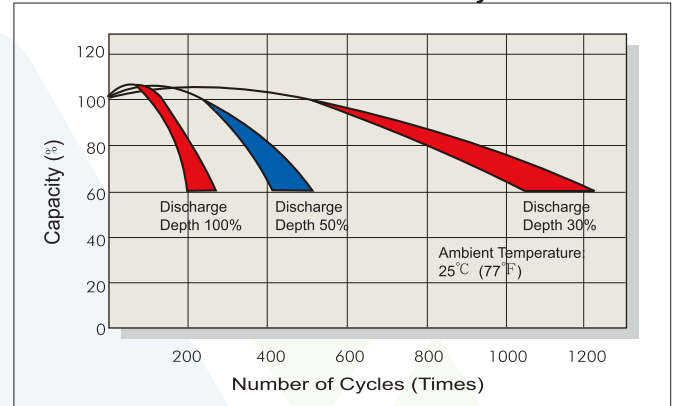
**Capacity Retention Characteristic**



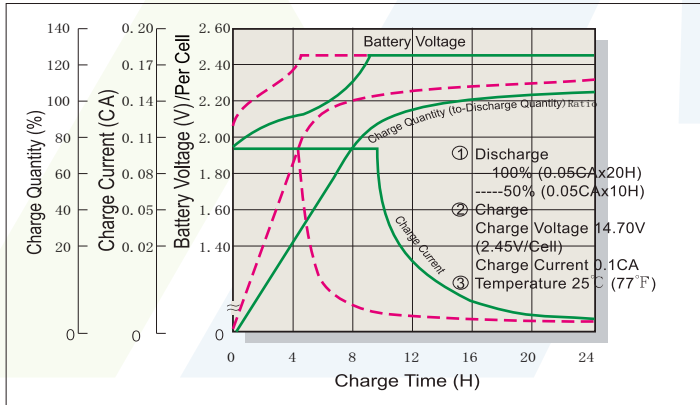
**Battery Voltage and Charge Time for Standby Use**



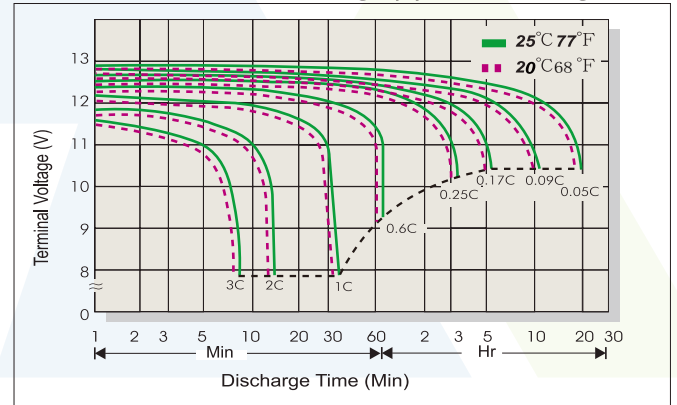
**Cycle Service Life**



**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%

