

MK12-225W 12V55Ah



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

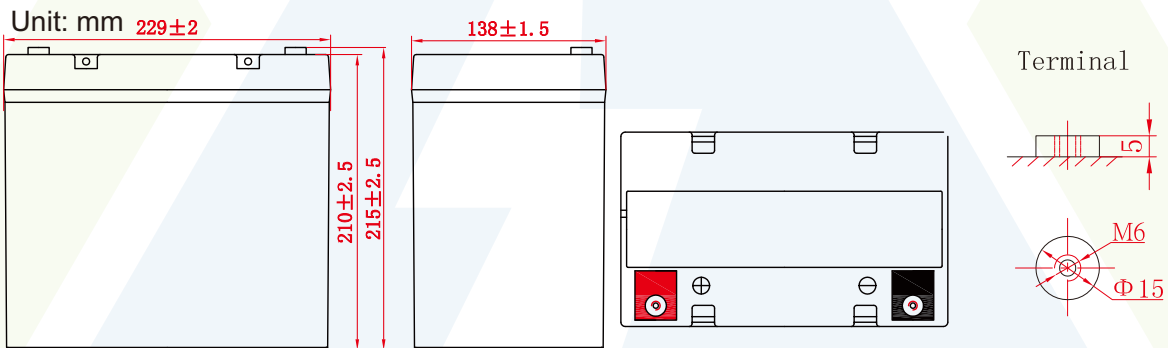
introduce

MK12-225W 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.

Specification

CellsPerUnit	6
Voltage PerUnit	12
Capacity	225W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 17.5 kg(38.6 lbs)
Maximum Discharge Current	550A(5sec)
Internal Resistance	Approx. 8.5 mΩ
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)
NominalOperatingTemperatureRange	25°C±3°C (77°F±5°F)
FloatCharging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	12A
Equalization andCycleService	14.4 to 14.8 VDC/unit Average at 25°C (77°F)
SelfDischarge	Baace Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using. For higher temperature the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M6 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

Dimensions :	Overall Height (H)	Containerheight (h)	Length(L)	Width (W)
Unit: mm	215±2.5	210±2.5	230±2	138±1.5



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

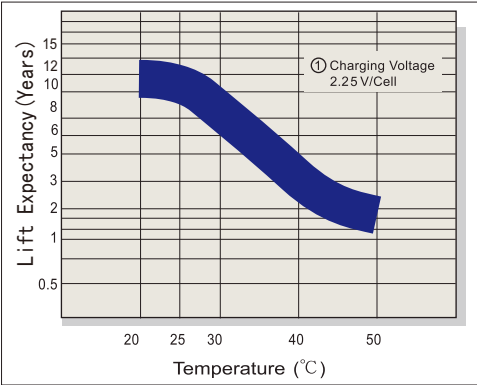
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	139	124	108	91.9	77.0	58.5	35.7	26.2	23.1
1.80V	151	134	118	98.5	81.0	61.7	36.9	27.1	24.4
1.75V	163	143	127	104	84.5	64.3	37.9	27.9	25.2
1.70V	173	151	136	110	87.3	66.3	38.6	28.5	25.5
1.67V	182	157	141	113	90.7	68.3	39.7	29.3	26.0
1.60V	197	167	150	120	96.6	71.2	41.3	30.5	26.4

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

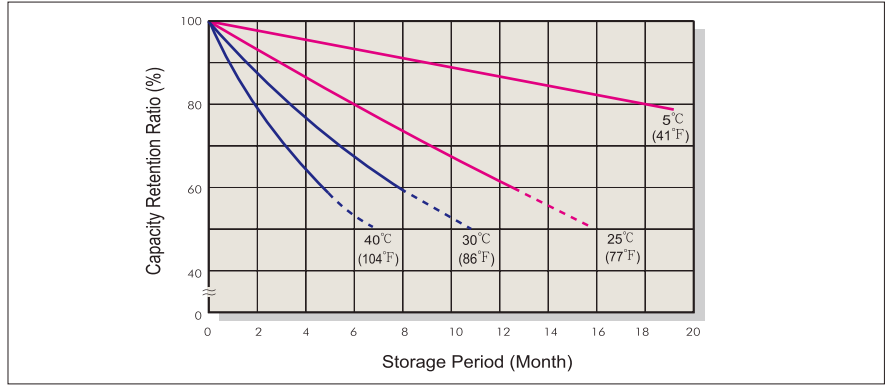
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	270	242	214	171	152	118	71.5	52.6	48.5
1.80V	288	257	229	190	159	122	73.0	53.7	50.1
1.75V	306	270	243	207	165	126	74.4	54.6	50.9
1.70V	323	282	256	219	170	128	75.6	55.6	51.6
1.67V	333	290	262	225	173	130	76.3	56.2	51.9
1.60V	355	305	276	232	179	132	77.2	57.3	52.4

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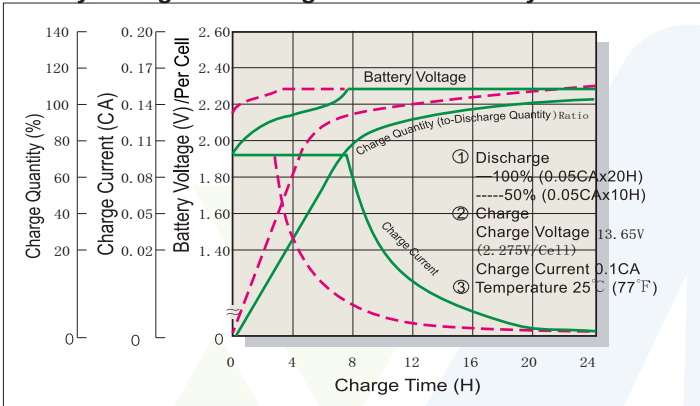
Trickle(or Float)Design Life



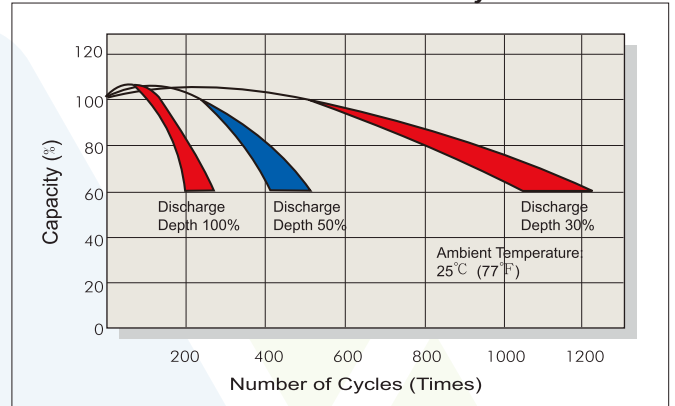
Capacity Retention Characteristic



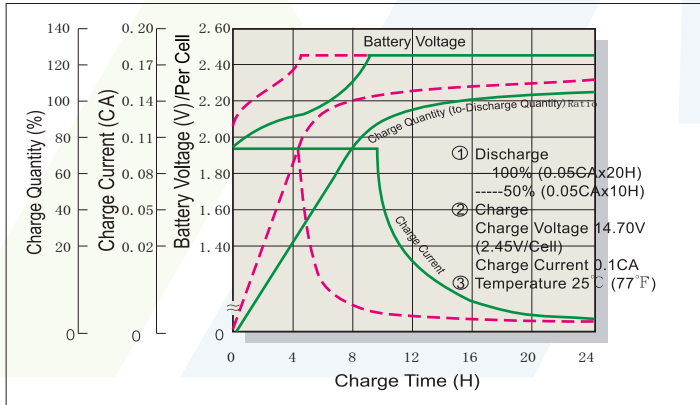
Battery Voltage and Charge Time for Standby Use



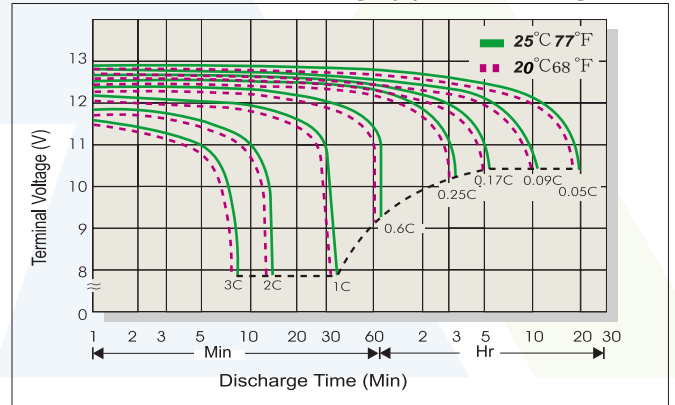
Cycle Service Life



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	0.30C
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%

