

MK12-360W 12V90Ah



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

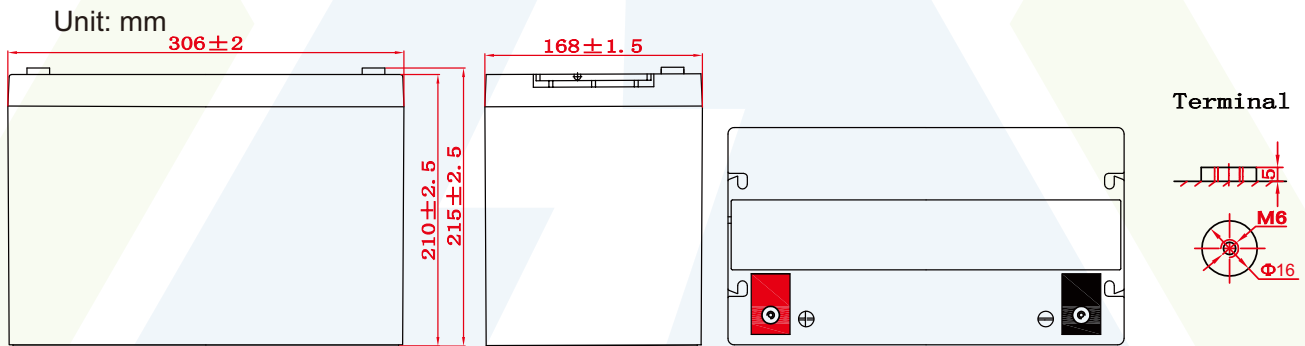
introduce

MK12-360W 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	360W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 28.9 kg(63.71 lbs)
Maximum DischargeCurrent	900A (5sec)
InternalResistance	Approx. 5.5mΩ
Operating TemperatureRange	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 TemperatureRange	25°C±3°C (77°F±5°F)
FloatChargingVoltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging CurrentLimit	27A
Equalization andCycleService	14.4 to 15.0 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 temperatures 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)	Container height (h)	Length (L)	Width (W)
Unit: mm	215±2.5	210±2.5	306±2	168±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	232	207	180	153	129	97.6	59.5	43.6	36.9
1.80V	252	223	197	164	135	103	61.5	45.2	39.0
1.75V	271	238	212	174	141	107	63.1	46.4	40.4
1.70V	289	252	226	183	146	111	64.3	47.4	40.8
1.67V	303	262	235	189	151	114	66.1	48.8	41.6
1.60V	329	279	251	199	161	119	68.9	50.8	42.2

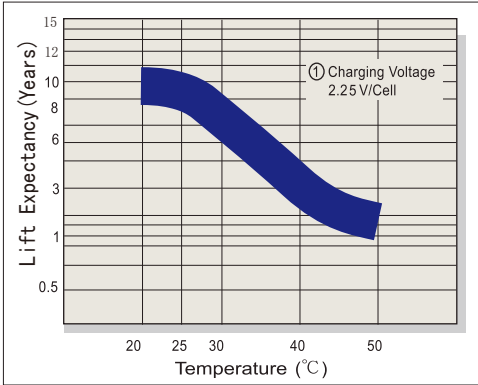
Constant Power Discharge Characteristics Unit:: W/cell(25°C/77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	450	404	357	274	254	197	119	87.5	77.6
1.80V	481	429	382	303	264	204	122	89.3	80.1
1.75V	511	450	405	331	275	210	124	90.9	81.5
1.70V	538	471	427	351	284	214	126	92.4	82.6
1.67V	555	484	438	360	289	216	127	93.7	83.0
1.60V	592	509	460	371	298	221	129	95.4	83.9

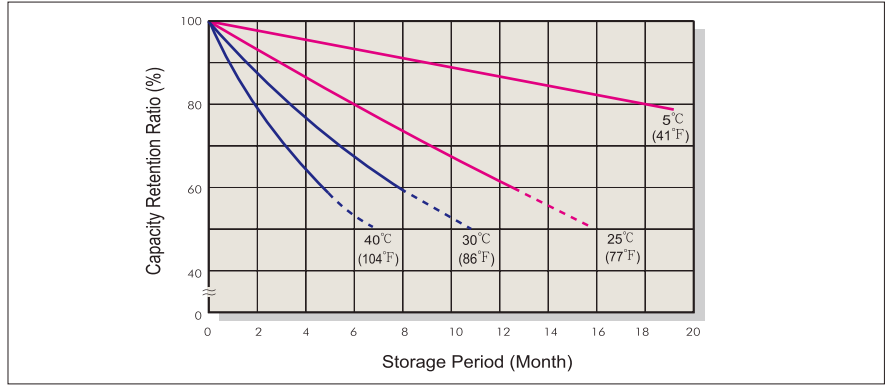
MK Lead acid high power battery series

MK12-360W 12V90Ah

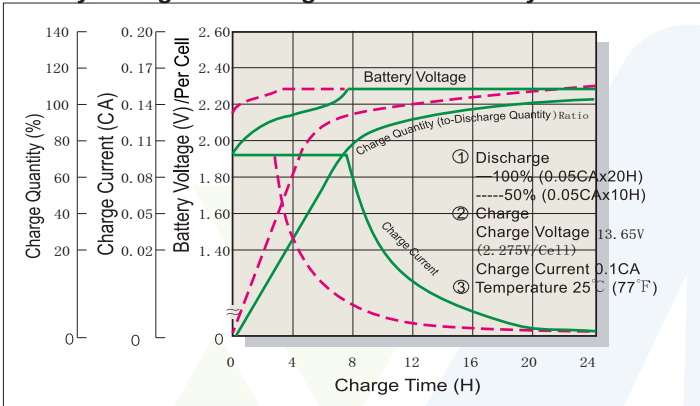
Trickle(or Float)Design Life



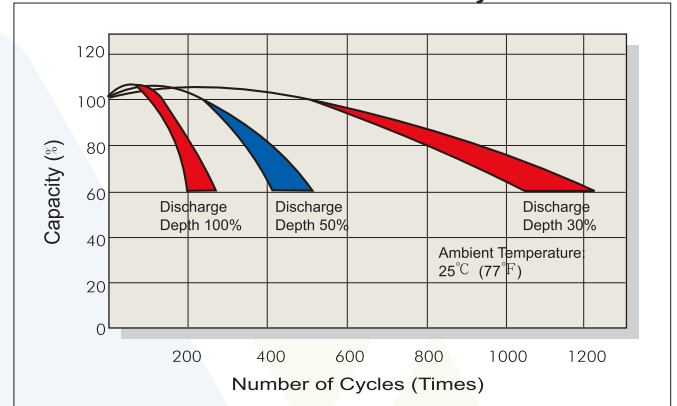
Capacity Retention Characteristic



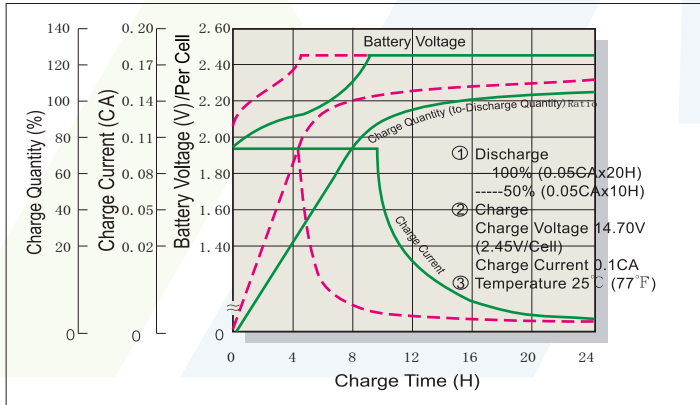
Battery Voltage and Charge Time for Standby Use



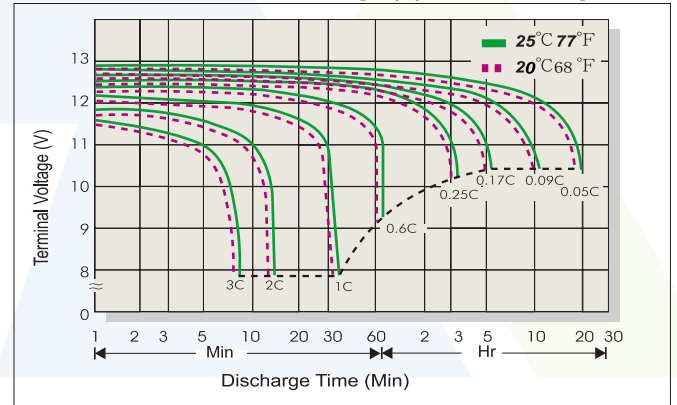
Cycle Service Life



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%