

## VRLA Rechargeable Battery

# BP3.6-12FR

### FEATURES

- Maintenance Free ( topping up not needed )
- Non - spillable ( no free electrolyte )
- Low Self Discharge, less than 3% per month
- both Vertical & Horizontal installations
- Its design life is up to 8 years in floating application

### APPLICATIONS

- UPS
- Security Systems
- Medical Equipment
- Power Packs
- Emergency Lighting
- R/C Cars & Planes



### SPECIFICATIONS

Nominal Voltage	12V	
Nominal Capacity	20 Hour Rate (180mA, 10.5V)	3.60 Ah
	10 Hour Rate (342mA, 10.5V)	3.42 Ah
	5 Hour Rate (612mA, 10.5V)	3.06 Ah
	1 Hour Rate (2160mA, 9.3V)	2.16 Ah
Approx. Weight	1320g(2.91lbs.)	
Terminals	T1 (Faston Tab 187) T2 is optional	
Max. Discharge Current	54 A (5 sec.)	
Max. Charge Current	1.08 A	
Operating Temperature Range	Charge	0°C~40°C(32°F~104°F)
	Discharge	-20°C~50°C(-4°F~122°F)
	Storage	-20°C~40°C(-4°F~104°F)
Self Discharge	< 3% per month (25°C)	
Internal Resistance	≤50mΩ (Fully Charged )	

### CONTAINER MATERIAL

- Flame Retardant ABS (UL94 V-0)
- Model Name: BP3.6-12FR

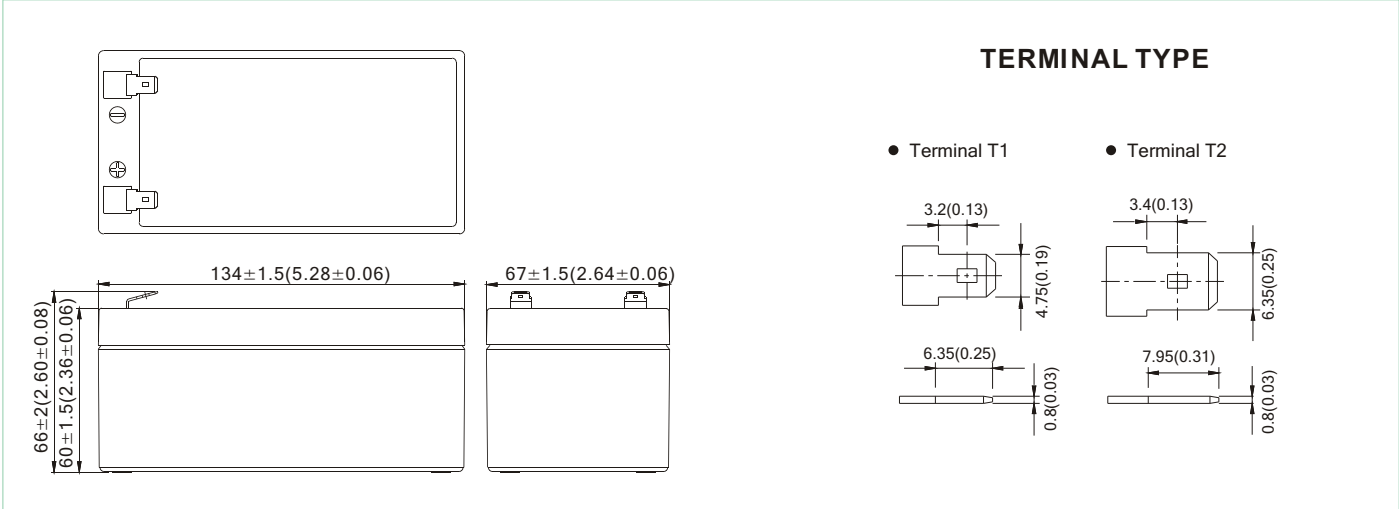
Certificate as below:



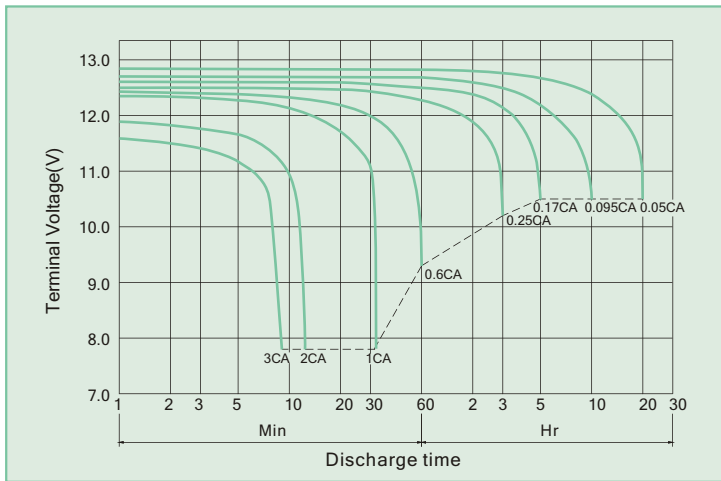
Compliance of the standards as below:

- IEC 61056-1
- JIS C 8702-1
- GB/T 19639.1

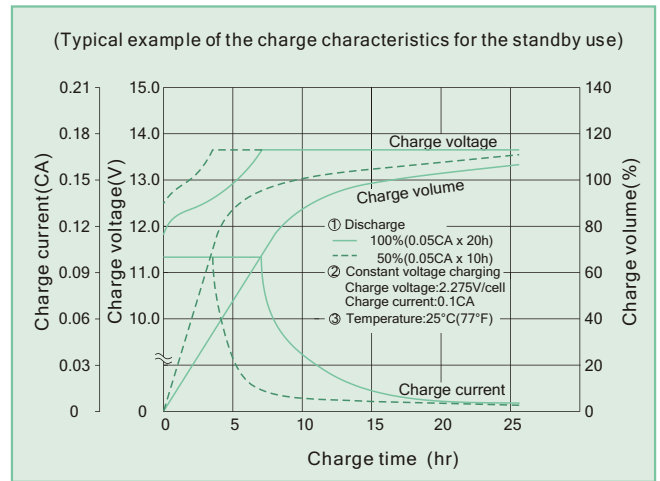
OUTER DIMENSIONS mm(inch)	Length (L)	Width (W)	Container Height (H)	Total Height (TH)
		134±1.5(5.28±0.06)	67±1.5(2.64±0.06)	60±1.5(2.36±0.06)



### BP3.6-12FR discharge characteristics (25°C/77°F)



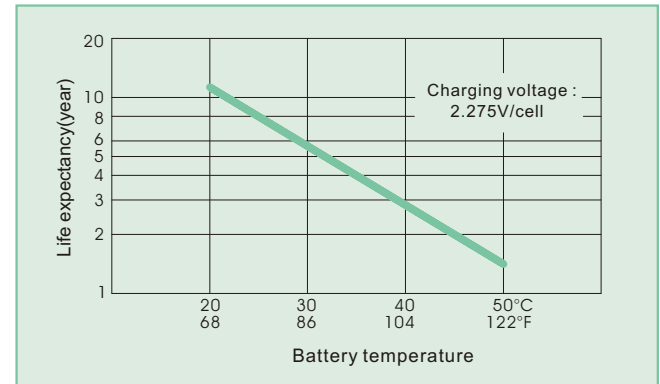
### Battery Charging Characteristics



### Charging Procedure

Application	Charging method	Charging Voltage at 25°C (V/cell)	Temperature compensation coefficient of charging voltage (mV/°C/cell)	Max. charging current (CA)	Charging time 0.1CA, 25°C (h)		Temp (°C)
					100% discharge	50% discharge	
For standby power Source	Constant voltage & Constant current charging (with current restriction)	2.25~2.30	-3	0.3	24	20	0~40 (32~104°F)
For cycle service		2.40~2.50	-4	0.3	16	10	

### Effect Of Temperature On Long Term Float Life



### Constant power discharge characteristics at 25 °C/77 °F Unit: W

Discharge F.V.	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
10.8V	130.2	95.8	76.8	45.69	26.20	10.49	7.235	4.043	2.128
10.5V	150.7	103.8	80.3	47.42	26.99	10.70	7.344	4.104	2.160
10.2V	160.1	107.5	82.8	48.51	27.47	10.80	7.384	4.124	2.174
9.9V	167.3	110.1	84.7	49.19	27.80	10.88	7.410	4.137	2.174
9.6V	172.8	112.3	86.4	49.68	28.08	10.94	7.432	4.137	2.174

### Constant current discharge characteristics at 25 °C/77 °F Unit: A

Discharge F.V.	5 Min	10 Min	15 Min	30 Min	1 Hr	3 Hr	5 Hr	10 Hr	20 Hr
10.8V	11.73	8.43	6.68	3.87	2.202	0.874	0.603	0.337	0.177
10.5V	13.82	9.14	6.98	4.02	2.268	0.892	0.612	0.342	0.180
10.2V	14.68	9.47	7.20	4.11	2.309	0.900	0.615	0.344	0.181
9.9V	15.34	9.69	7.37	4.17	2.336	0.906	0.617	0.345	0.181
9.6V	15.85	9.89	7.51	4.21	2.360	0.912	0.619	0.345	0.181

All data and artworks shall be changed without prior notice, BB reserves the right to explain and update the information contained hereinto.

For operation, please refer to the instruction from technical manual.

A/0 REV. Aug. 2023

**USA:**  
B&B BATTERY(USA) INC.  
6415 RANDOLPH ST.COMMERCE, CA,90040 U.S.A.  
TEL:1-323-278-1900.1-800-278-8599  
FAX:1-323-278-1268  
E-Mail:sales@bb-battery.com

**CHINA FACTORY:**  
B.B. TECH(CHANGSHA) CO., LTD.  
No.57 DongsirRoad, Changsha National Economic & Technical Development Zone, Changsha, Hunan PRC  
TEL:86-731-82955888  
FAX:86-731-82955111  
E-Mail:maggy@bb-battery.com

**EUROPE:**  
B&B BATTERY(EUROPE) B.V.  
SUITE 8, HAAKSBERGWEG 33, 1101  
BP AMSTERDAM, THE NETHERLANDS  
TEL: 31-30-320-0190  
MOBILE: 852-9128-2711  
E-Mail: dliu@bb-battery.com

**HONG KONG:**  
B&B BATTERY(Hong Kong) Co.  
TEL:852-2311-4918  
FAX:852-2739-1182  
E-Mail:bbhk@hkstar.com

**JAPAN:**  
B&B BATTERY(JAPAN) CO., LTD.  
1375-11 NARAHARA-MACHI,HACHIOJI,  
TOKYO 193-0803,JAPAN.  
TEL:81-426-25-6375  
FAX:81-426-25-6375  
E-Mail:miyata@bb-battery.com

**TAIWAN:**  
B.B. BATTERY(TAIWAN) CO., LTD.  
TEL:886-6-502-5150  
FAX:886-6-589-8087  
E-Mail:kevinlin@bb-battery.com