

### High Rate Series Battery

High rate Series VRLA batteries are designed with low internal resistance AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for High rate UPS and power backup system. High rate series Batteries are the special design batteries with 10 years floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard. UL(MH62092), CE approved.

### Application

- \*Emergency Power System
- \*Communication equipment
- \*Telecommunication systems
- \*Uninterruptible power supplies
- \*Power tools
- \*Alarm system
- \*Security system
- \*Fire and Security System. etc.

### General Features

- \*Safety Sealing
- \*Non-spillable construction
- \*High Reliability and Stability
- \*Sealed and Maintenance-free
- \*Safety and Quality certification
- \*Long Life and low self-discharge design
- \*30% increased power output at 15M backup time.

### Construction

- \*Positive .....Lead dioxide
- \*Electrolyte .....Sulfuric acid
- \*Separator .....Fiber glass
- \*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V0 can be available upon request
- \*Negative .....Lead
- \*Safety Valve .....EPDR
- \*Terminal .....Copper

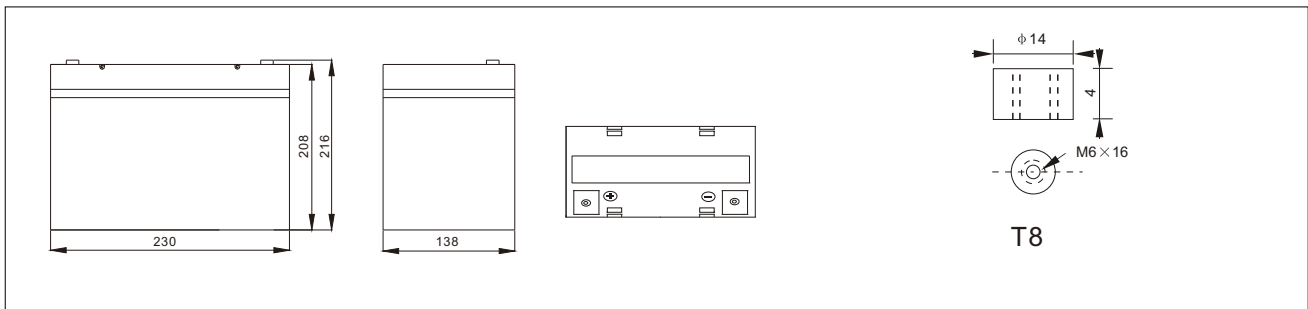


### Specification

Battery Model	Nominal Voltage		12V	
	Capacity(15 minutes rate to 1.67V/Cell)		185W	
	Rated capacity (10 Hour rate)		55Ah	
Dimensions	Length	Width	Height	Total Height
	230mm (9.06 inches)	138mm(5.43 inches)	208mm(8.19 inches)	216mm (8.50 inches)
Approx Weight	15.50kg (34.16lbs) ±3%			
Capacity 25°C (77°F)	30 Min rate(1.70V)		15 Min rate(1.67V)	5 Min rate(1.6V)
	112W/CELL		185W/CELL	333W/CELL
Max discharge current	550A(5Sec.)			
Internal Resistance	Full charged at 25 °C: Approx 6.0mΩ			
Capacity affected by Temp. (10 HR)	40°C (104 °F)	25°C (77°F)	0°C (32°F)	-15 °C (5°F)
	102%	100%	85%	65%
Self Discharge at 25°C (77°F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	14.60-14.80V (Initial charging current less than 16.5A)		13.70-13.90V	

### Outer dimensions (mm)

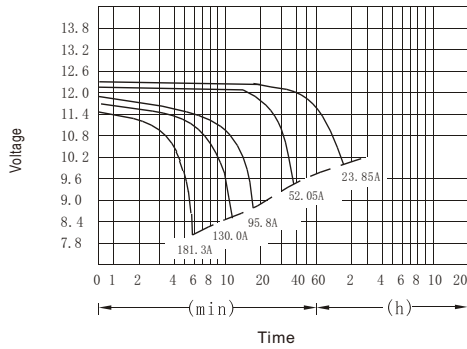
### Terminal Type (mm)



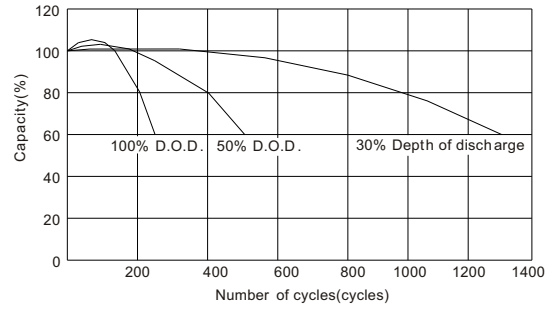
Constant Power(Watt/Cell) Discharge at 25°C (77°F)									
F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min	
1.60V	334.5	244.7	195.6	161.1	120.1	87.55	69.11	51.31	
1.67V	312.3	230.2	185.5	152.8	114.7	83.87	66.74	49.45	
1.70V	301.5	224.6	181.2	149.7	112.3	82.29	64.89	48.77	
1.75V	281.9	212.3	173.1	143.8	108.9	79.98	63.78	47.39	
1.80V	265.3	201.6	166.3	138.5	104.3	77.41	62.05	46.07	
1.85V	229.2	172.4	143.9	121.4	93.6	69.75	56.44	42.55	

Constant Current(Amp) Discharge at 25°C (77°F)									
F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min	
1.60V	180.87	129.41	102.37	83.44	61.44	44.67	36.95	27.07	
1.67V	165.11	119.65	95.83	78.45	58.25	42.51	35.30	25.96	
1.70V	157.45	115.23	92.65	76.34	56.74	41.38	34.47	25.41	
1.75V	145.41	108.07	87.65	72.18	54.60	39.98	38.27	24.63	
1.80V	133.36	101.65	82.87	68.95	52.11	38.37	32.15	23.85	
1.85V	114.65	86.64	71.33	59.61	47.02	34.33	29.07	21.69	

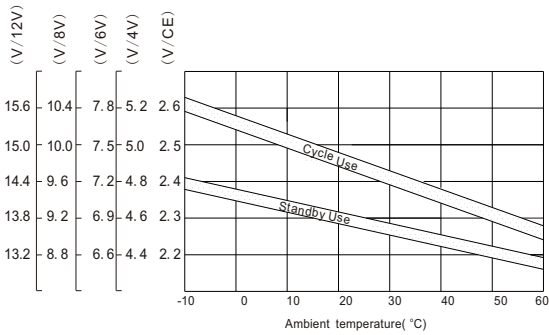
### Discharge characteristic Curve



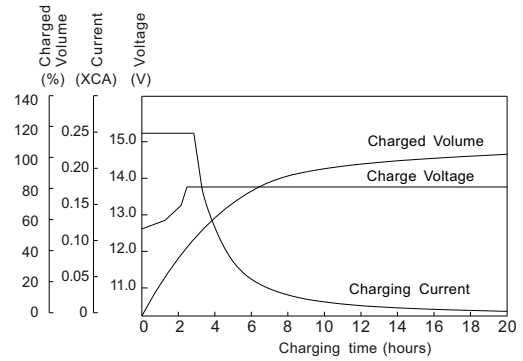
### Cycle service life in relation to depth of discharge



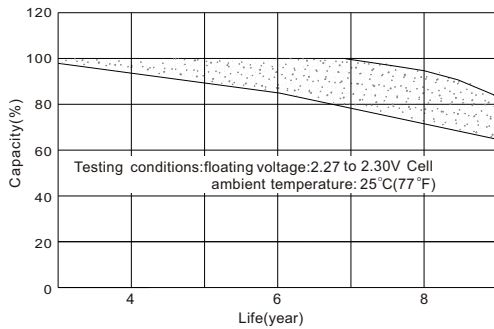
### Relationship between charging voltage and temperature



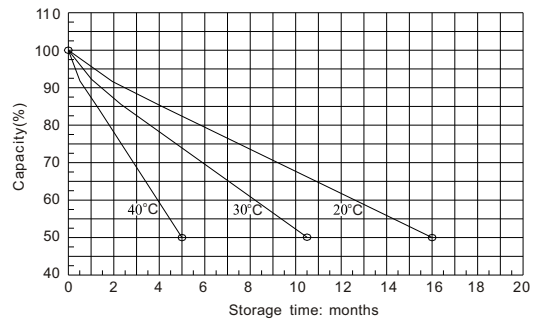
### Constant voltage charging characteristic (0.25CA, at 25°C)



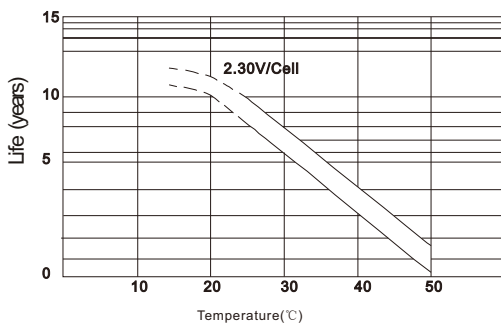
### Life characteristics of standby use



### Self-discharge characteristic



### Temperature effects on float life



### Charge characteristic Curve for standby use

