

General Series Battery

ReFortis General (GP) Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system. GP Series Batteries are the general purpose 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
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Alarm system
- * Marine equipment
- * Medical equipment
- * Fire and Security System



General Features

- * Heavy Duty Grid
- * Mechanized assembly
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design

Construction

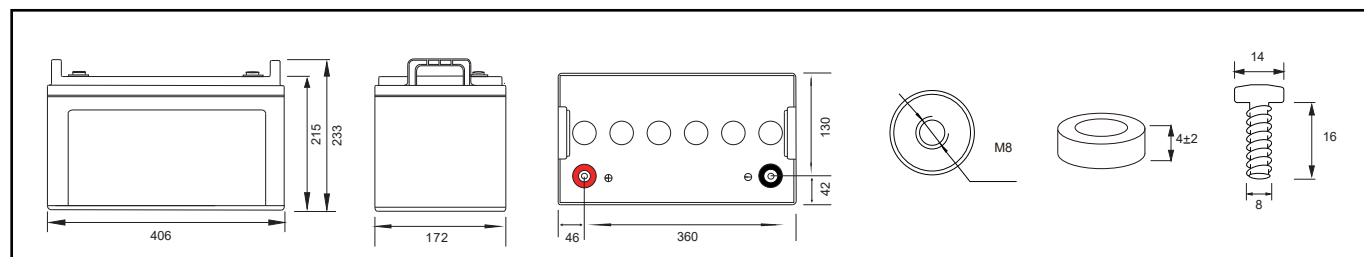
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS (UL94-HB) / Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		100Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	406mm (15.98 inches)	174mm (6.85 inches)	215mm (8.46 inches)	233mm (9.17 inches)
Approx Weight	28.6kg(63.05lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(5.029A,10.8V)	5 hour rate(18.482A,10.5V)	3 hour rate(26.856A,10.8V)	1 hour rate(60A,9.6V)
	100.58Ah	92.41Ah	80.56Ah	60Ah
Max.discharge current	960A (5 Sec.)			
Internal Resistance	Full charged at 25°C (77°F): Approx 4.9mΩ			
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 @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	
	14.40-14.70V (Initial charging current less than 30A)		13.50-13.80V	

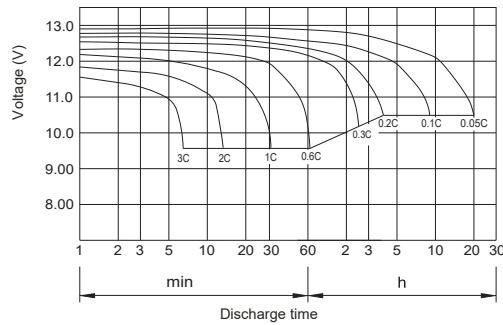
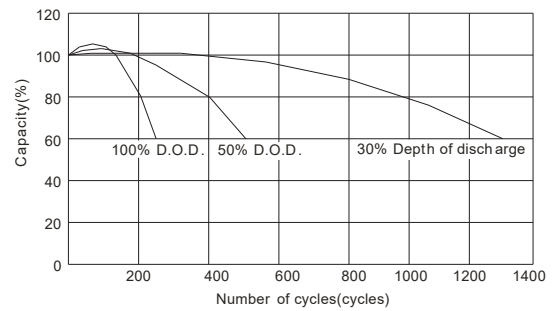
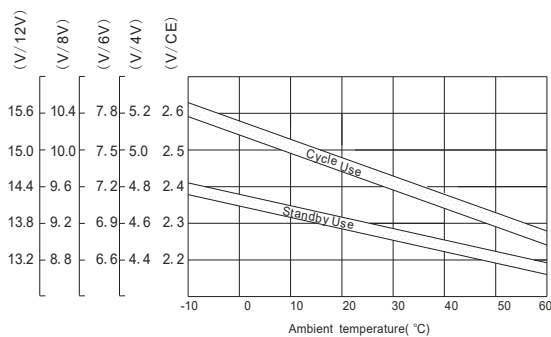
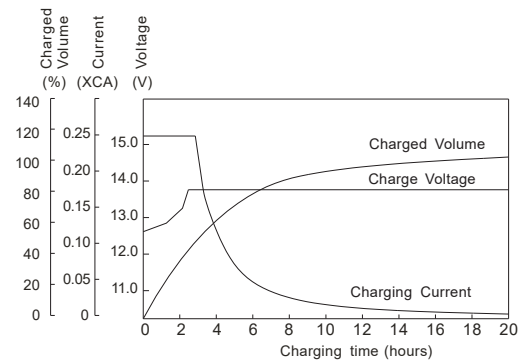
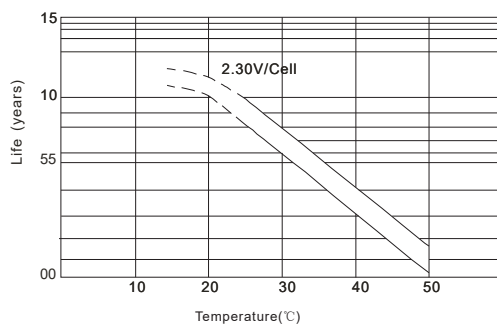
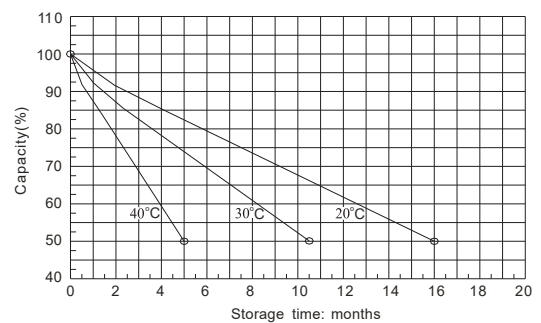
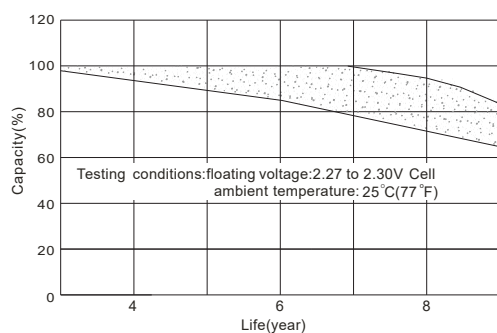
Outer dimension (mm)

Terminal Type (mm)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)

F.V/time	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	174.500	105.000	60.000	43.913	38.441	27.383	18.687	12.742	10.376	5.714
	336.785	209.160	119.700	87.681	76.915	54.789	37.390	25.494	20.761	11.433
1.67V	165.435	102.756	59.565	43.478	38.250	27.239	18.584	12.634	10.215	5.429
	319.539	204.794	118.841	86.835	76.596	54.600	37.252	25.332	20.481	10.884
1.70V	161.356	101.859	59.130	43.435	38.154	27.170	18.580	12.508	10.086	5.284
	311.901	203.011	118.116	86.783	76.436	54.477	37.253	25.091	20.233	10.599
1.75V	154.557	100.064	58.261	42.870	37.915	27.000	18.482	12.473	10.000	5.200
	299.068	199.579	116.667	85.739	75.944	54.162	37.074	25.040	20.075	10.439
1.80V	148.212	97.821	57.826	42.565	37.676	26.856	18.430	12.366	9.839	5.029
	287.234	195.192	115.942	85.343	75.479	53.901	36.989	24.842	19.766	10.102
1.85V	140.506	95.128	56.957	42.087	37.340	26.617	18.327	12.204	9.677	4.857
	272.583	189.957	114.369	84.595	74.840	53.474	36.819	24.543	19.461	9.768

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)

Temperature effects on float life

Self-discharge characteristic

Life characteristics of standby use

Charge characteristic Curve for standby use
