

GEL Series Battery

ReFortis GE series batteries are designed with AGM separator and GEL deep cycle technology to give Extra-durable cyclic performance at extreme temperature.

GE series Batteries are designed for 12 years life time floating design life at 25 °C .

Meet with IEC, BS, JIS and Eurobat standard .

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Electric toy car and wheelchairs, etc.
- * Power tools
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system



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

Construction

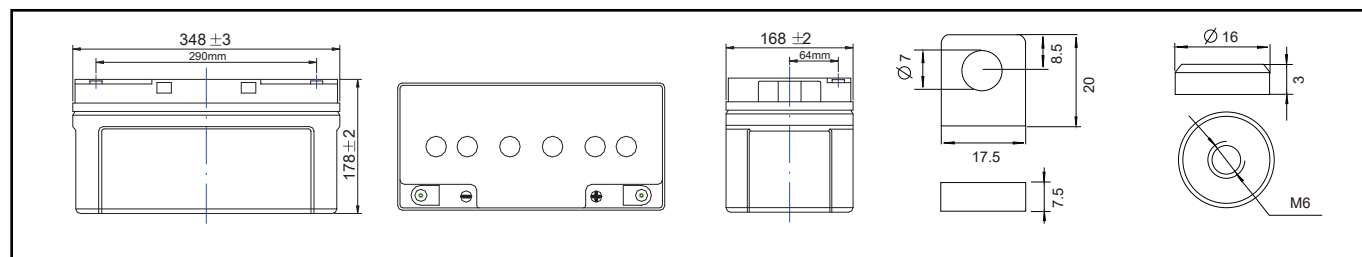
- * Positive Lead dioxide
- * Electrolyte Silicon dioxide
- * Separator AGM
- * Container ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		65Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	348mm (13.70 inches)	168mm (6.61 inches)	178mm (7.01 inches)	178mm (7.01 inches)
Approx Weight	18.4kg(40.56lbs) ± 3%			
Capacity @ 25°C (77 °F)	10 hour rate(6.5A,10.5V)	5 hour rate(11.56A,10.5V)	3 hour rate(16.81A,10.8V)	1 hour rate(39A,9.6V)
	65Ah	57.8Ah	50.43Ah	39Ah
Max.discharge current	650A (5 Sec.)			
Internal Resistance	Full charged at 25°C(77°F) : Approx 7.4mΩ			
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	
	14.40-15.00V (Initial charging current less than 19.5A)		13.60-13.80V	

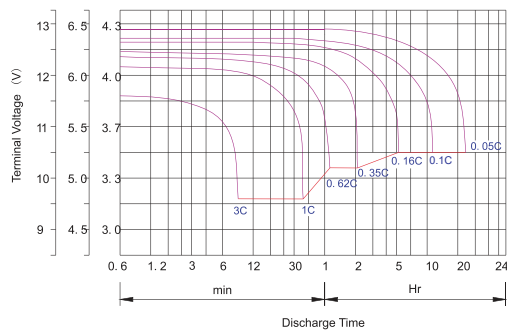
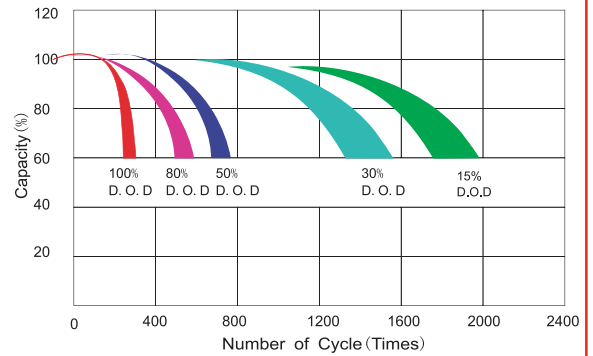
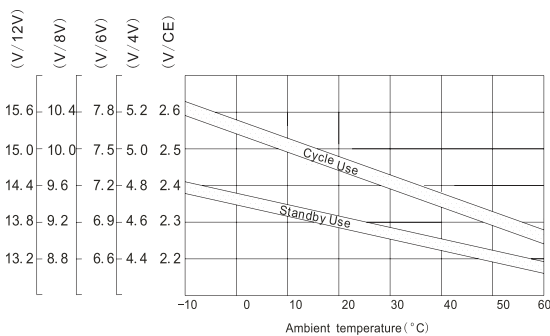
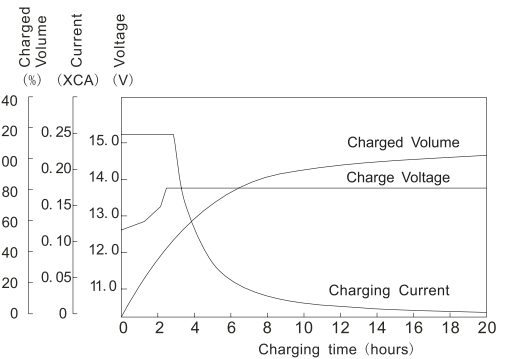
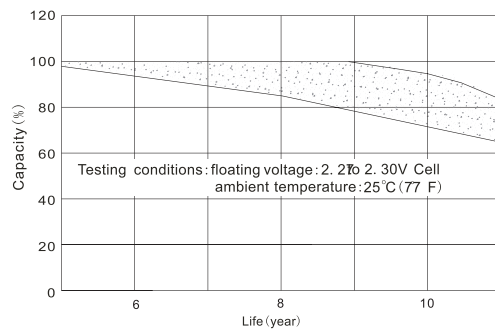
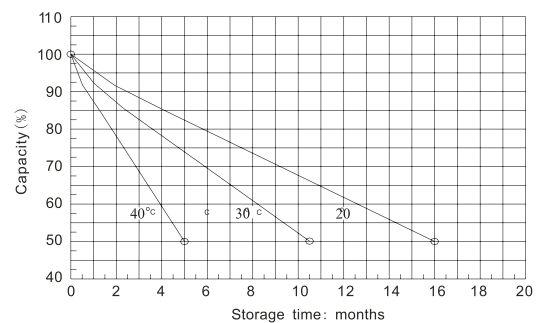
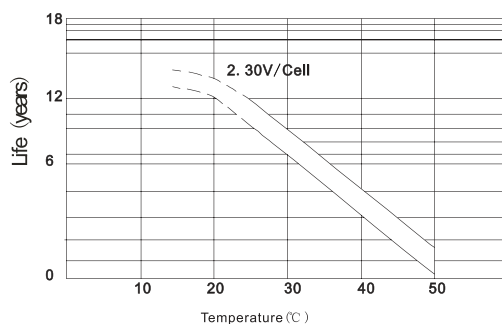
Outer dimension (mm)

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	116.500	69.000	39.000	28.543	24.062	17.140	11.697	8.282	6.745	3.714
	224.845	137.448	77.805	56.993	48.143	34.294	23.404	16.571	13.495	7.432
1.67V	110.448	67.526	38.717	28.261	23.942	17.050	11.632	8.212	6.640	3.529
	213.331	134.579	77.246	56.443	47.943	34.175	23.317	16.466	13.313	7.075
1.70V	107.725	66.936	38.435	28.233	23.882	17.007	11.630	8.130	6.556	3.435
	208.232	133.407	76.775	56.409	47.843	34.098	23.317	16.309	13.151	6.890
1.75V	103.186	65.756	37.870	27.865	23.732	16.900	11.568	8.108	6.500	3.380
	199.664	131.152	75.833	55.730	47.535	33.901	23.206	16.276	13.049	6.785
1.80V	98.949	64.282	37.587	27.667	23.582	16.810	11.536	8.038	6.395	3.269
	191.764	128.269	75.362	55.473	47.244	33.738	23.152	16.148	12.848	6.567
1.85V	93.805	62.513	37.022	27.357	23.372	16.660	11.471	7.933	6.290	3.157
	181.982	124.829	74.340	54.987	46.845	33.471	23.046	15.953	12.650	6.349

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
