

Deep Cycle Series Battery

ReFortis DC series VRLA batteries are superior deep cycle design with thick plates, high-density active materials And Slightly stronger electrolyte, Which can withstand repeated deep cyclic applications. Deep cycle series Batteries are the special design batteries with 5 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
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system



General Features

- * Safety Sealing
- * Non-spillable construction
- * High power density
- * Excellent recovery from Deep discharge
- * Thick plates and high active materials
- * Longer Life and low self-discharge design

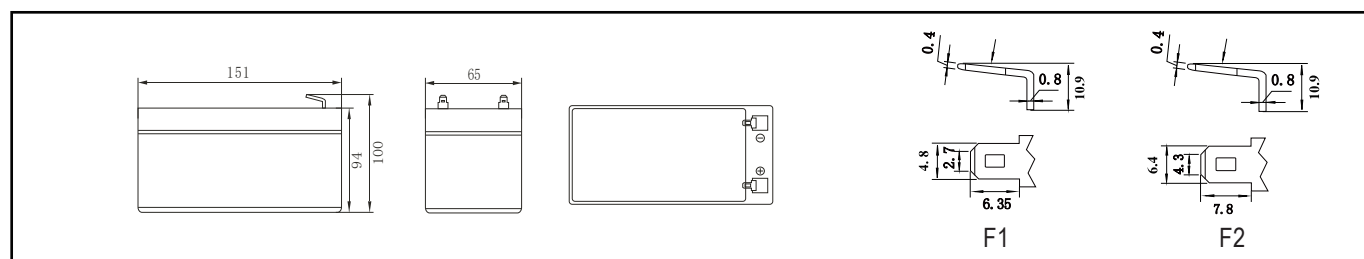
Construction

- * 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

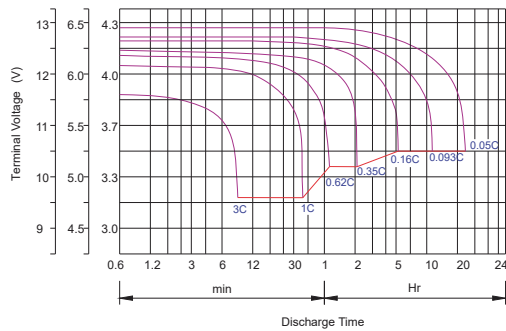
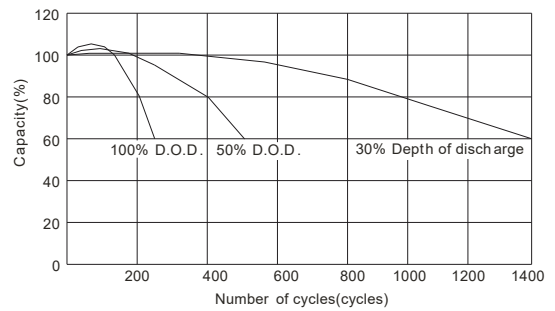
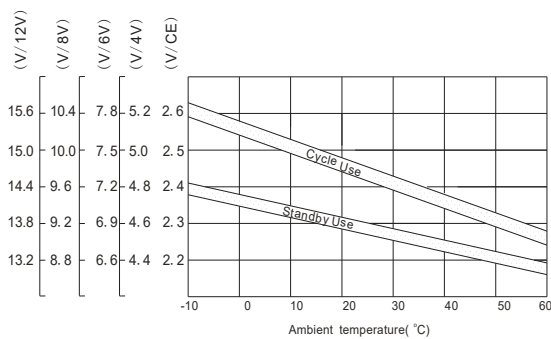
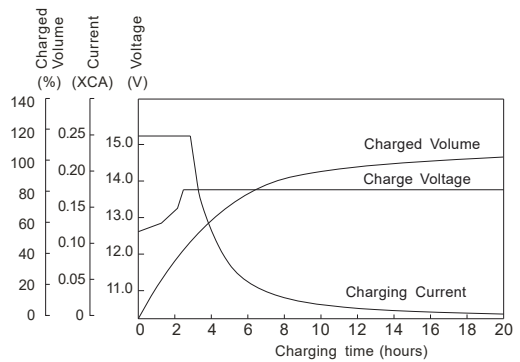
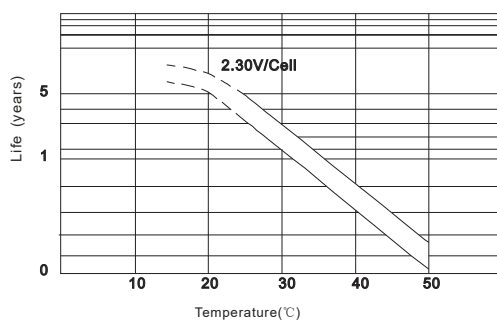
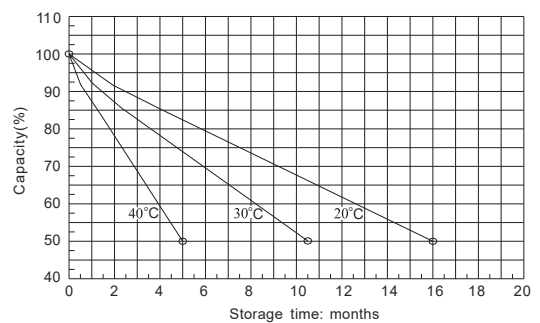
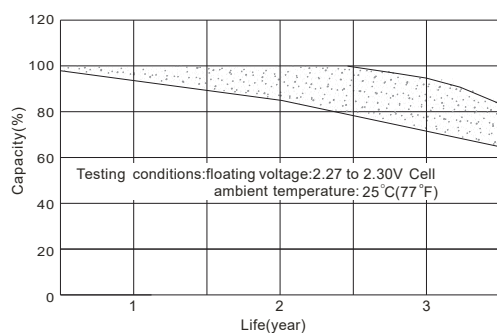
Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		7Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.70 inches)	100mm (3.94 inches)
Approx Weight	2.46kg (5.42lbs) ± 3%			
Capacity @ 25°C (77°F)	20 hour rate(0.35A,10.5V)	10 hour rate(0.64A,10.5V)	5 hour rate(1.2A,10.2V)	1 hour rate(4.2A,9.6V)
	7Ah	6.4Ah	6Ah	4.2Ah
Max.discharge current	105A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 17mΩ			
Capacity affected by Temp.(20 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	
	14.4-14.7V (Initial charging current less than 2.1A)		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		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	25.20	16.50	12.30	8.05	4.20	2.45	1.80	1.45	1.23	0.81	0.66	0.36
	W	297.20	186.70	141.20	85.50	48.40	28.40	20.85	16.74	14.20	9.36	7.67	4.20
10.20V	A	23.10	15.80	11.30	7.64	3.94	2.35	1.75	1.40	1.20	0.80	0.65	0.35
	W	279.10	176.80	132.70	84.90	45.40	27.20	20.27	16.22	13.94	9.22	7.53	4.08
10.50V	A	21.00	14.80	10.50	7.41	3.82	2.30	1.72	1.33	1.20	0.79	0.64	0.35
	W	270.10	171.50	126.90	84.00	44.20	26.70	19.92	15.40	13.85	9.13	7.47	4.05
10.80V	A	20.20	14.10	9.80	7.20	3.69	2.25	1.69	1.31	1.14	0.77	0.63	0.35
	W	236.80	166.30	122.20	83.70	42.90	26.10	19.69	15.21	13.24	8.75	7.29	3.97
11.10V	A	18.70	13.30	9.10	7.00	3.56	2.19	1.60	1.28	1.09	0.75	0.61	0.33
	W	229.00	160.70	116.40	83.10	42.30	26.00	19.10	15.17	12.95	8.46	7.15	3.94

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
