

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

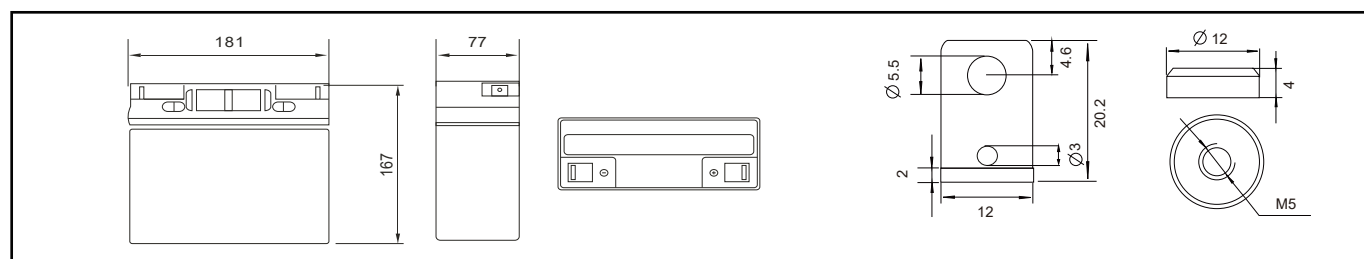
Construction

- * 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

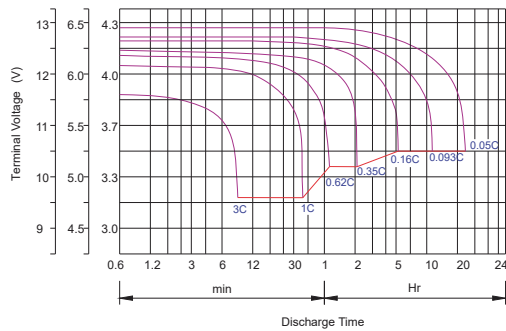
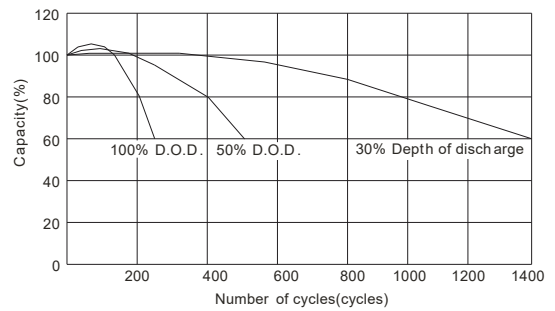
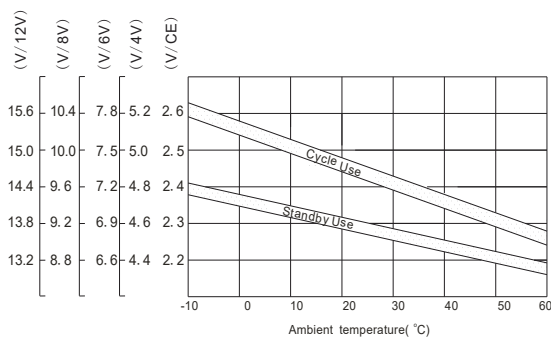
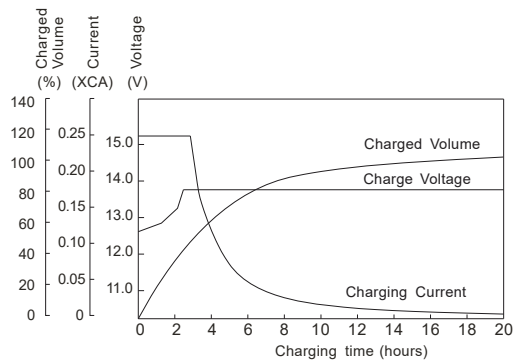
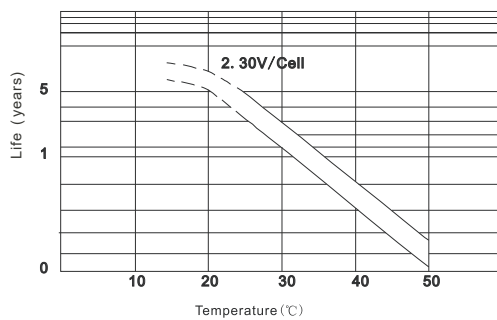
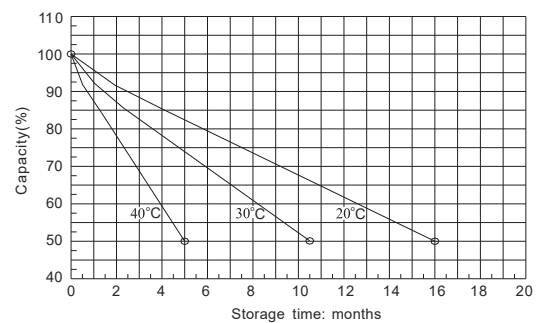
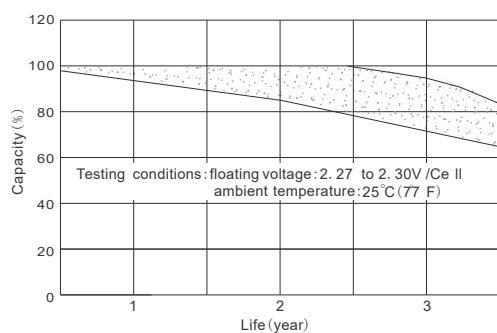
Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		18Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	181mm (7.13 inches)	77mm (3.03 inches)	158mm (6.57 inches)	167mm (6.57 inches)
Approx Weight	5.3kg (11.68lbs) ± 3%			
Capacity @ 25°C (77 °F)	20 hour rate(0.9A,10.5V)	10 hour rate(1.66A,10.5V)	5 hour rate(3.06A,10.5V)	1 hour rate(10.8A,9.6V)
	18Ah	16.6Ah	15.3Ah	10.8Ah
Max.discharge current	270A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 11.5mΩ			
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 5.4A)		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	64.80	42.50	31.50	20.70	10.80	6.30	4.64	3.72	3.16	2.08	1.70	0.93
	W	764.20	480.00	363.00	219.70	124.50	72.90	53.63	43.05	36.53	24.08	19.72	10.80
10.20V	A	59.40	40.60	28.90	19.70	10.14	6.04	4.50	3.60	3.10	2.05	1.67	0.91
	W	719.20	454.50	341.20	218.30	117.00	70.00	52.12	41.70	35.85	23.70	19.35	10.50
10.50V	A	54.10	38.00	27.00	19.00	9.81	5.93	4.42	3.42	3.06	2.03	1.66	0.90
	W	694.50	441.00	326.30	216.00	113.50	68.60	51.22	39.60	35.63	23.48	19.20	10.43
10.80V	A	52.00	36.30	25.20	18.50	9.48	5.77	4.35	3.36	2.93	1.97	1.61	0.88
	W	609.00	427.50	314.20	215.20	110.30	67.20	50.63	39.11	34.05	22.50	18.75	10.20
11.10V	A	48.00	34.20	23.40	18.00	9.15	5.63	4.13	3.30	2.80	1.92	1.58	0.86
	W	588.70	413.20	299.30	213.80	108.80	66.70	49.13	39.00	33.30	21.75	18.37	10.13

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
