

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 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
- * Golf cars and buggies
- * Marine equipment
- * Medical equipment
- * Solar and wind power system

- * Generator



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

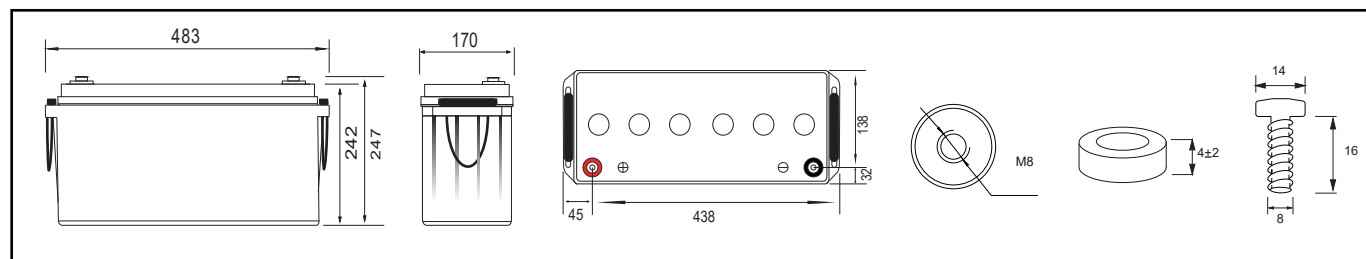
Construction

- * 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

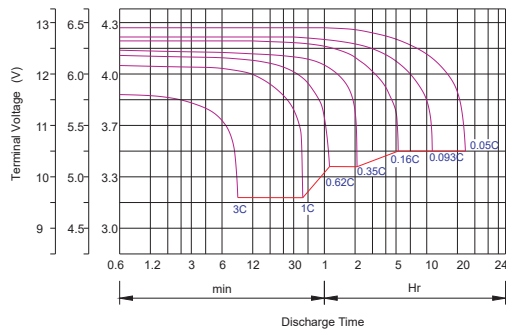
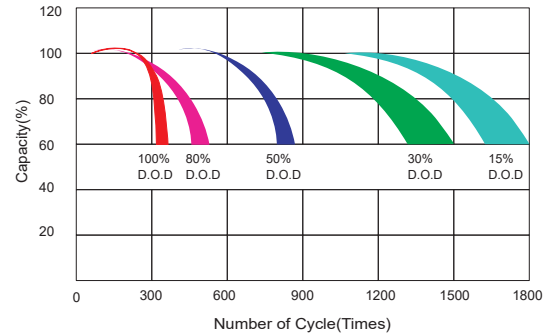
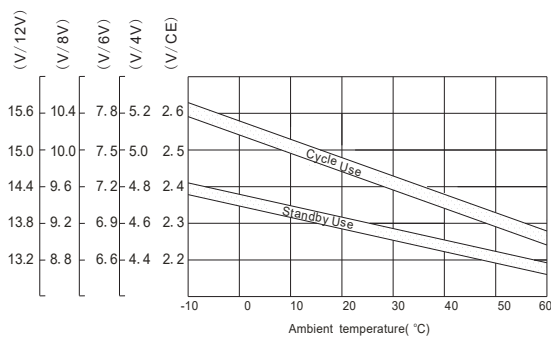
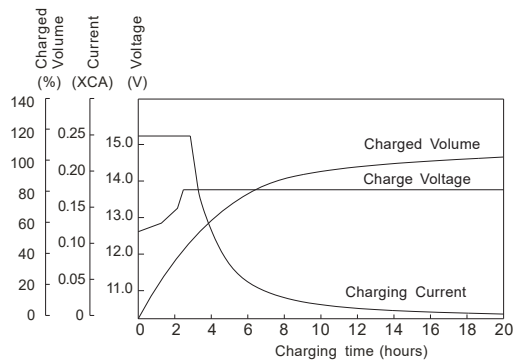
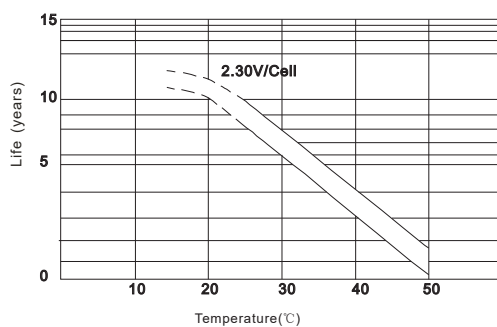
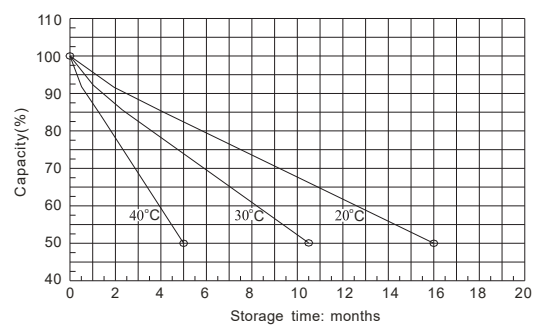
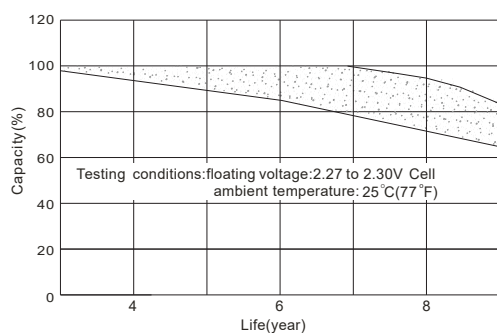
Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		150Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	484mm (19.06 inches)	170mm (6.69 inches)	242mm (9.52 inches)	247mm (9.72 inches)
Approx Weight	43.3kg (95.46lbs) ± 3%			
Capacity @ 25°C (77°F)	10 hour rate(15.25A,10.8V)	5 hour rate(27.44A,10.5V)	3 hour rate(40.35A,10.2V)	1 hour rate(92.2A,9.6V)
	152.50Ah	137.2Ah	121.05Ah	92.2Ah
Max.discharge current	1500A (5 Sec.)			
Internal Resistance	Full charged at 25°C: Approx 2.8mΩ			
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	
	14.4-15.0V (Initial charging current less than 45A)		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	255.000	156.600	92.200	67.480	57.093	40.669	27.754	19.750	16.083	8.868
	492.150	311.947	183.939	134.737	114.233	81.371	55.532	39.516	32.180	17.744
1.67V	241.753	153.254	91.532	66.812	56.808	40.455	27.601	19.583	15.833	8.425
	466.948	305.435	182.618	133.436	113.759	81.091	55.325	39.265	31.746	16.892
1.70V	235.792	151.915	90.864	66.745	56.666	40.353	27.594	19.387	15.634	8.200
	455.786	302.777	181.505	133.356	113.522	80.908	55.327	38.891	31.361	16.450
1.75V	225.857	149.238	89.528	65.876	56.311	40.100	27.448	19.333	15.500	8.070
	437.034	297.658	179.278	131.752	112.790	80.441	55.062	38.812	31.116	16.201
1.80V	216.584	145.892	88.859	65.409	55.955	39.887	27.372	19.167	15.250	7.804
	419.741	291.115	178.164	131.144	112.100	80.053	54.936	38.506	30.637	15.678
1.85V	205.325	141.877	87.523	64.674	55.457	39.531	27.219	18.917	15.000	7.538
	398.330	283.308	175.747	129.994	111.152	79.418	54.683	38.041	30.165	15.159

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
