Virtec Battery

Phycical Specifications

Brand	Virtec
Weight	17Kg
Length	229mm
Width	138 mm
Height	208mm
Technology	AGM
Warranty	1 Year
Terminals	

12V 55Ah virtec Battery VR12550

Specifications

Model		VR12550
Normal Voltage		12 Volts
Normal Capacity (C20)		55 Ah
Terminal Type	Standard Terminal	F6
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	UL94:VO
Rated Capacity	64 Ah/0.64A	(100HR 1.80V/cell, 25°C)
	57.8 Ah/2.89A	(20HR 1.80V/cell, 25°C)
	55.0 Ah/5.50A	(10HR 1.80V/cell, 25°C)
	48.5 Ah/9.69A	(5HR 1.75V/cell, 25°C)
	42.0 Ah/14.0A	(3HR 1.75V/cell, 25°C)
Max Discharge Current	34.8 Ah/34.8A	(1HR 1.60V/cell, 25°C)
Internal Resistance		550A (5s)
		Approx 9mΩ
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp.Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 13.8A. Voltage 14.1V ~ 14.4V @ 25°C Temp. Coefficient -30mV/°C
	Standby Use	No limit on initial charging current Voltage 13.5V ~ 13.8V @ 25°C Temp. Coefficient -20mV/°C
	Capacity affected by Temperature	40°C (104°F) 103%
		25°C (77°F) 100%
		0°C (32°F) 86%
Design Floating Life at 20°C		3-5 Years
Self Discharge		Virtec batteries may be stored for up to 6 months at 25°C(°77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.

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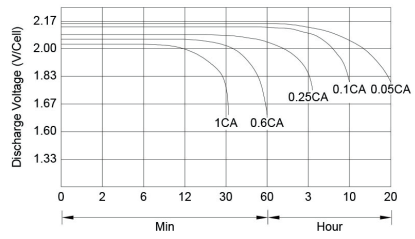
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	30 min	60min	2hours	3hours	4hours	5hours	6hours	8hours	10hours	20 hours
1.85V/cell	44.9	28.6	16.3	13.0	10.6	9.04	7.79	6.37	5.11	2.68
1.80V/cell	50.1	30.3	17.2	13.8	11.1	9.37	8.11	6.53	5.50	2.89
1.75V/cell	52.3	32.1	17.9	14.0	11.5	9.69	8.25	6.64	5.55	2.92
1.70V/cell	52.9	33.6	18.6	14.4	11.8	9.86	8.39	6.75	5.61	2.94
1.65V/cell	53.7	34.8	19.2	14.9	12.0	10.0	8.48	6.86	5.66	2.97
1.60V/cell	54.5	35.2	19.5	15.1	12.2	10.2	8.53	6.92	5.72	3.00

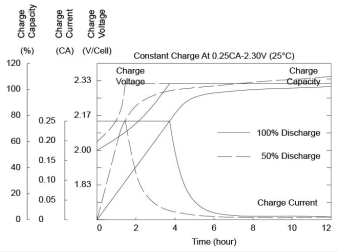
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	30 min	60min	2hours	3hours	4hours	5hours	6hours	8hours	10hours	20 hours
1.85V/cell	86.1	55.4	31.7	25.3	20.7	17.8	15.4	12.6	10.2	5.34
1.80V/cell	94.8	58.4	33.3	26.7	21.6	18.3	15.9	12.9	10.9	5.73
1.75V/cell	98.1	61.6	34.6	27.1	22.4	18.9	16.2	13.1	11.0	5.78
1.70V/cell	98.6	64.2	35.8	27.9	22.8	19.2	16.4	13.3	11.1	5.83
1.65V/cell	99.2	66.0	36.7	28.6	23.3	19.5	16.5	13.5	11.2	5.88
1.60V/cell	99.8	66.4	37.1	29.0	23.5	19.7	16.6	13.6	11.3	5.93

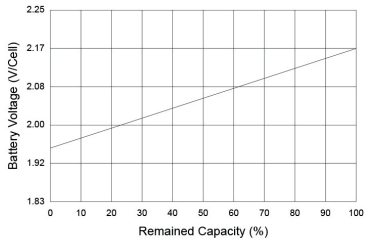
Discharge Characteristics



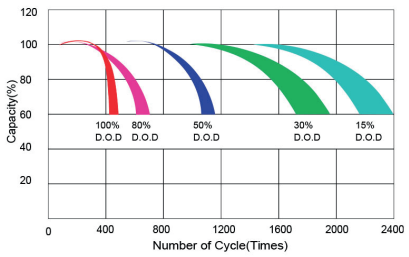
Float Charging Characteristics



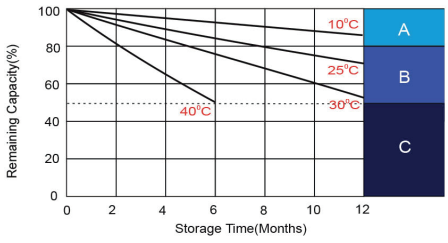
Temperature Effects in Relation to Battery Capacity



Life Characteristics of Cycle Use



Self Discharage Characteristics



A — No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

B — Supplementary charge required before use. Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limited current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA.

C — Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.