

DC12-55(12V55Ah)

Specification

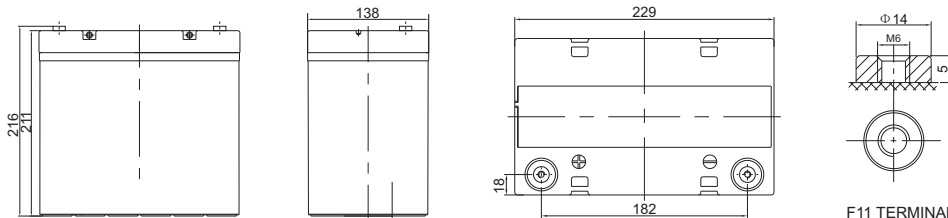
Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 16.5 Kg (Tolerance ±3%)
Internal Resistance	Approx. 6.0 mΩ
Terminal	F11(M6)/F15(M6)
Max. Discharge Current	550A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	16.5 A
Reference Capacity	C3 40.8AH C5 46.0AH C10 52.3AH C20 55.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



DC (Deep Cycle Gel) series is a hybrid GEL battery. It is an AGM battery with 12 years floating design life, ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the DC series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and can deliver 450 cycles at 100% DOD. Suitable for pumps, solar and wind system, CATV, marine, RV and deep discharge UPS, and telecommunication, etc.



Dimensions



Length	229±2mm (9.02 inches)
Width	138±2mm (5.43 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	134.7	100.6	57.69	33.34	19.52	14.53	11.51	9.70	6.62	5.61	2.86
1.65V	130.3	97.55	56.48	32.71	19.19	14.31	11.35	9.58	6.55	5.55	2.83
1.70V	124.4	93.60	54.88	31.87	18.75	14.01	11.14	9.42	6.45	5.48	2.80
1.75V	116.6	88.29	52.70	30.73	18.15	13.61	10.85	9.20	6.31	5.37	2.75
1.80V	106.1	81.14	49.71	29.16	17.31	13.05	10.45	8.89	6.12	5.23	2.68
1.85V	91.75	71.28	45.49	26.93	16.12	12.24	9.86	8.44	5.84	5.01	2.58

Constant Power Discharge Characteristics : WPC(25°C)

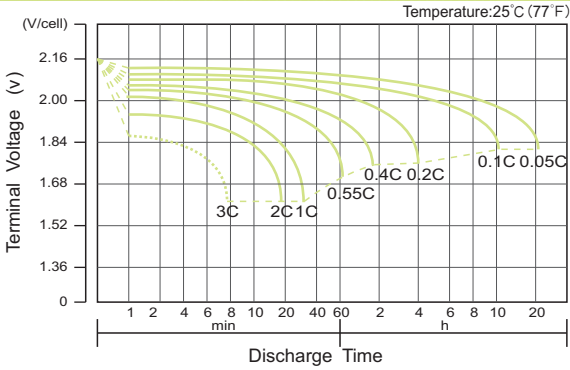
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	229.0	175.8	104.8	62.3	37.0	27.8	22.1	18.7	12.9	11.0	5.63
1.65V	227.3	174.1	104.1	61.8	36.6	27.5	21.9	18.6	12.8	10.9	5.59
1.70V	219.5	168.5	101.7	60.4	35.9	27.0	21.5	18.3	12.6	10.8	5.52
1.75V	209.4	161.3	98.7	58.6	34.9	26.3	21.1	17.9	12.4	10.6	5.44
1.80V	193.8	150.3	94.1	55.8	33.5	25.3	20.4	17.4	12.1	10.3	5.31
1.85V	170.7	133.9	86.9	51.9	31.3	23.9	19.3	16.6	11.5	9.92	5.12

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

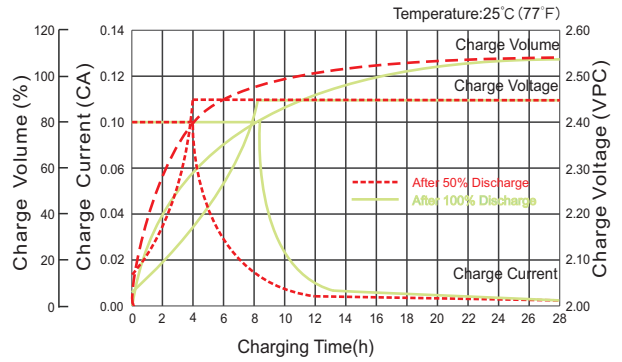
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AUS CELL No. 1

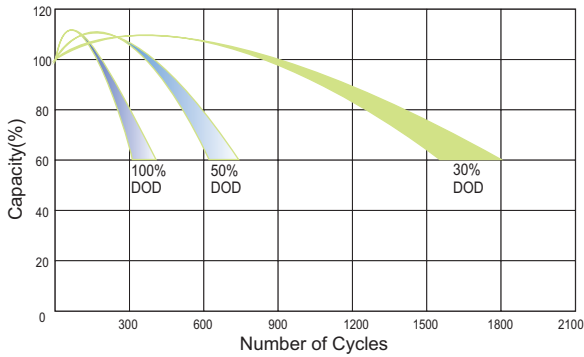
Discharge Characteristics Curve



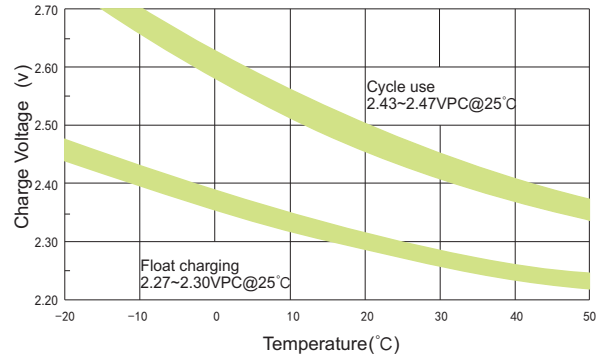
Charge Characteristic Curve for Cycle Use(IU)



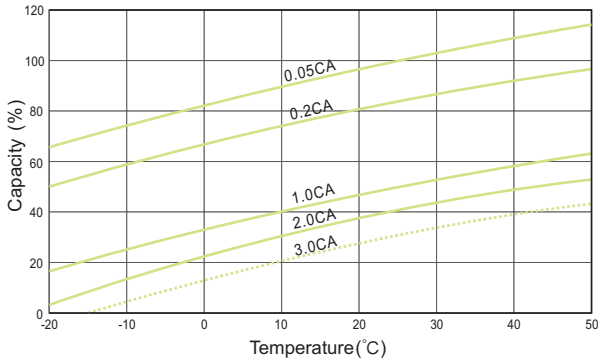
Cycle Life in Relation to Depth of Discharge



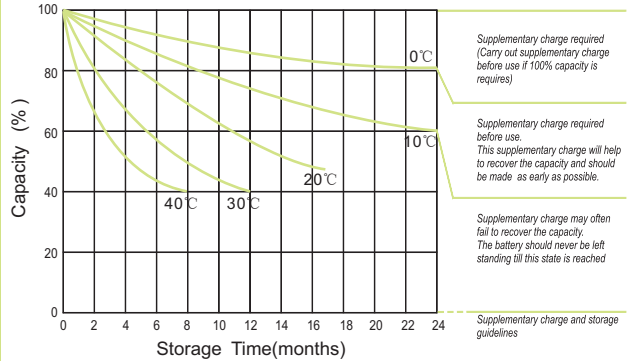
Relationship Between Charging Voltage and Temperature



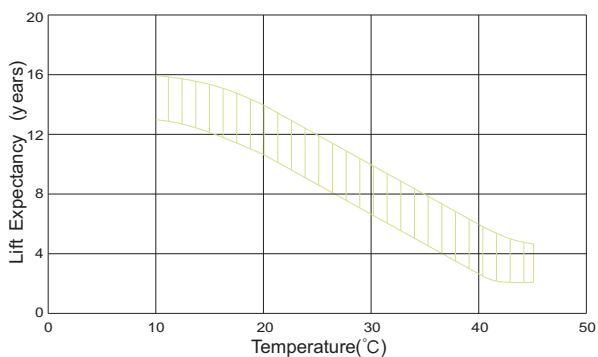
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

