AUS CELL No. 1

DC12-33(12V33Ah)

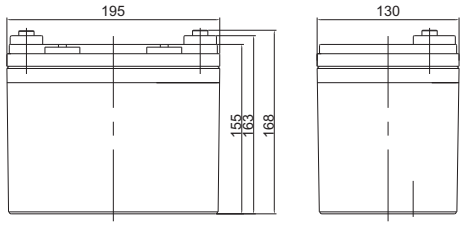
Specification

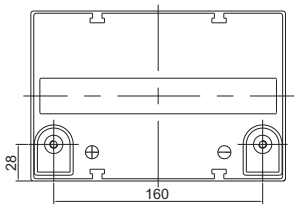
Cells Per Unit	6
Voltage Per Unit	12
Capacity	33Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 10.2 Kg (Tolerance±3%)
Internal Resistance	Approx. 9.0 mΩ
Terminal	F7(M8)/F11(M6)
Max. Discharge Current	330A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	9.9 A
Reference Capacity	C3 24.5AH C5 27.6AH C10 31.4AH C20 33.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

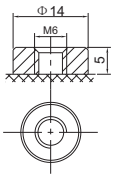
DC (Deep Cycle Gel) series is a hybrid GEL battery. It is an AGM battery with 12 years floating design life, ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the DC series offers excellent recovery 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.

ISO 9001 ISO 14001 OHSAS 18001

Dimensions







F11 TERMINAL

Length	195±2mm (7.68 inches)
Width	130±2mm (5.12 inches)
Height	155±2mm (6.10 inches)
Total Height	168±2mm (6.61 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℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	80.85	60.34	34.62	20.00	11.71	8.72	6.91	5.82	3.97	3.36	1.71
1.65V	78.15	58.53	33.89	19.62	11.51	8.59	6.81	5.75	3.93	3.33	1.70
1.70V	74.64	56.16	32.93	19.12	11.25	8.41	6.68	5.65	3.87	3.29	1.68
1.75V	69.93	52.98	31.62	18.44	10.89	8.17	6.51	5.52	3.79	3.22	1.65
1.80V	63.64	48.68	29.83	17.50	10.39	7.83	6.27	5.33	3.67	3.14	1.61
1.85V	55.05	42.77	27.29	16.16	9.67	7.34	5.92	5.07	3.51	3.01	1.55

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	137.4	105.5	62.9	37.4	22.2	16.7	13.3	11.2	7.76	6.61	3.38
1.65V	136.4	104.5	62.5	37.1	22.0	16.5	13.1	11.1	7.69	6.56	3.35
1.70V	131.7	101.1	61.0	36.3	21.5	16.2	12.9	11.0	7.59	6.48	3.31
1.75V	125.6	96.8	59.2	35.1	20.9	15.8	12.6	10.8	7.44	6.36	3.26
1.80V	116.3	90.2	56.4	33.5	20.1	15.2	12.2	10.4	7.23	6.20	3.19
1.85V	102.4	80.4	52.1	31.2	18.8	14.3	11.6	9.94	6.92	5.95	3.07

(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 C_{10} should reach 95% after the first cycle and 100% after the third cycle.

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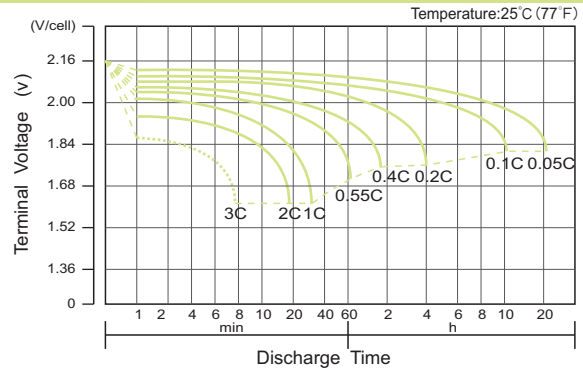
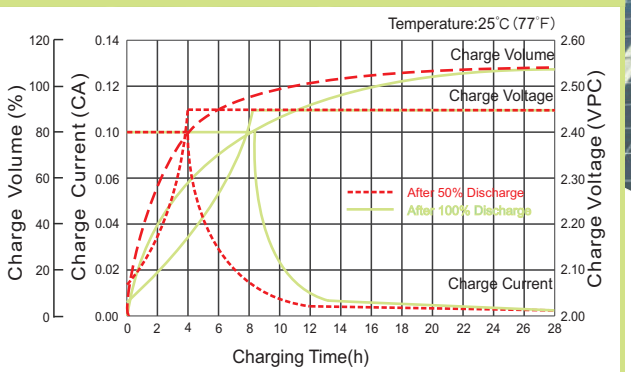
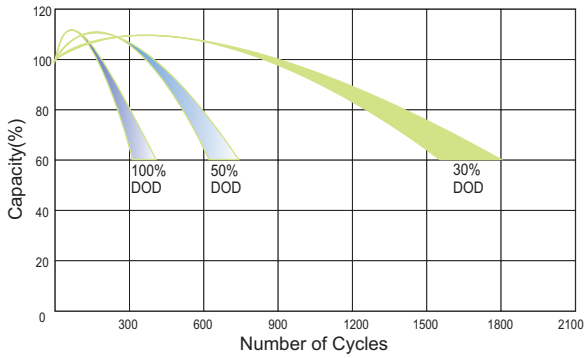
Discharge Characteristics Curve



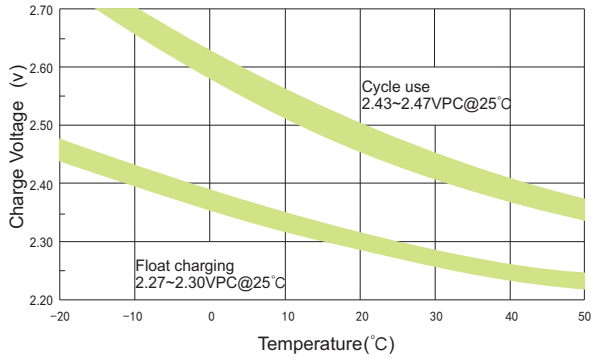
Charge Characteristic Curve for Cycle Use(IU)



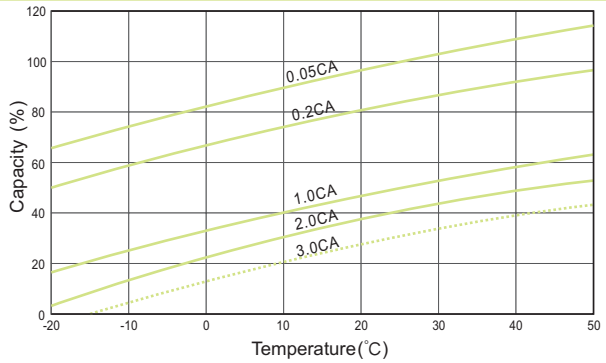
Cycle Life in Relation to Depth of Discharge



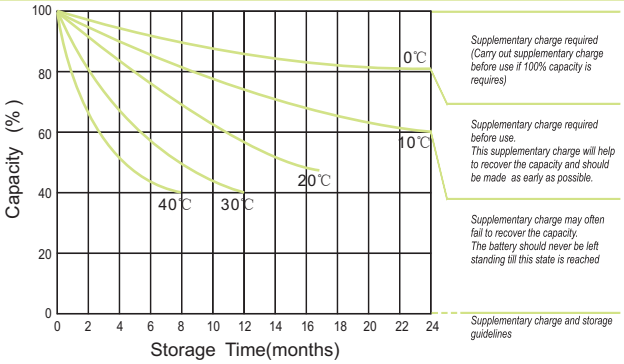
Relationship Between Charging Voltage and Temperature



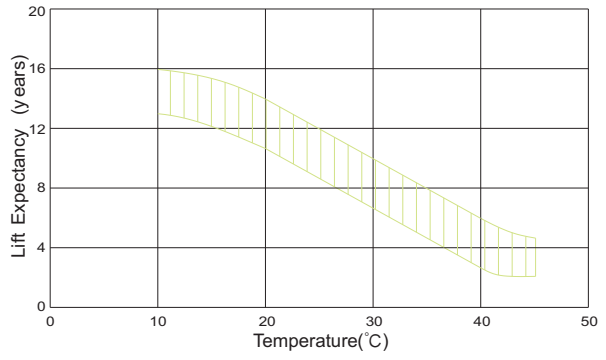
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)