



Specification Sheet

Deep Cycle VRLA Battery

DC12-90 (12V90Ah)

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	90Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 26.3 Kg (Tolerance ±2.0%)
Internal Resistance	Approx. 5.5 mΩ
Terminal	F12(M8)
Max. Discharge Current	900A (5 sec)
Short Circuit Current	1810A
Design Life	12 years (Float charging)
Recommended Maximum Charging Current	18A
Reference Capacity	C3 66.6AH C5 74.7AH C10 90.0AH C20 92.7AH
Standby Use 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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

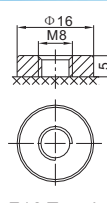
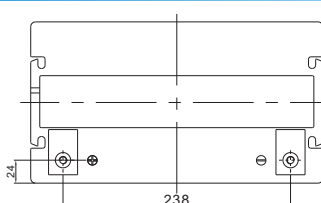
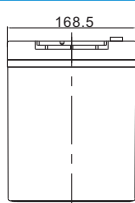
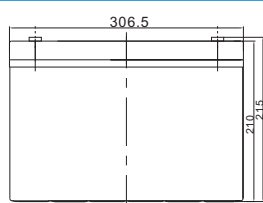


MH60689



CTL1908029031-EC

Dimensions



F12 Terminal

Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (8.46 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	212.3	161.5	93.5	56.0	33.5	24.0	20.0	15.9	11.3	9.59	4.82
1.65V	206.0	157.3	91.4	54.9	33.0	23.8	19.8	15.7	11.2	9.50	4.78
1.70V	197.7	151.7	88.7	53.6	32.4	23.0	19.4	15.4	11.0	9.38	4.73
1.75V	187.0	144.5	85.2	51.8	31.5	22.2	19.0	14.9	10.8	9.22	4.64
1.80V	173.2	135.2	80.6	49.4	30.4	22.0	18.4	14.6	10.5	9.00	4.57
1.85V	156.1	123.4	74.7	46.4	28.9	21.5	17.6	14.0	10.2	8.72	4.54

Constant Power Discharge Characteristics : WPC (25°C)

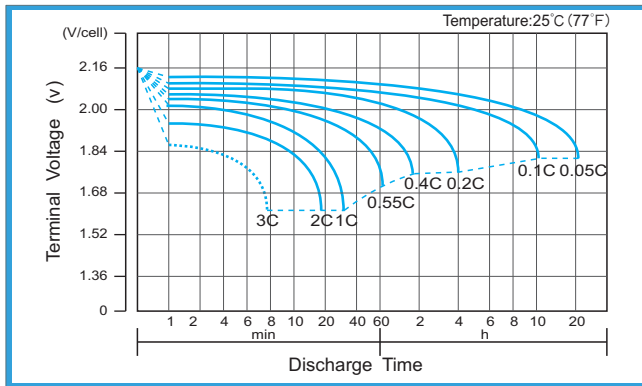
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	366.3	286.6	172.3	106.2	64.5	47.7	39.0	33.0	22.4	19.1	9.83
1.65V	364.8	285.0	171.1	105.4	64.0	47.4	38.7	32.8	22.2	19.0	9.77
1.70V	354.1	277.3	166.9	103.1	63.0	46.7	38.1	32.4	21.9	18.8	9.68
1.75V	340.8	267.9	161.9	100.1	61.6	45.7	37.4	31.8	21.6	18.5	9.55
1.80V	321.3	254.2	154.7	96.0	59.6	44.4	36.4	31.0	21.1	18.1	9.37
1.85V	294.7	235.4	144.8	90.7	57.1	42.6	35.0	29.9	20.4	17.5	9.14

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

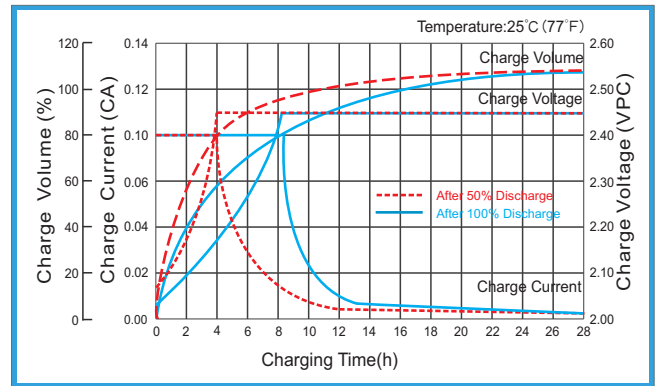
DC12-90 (12v90Ah-10HR)



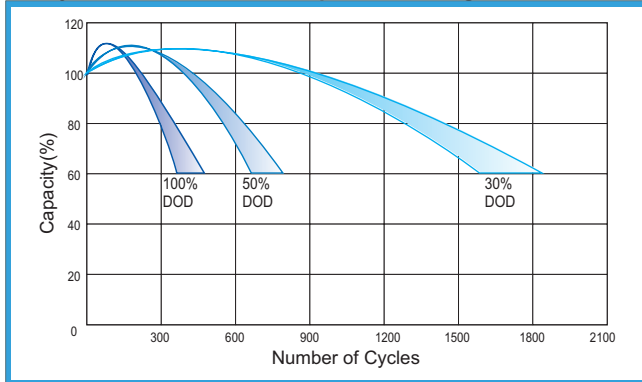
Discharge Characteristics Curve



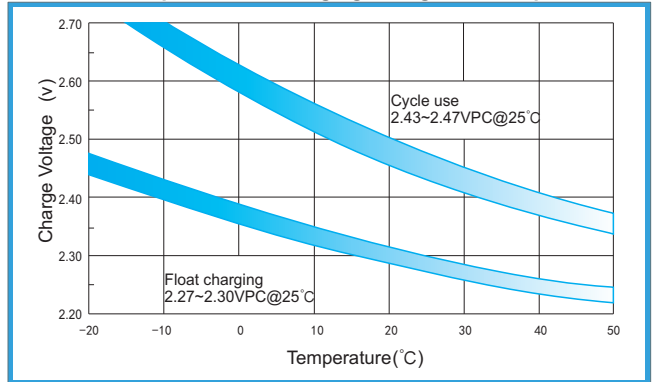
Charge Characteristic Curve for Cycle Use(IU)



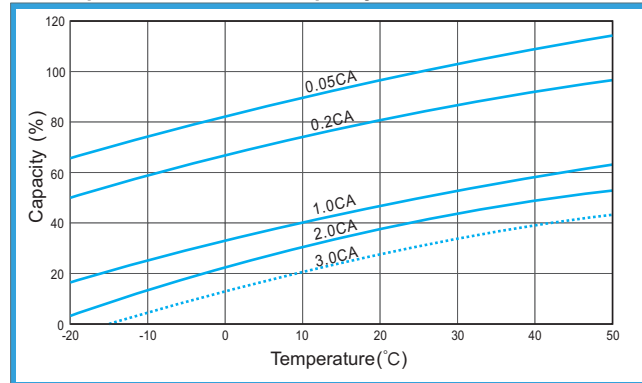
Cycle Life in Relation to Depth of Discharge



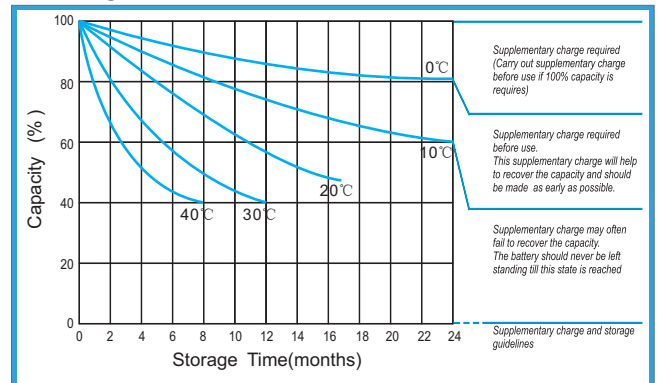
Relationship Between Charging Voltage and Temperature



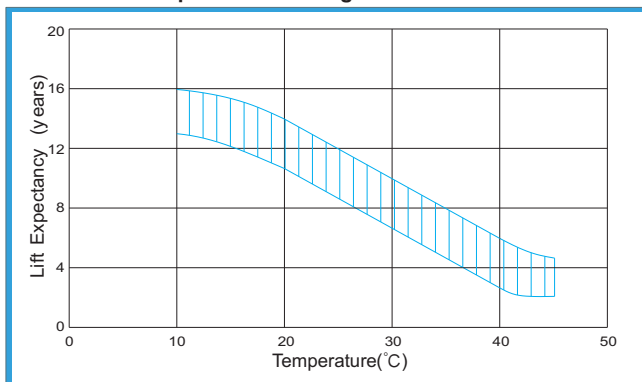
Temperature Effects on Capacity



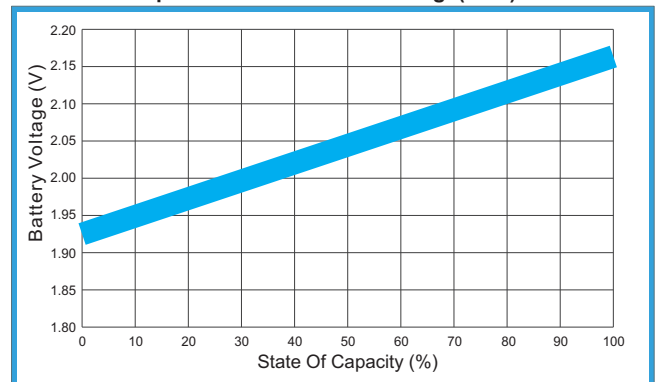
Storage Characteristics



Effect of Temperature on Long Term Life



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



(Note) All above information shall be changed without prior notice, AxiWin reserves the right to explain and update the latest information.