



EV6-210 (6V210Ah)

EV (Electric Vehicle) series is specially designed for frequent deep cycle discharge. By using the specially designed active material and strong grids, the EV series battery offers reliable performance in high load situations and can deliver more than 300 cycles at 100% DOD. Suitable for mobility scooters, electric wheel chairs, golf buggies etc.



Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	210Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 32.0 Kg(Tolerance $\pm 2\%$)
Max. Discharge Current	2100A (5 sec)
Internal Resistance	Approx. 2.2 m Ω
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C \pm 5°C
Float charging Voltage	6.8 to 6.9 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	63 A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F12
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



MH28539



G4M20206-0910-E-16



CERTIFICATE

Postcode: 421001

is in conformity with

ISO 14001:2004 Standard



CERTIFICATE

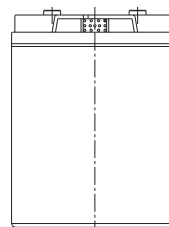
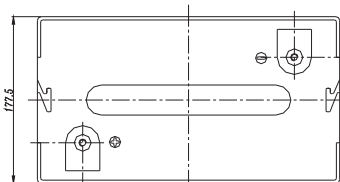
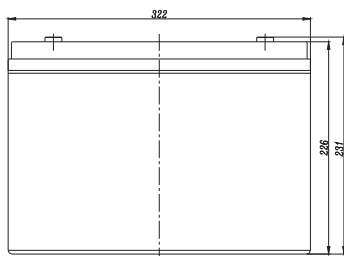
Postcode: 421001

is in conformity with

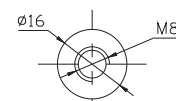
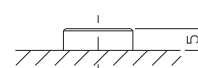
OHSAS 18001:1999 Standard

Dimensions

Unit: mm Dimension: 322(L) \times 178(W) \times 231(H)



Terminal F12



Constant Current Discharge Characteristics: A (25°C)

F.V./Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
4.80 V	750.8	552.8	407.9	238.7	136.5	83.26	56.16	46.69	37.21	26.85	21.85	11.57
5.00 V	729.1	526.0	399.5	234.6	133.8	82.64	55.73	46.48	36.98	26.63	21.64	11.35
5.10 V	707.5	507.4	393.2	230.3	130.4	82.01	54.68	46.26	36.75	26.42	21.42	11.14
5.25 V	635.3	468.2	374.4	228.5	127.7	81.39	53.41	45.83	36.29	26.20	21.21	10.92
5.40 V	573.4	426.9	345.1	224.6	123.9	79.92	52.52	44.75	36.01	25.76	21.02	10.81
5.55 V	489.6	381.6	309.6	210.3	119.5	76.38	51.62	42.59	35.11	24.67	20.77	10.37

Constant Power Discharge Characteristics: W(25°C)

F.V./Time	5 MIN	10 MIN	15 MIN	30 MIN	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
4.80 V	3960	2973	2257	1366	788.7	494.2	333.9	278.3	222.9	160.3	131.1	71.25
5.00 V	3882	2882	2220	1349	786.8	492.6	332.5	277.9	221.2	159.5	130.3	70.01
5.10 V	3838	2806	2204	1338	780.7	489.6	327.4	277.3	220.5	158.5	129.1	68.71
5.25 V	3494	2613	2136	1344	765.3	488.1	320.1	274.7	218.4	157.2	127.8	67.42
5.40 V	3182	2408	1974	1322	743.7	480.8	316.3	268.5	216.1	154.6	126.6	66.12
5.55 V	2795	2198	1812	1245	717.5	460.1	310.9	255.5	211.0	148.0	124.9	64.22

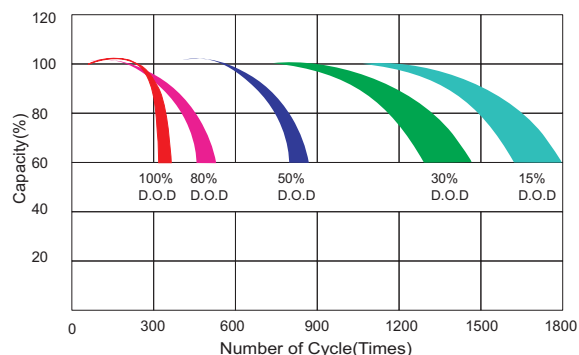
All mentioned values are average values (Tolerance $\pm 2\%$).

EV6-210

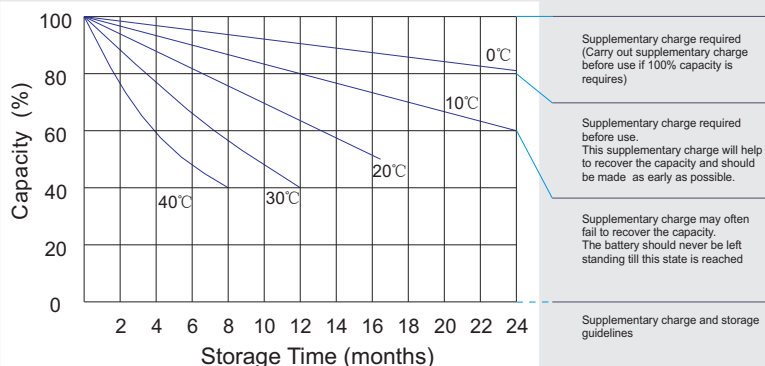
6V210Ah



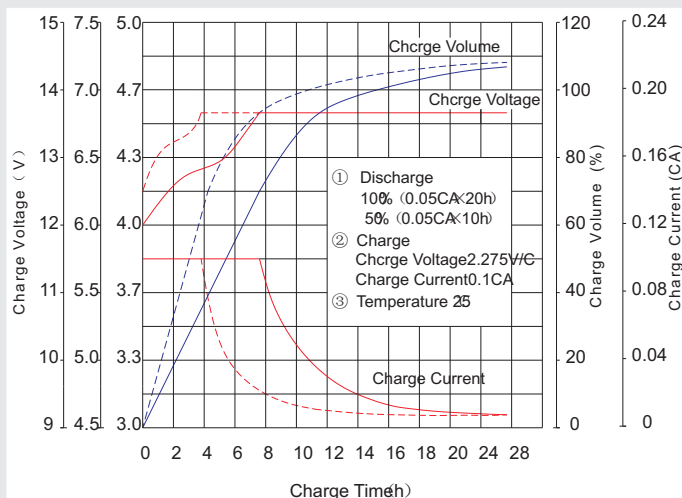
Life characteristics of cyclic use



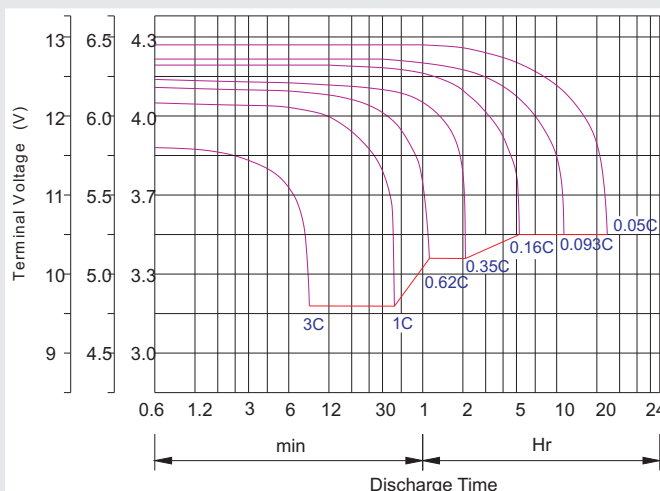
Storage characteristic



Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge C current V S. Discharge V oltag

Final Discharge Voltage V /cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4-2.45V/cellx24h, Max. Current 0.3C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.3Cx4h

Maintenance & Cautions

Cycle service

※ Avoid battery over discharge, especially battery series connection use.

※ Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1-1.15 times discharge capacity.

※ Effect of temperature on cycle charge voltage: -4mV/Cell.

※ There are a number of factors that will affect the length of cyclic service.

The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.

Generally speaking, the most important factors is depth of discharge.