



RA12-225 (12V225Ah)

RA12-225 is a general purpose battery with 10 years floating design life, meet with IEC, JIS .BS and Eurobat standard. With heavy duty grid, thickness plates, special additives, RA series battery have long and reliable standby service life. Our RA Series batteries keep high consistent for better performance in series usage.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	225Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 65 Kg
Max. Discharge Current	2250A (5 sec)
Internal Resistance	Approx. 3.8 mΩ
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
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	67.5A
Equalization and Cycle Service	14.6 to 14.8 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 F16
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



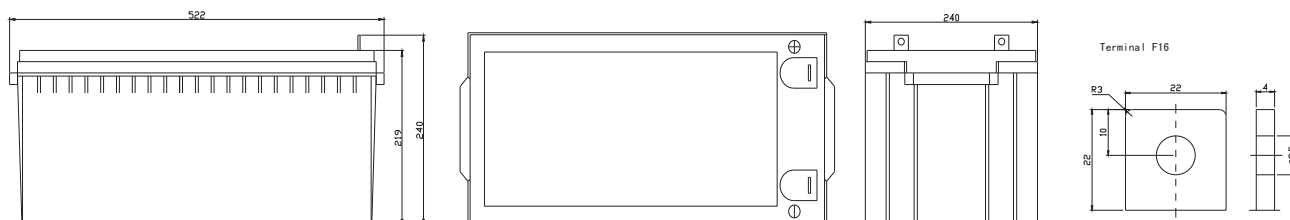
G4M20206-0910-E-16



ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 522(L)×240(W)×219(H)



Constant Current Discharge Characteristics: A (25°C)

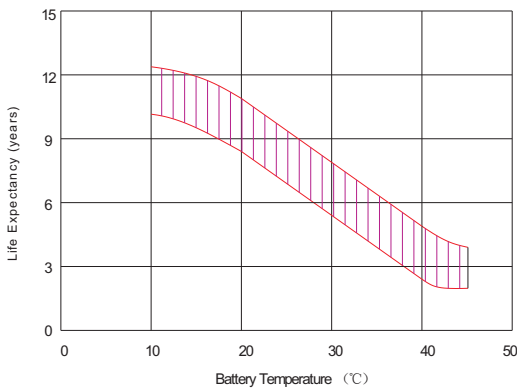
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	613.3	459.4	387.8	235.8	146.3	87.5	60.5	49.6	40.6	27.9	23.6	13.0
10.0V	595.5	437.1	379.8	231.9	145.6	86.9	60.3	49.3	40.3	27.7	23.4	12.8
10.2V	577.9	421.7	373.9	229.8	144.2	86.2	59.8	49.1	40.1	27.5	23.2	12.5
10.5V	518.9	389.1	356.0	224.1	142.9	85.5	59.6	48.7	39.6	27.3	23.0	12.3
10.8V	468.4	354.8	328.1	214.2	139.5	84.0	57.9	47.5	38.9	26.8	22.7	12.1
11.1V	399.9	317.1	294.3	200.7	132.5	80.3	55.4	45.2	37.2	25.7	22.0	11.3

Constant Power Discharge Characteristics: W(25°C)

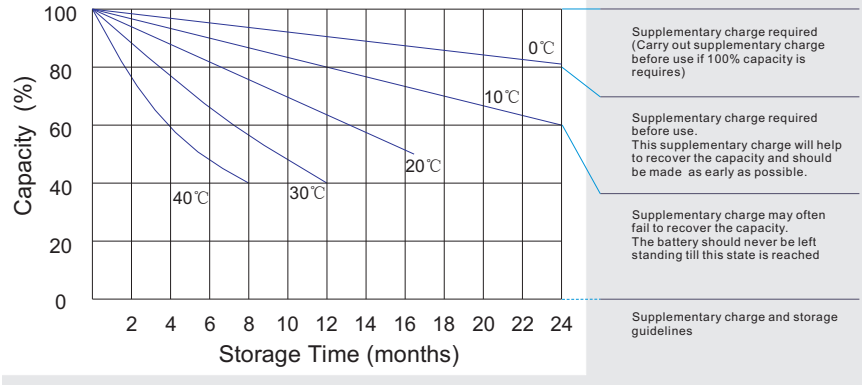
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.6V	6343	4892	4266	2688	1690	1031	720	591	484	334	282	156
10.0V	6218	4742	4197	2655	1686	1026	720	590	483	332	281	153
10.2V	6147	4617	4150	2636	1673	1020	717	589	481	330	278	150
10.5V	5596	4300	3958	2575	1658	1012	714	583	475	327	275	147
10.8V	5097	3963	3658	2468	1627	1000	695	570	467	322	273	145
11.1V	4477	3583	3293	2318	1558	962	665	543	447	308	264	136

All mentioned values are average values.

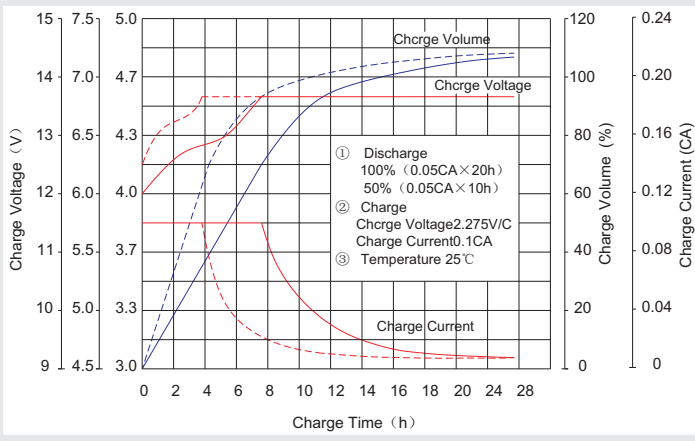
Effect of temperature on long term float life



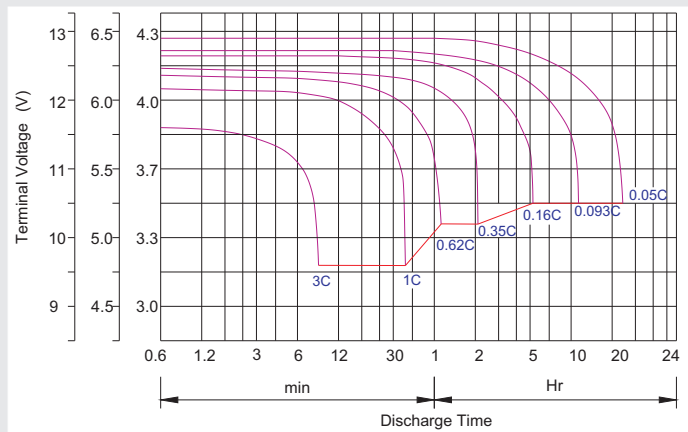
Storage characteristic



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 Current VS. Discharge Voltage

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 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.