RITAR®

RL2-450(2V450Ah)

Specification

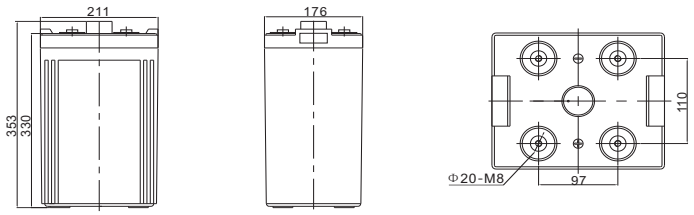
Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	450Ah@10hour-rate to 1.80V per cell @25℃
Weight	Approx. 28.0 Kg (Tolerance±2.0%)
Internal Resistance	Approx. 0.65 mΩ
Terminal	F10(M8)
Max. Discharge Current	2250A (5 sec)
Short Circuit Current	3630A
Design Life	20 years (Float charging)
Recommended Maximum Charging Current	90 A
Reference Capacity	C1 278.0AH C3 348.9AH C5 393.5AH C10 450.0AH
Standby Use Voltage	2.27 V~2.30 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	2.43 V~2.47 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	RITAR 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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

RL series is a general purpose battery with 20 years design life in float service. It meets with heavy duty grids, thicker plates, special additives and advanced AGM valve regulated technology, the RL series battery provides consistent performance and long service life. The new grid design effectively reduces the internal resistance, which provides higher specific energy density and excellent high rate discharge characteristics. It is suitable for communications back-up power and EPS/UPS applications.

MH28539

G4M20206-0910-E-16

Dimensions



F10 TERMINAL

Length	211±2mm (8.31 inches)
Width	176±2mm (6.93 inches)
Height	330±2mm (13.0 inches)
Total Height	353±2mm (13.9 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	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	706.3	444.1	278.0	168.1	123.0	99.1	82.7	57.0	47.9
1.65V	687.8	434.3	272.8	165.7	121.4	97.9	81.7	56.4	47.5
1.70V	663.5	421.4	266.0	162.4	119.2	96.2	80.4	55.7	46.9
1.75V	631.8	404.6	257.0	158.1	116.3	94.1	78.7	54.7	46.1
1.80V	591.1	382.7	245.3	152.4	112.5	91.2	76.5	53.3	45.0
1.85V	539.6	354.8	230.2	145.0	107.5	87.4	73.6	51.5	43.6

Constant Power Discharge Characteristics : WPC (25℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	1283	830.4	526.9	321.1	236.2	191.1	161.4	112.1	94.4
1.65V	1268	820.7	520.9	318.4	234.3	189.7	160.1	111.2	93.7
1.70V	1230	799.1	509.4	312.9	230.6	186.9	157.8	109.7	92.6
1.75V	1183	771.0	494.5	305.8	225.8	183.3	154.8	107.9	91.1
1.80V	1118	732.8	474.4	296.0	219.2	178.3	150.7	105.3	89.1
1.85V	1031	684.1	447.6	282.8	210.3	171.5	145.3	101.9	86.4

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

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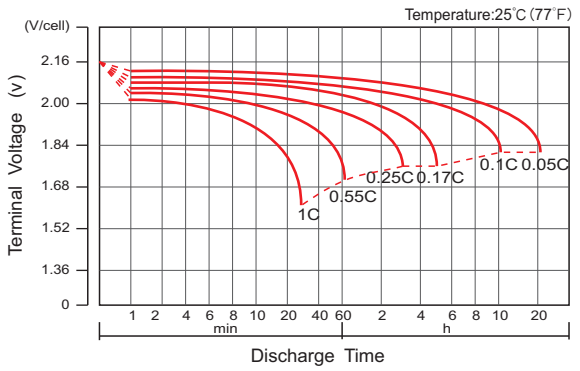
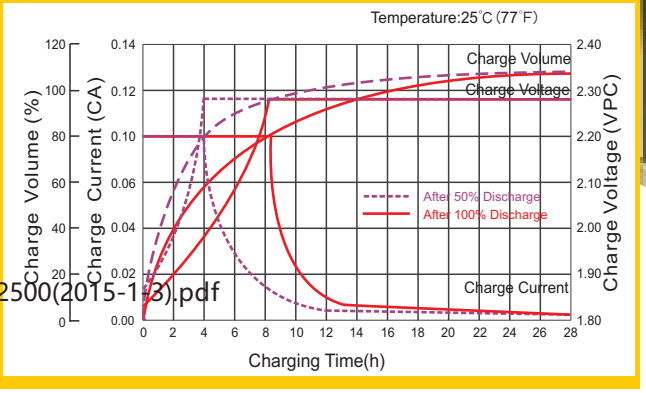
Discharge Characteristics Curve



Charge Characteristic Curve For Standby Use



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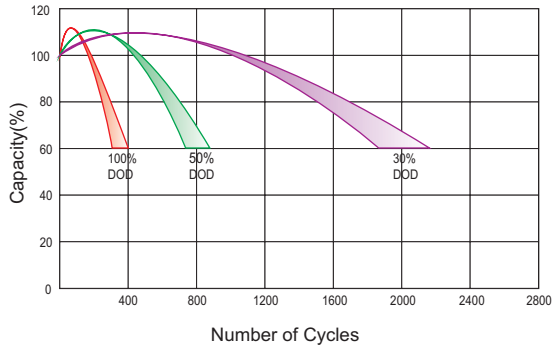
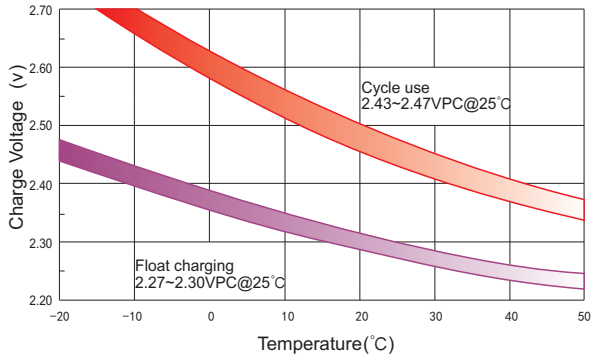
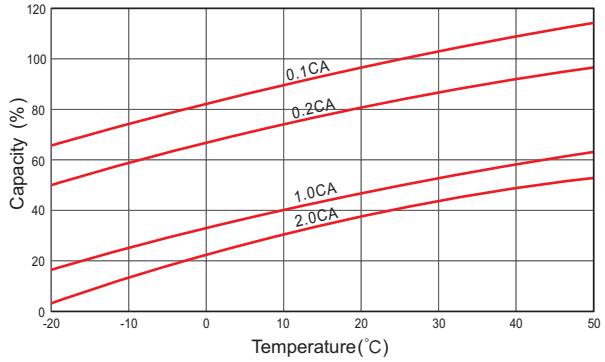
Cycle Life In Relation To Depth Of Discharge



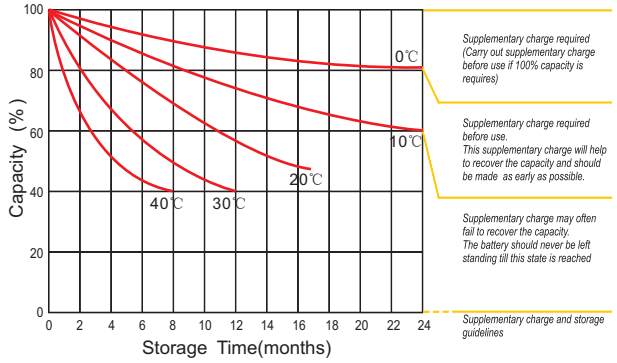
Relationship Between Charging Voltage And Temperature



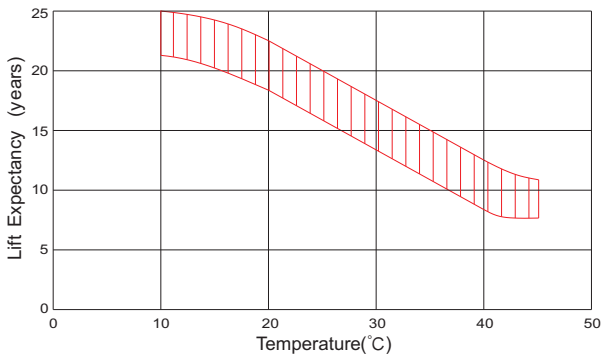
Temperature Effects On Capacity



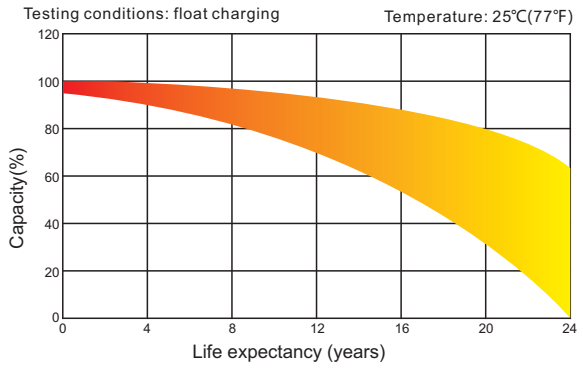
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



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

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