



RL2-400(2V400Ah)

Specification

Cells Per Unit	1
Voltage Per Unit	2V
Nominal Capacity	400Ah@10hour-rate to 1.80V per cell @25°C
Weight	Approx. 19.0 Kg (Tolerance $\pm 5.0\%$)
Internal Resistance	$\leq 0.68 \text{ m}\Omega$ (Full Charge Condition @25°C)
Terminal	Default F10(M8)
Max. Discharge Current	2000A (5 sec)
Short Circuit Current	3400A
Design Life	20 years
Max. Charging Current	80 A
Reference Capacity	C ₁ 220.0Ah C ₃ 300.0Ah C ₅ 340.0Ah C ₁₀ 400.0Ah
Standby Use Voltage	2.27 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.43 V~2.47 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 $\pm 5^\circ\text{C}$
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging be stored for up to 6 months at 25°C and then recharging than 3% at 25°C. 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.



ISO 9001



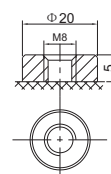
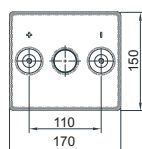
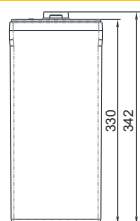
ISO 14001



ISO 45001



Dimensions



F10 TERMINAL

Length	170 $\pm$ 2mm (6.69 inches)
Width	150 $\pm$ 2mm (5.91 inches)
Height	330 $\pm$ 2mm (13.0 inches)
Total Height	342 $\pm$ 2mm (13.5 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	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	390.8	244.4	150.5	112.8	90.8	75.5	50.7	42.2
1.65V	375.2	236.0	145.7	109.3	88.4	73.5	50.1	41.7
1.70V	358.6	228.3	140.9	106.4	86.0	71.6	49.4	41.1
1.75V	342.8	220.0	136.0	103.2	83.8	69.8	48.7	40.5
1.80V	327.6	211.6	131.1	100.0	81.3	68.0	47.9	40.0
1.85V	282.2	189.8	120.1	92.4	75.6	63.4	44.9	37.7

Constant Power Discharge Characteristics : W/Cell (25°C)

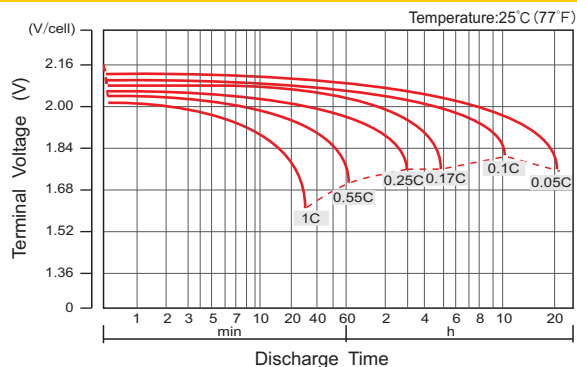
F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR
1.60V	709.8	459.3	285.3	215.5	174.4	145.5	99.0	83.0
1.65V	688.6	446.1	277.5	209.7	170.3	142.2	98.1	82.1
1.70V	664.8	434.3	269.8	204.9	166.3	139.0	96.8	80.9
1.75V	642.0	420.9	261.6	199.6	162.6	136.0	95.7	80.0
1.80V	619.8	407.2	253.5	194.2	158.5	132.9	94.3	79.0
1.85V	539.1	367.4	233.5	180.4	147.9	124.4	88.7	74.5

(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 C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

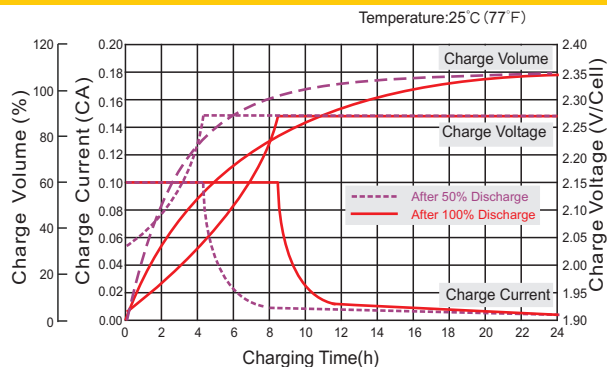
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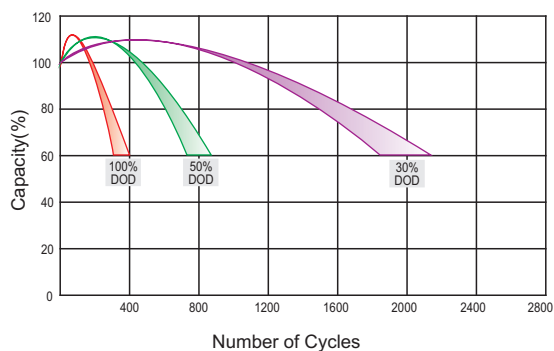
Discharge Characteristics Curve



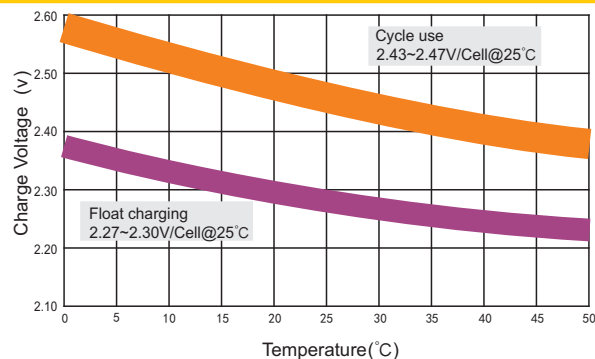
Charge Characteristic Curve For Standby Use(IU)



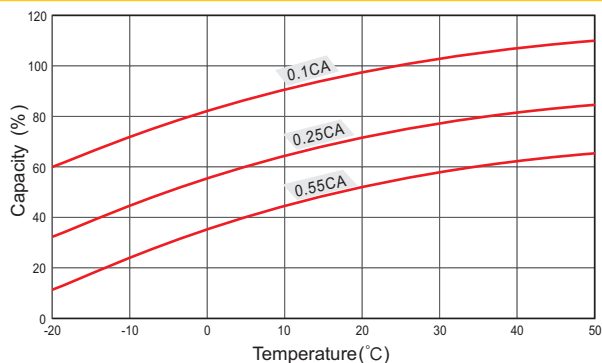
Cycle Life In Relation To Depth Of Discharge



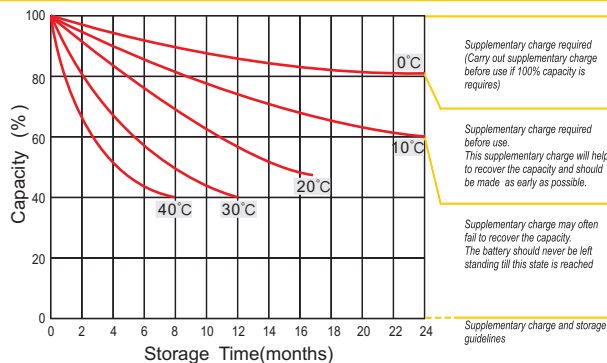
Relationship Between Charging Voltage And Temperature



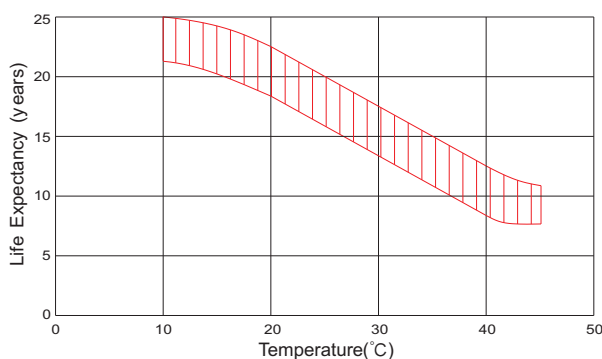
Temperature Effects On Capacity



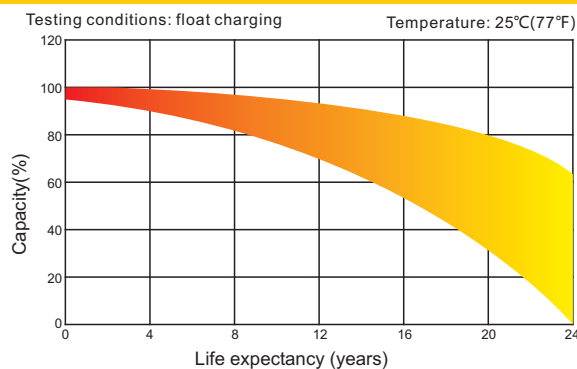
Storage Characteristics



Effect Of Temperature On Long Term Life



Charge Characteristic Curve For Standby Use



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