FirstPower Technology Co., Ltd.

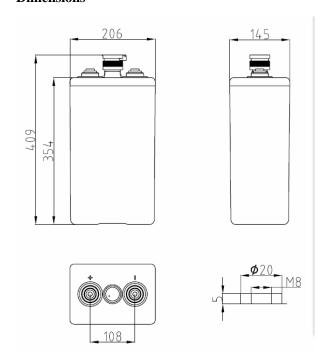
Specifications

Nomii	nal V	/oltage	2 V						
Capacity (20°C)	10	HR(1.80V)	300Ah						
	31	HR(1.75V)	230 Ah						
(200)	1]	HR(1.60V)	168Ah						
Battery		Dry	18.5kg (40.8lbs)±5%						
Weigh		Wet	24.5kg (54.0lbs)±5%						
Acid Weig	ht (c	l=1.24kg/l)	Approx.5kg (11.0lbs)						
Terminal	type	/material	T10 / Copper						
		istance ed, 25°C)	Approx. 0.9 mΩ						
Self-dischar	rge	1 month	Remaining Capacity: 86%(20°C)						
	al op pera	erating ture	20°C±5°C(68°F±9°F)						
Operating	3	Discharge	-15℃~50℃(5°F~122°F)						
temperatu		Charge	10°C ~45°C (50°F ~113°F)						
range		Storage	10°C ~30°C (50°F ~86°F)						
		Constant current	Charge the battery at $0.05 C_{10}$ for 72h.						
Initial charging		Constant voltage	Charge the battery at 0.1 C ₁₀ to 2.35v/cell; then Charge the battery with 2.35v/cell until the whole charge time up to 100h.						
Mark of Fully charged		Constant current	The battery voltage and density of electrolyte remain stable over 2h at the end of charging, and strong bubbles generated within the electrolyte						
		Constant voltage	The charging current and density of electrolyte kept constant for more than 3h at the end of the charge; and the charging current is about 0.002~0.005 C10 amp.						
Supplem	enta	ry charge	Charge the battery at $0.05 C_{10}$ to fully charged.						
Equaliz	ing o	charging	Charge the battery with 2.40v/cell for 48h.						
Battery	Float charging		Charge the battery with 2.23V (25°C); Equalizing charging the battery when the abnormal occurs						
operation	Charge& discharge Backup		Equalizing charging the battery after discharged and per 3months						
			Supplementary charge the battery per 3 or 6 months.						
Maximum	char	ging current	75.0A(0.25C ₁₀)						
		ge current	1500A(5 sec.)						
Designo	ed cy	ycle life	1600@80% DOD (30℃)						
		ating life	20 years(20°C)						

CHARACTERISTICS:

- ◆ Tubular Positive Plate;
- ◆ Flooded Battery;
- ◆ Porous Rubber and Porous PVC Separator
- ◆ Transparent Container.

Dimensions



Constant Current Discharge Characteristics (A, 25°C)

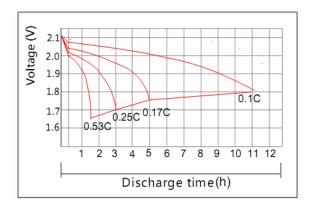
- · · · · · · · · · · · · · · · · · · ·													
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	234	162	99.0	77.1	61.8	54.3	46.2	35.4	30.3	16.4	14.3		
1.75V	228	158	97.5	76.5	61.5	54.0	45.9	35.1	30.3	16.4	14.2		
1.80V	220	153	95.1	74.1	59.7	52.5	44.4	33.9	30.0	16.2	14.1	7.23	
1.85V	208	144	89.4	69.6	56.1	49.5	41.7	31.8	28.5	15.5	13.4	7.23	3.00

Constant Power Discharge Characteristics (Watt, 25°C)

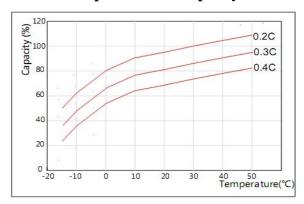
F.V/TIME	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h	24h	48h	120h
1.70V	437	306	191	152	122	107	91.2	69.9	60.6	32.7	28.7		
1.75V	426	300	188	150	121	107	90.3	69.6	60.0	32.7	28.5		
1.80V	412	291	183	146	117	103	87.6	67.5	59.7	32.4	28.4	14.7	
1.85V	383	270	171	135	109	96.0	81.6	62.7	55.5	30.0	27.0	14.7	6.12

Note: The above characteristics data can be obtained within three charge/discharge cycles.

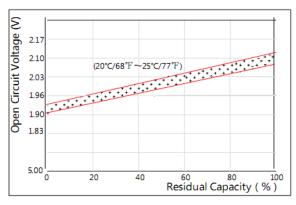
Discharge Characteristics(25°C)



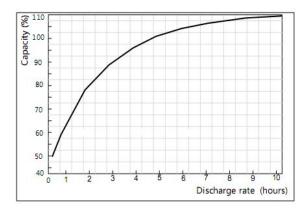
Effect of Temperature on Capacity



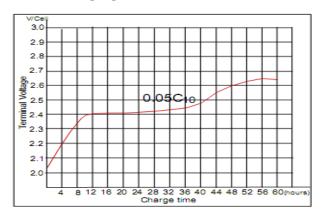
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



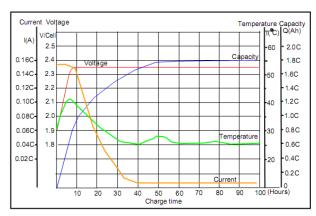
Effect of Discharge rate on Capacity



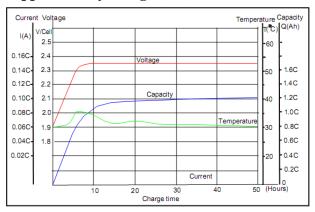
Initial Charging (CC)Characteristics(25°C)



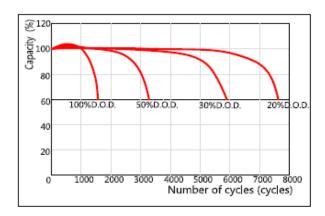
Initial Charging (CV)Characteristics



Supplementary charge (CV) Characteristics



Cycle Life on D.O.D(25℃)



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