ENERPOWER

Serie VCL 1000-2PE (2V-1000Ah)

Overview

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special oneway valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

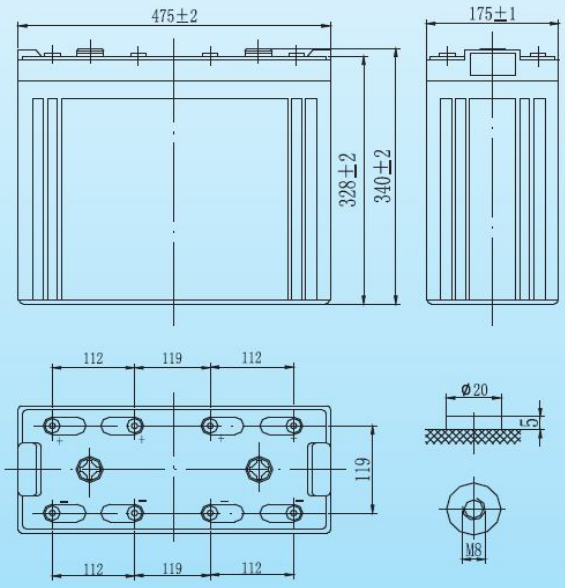
General Features

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density.
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.
- Case and cover available in both standard and flame retardant ABS.

Dimensions and Weight

Length(mm / inch)	475/18.70
Width(mm / inch)	175/6.98
Height(mm / inch)	328/12.91
Total Height(mm / inch)	367/14.5
Approx. Weight(Kg / lbs)	63.5/140.1

* Weight deviation: ± 5%



Total height with removeable cover: 367

Battery Specification

Performance Characteristics	
Nominal Voltage	2V
Number of cell	1
Design Life	20 years
Nominal Capacity 77°F(25°C)	
10 hour rate (100A, 1.8V)	1000Ah
5 hour rate (171A, 1.75V)	855Ah
1 hour rate (589A, 1.6V)	589Ah
Internal Resistance	
Fully Charged battery 77℉(25℃)	≤0.65mOhms
Self-Discharge	
3% of capacity declined per month at 20℃(average)	
Operating Temperature Range	
Discharge	-20~60℃
Charge	-10~60℃
Storage	-20~60℃
Max. Discharge Current 77°F(25°C)	4000A(5s)
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2.45VPC
Maximum charging current	200A
Temperature compensation	-5.0mV/℃
Standby use	2.20-2.30VPC
Temperature compensation	-3.3mV/℃

Discharge Constant Current (Amperes at 77°F25°C)

End Point Volts/Cell	15min	30min	45min	1h	3h	5h	10h
1.60V	--	1010	720	589	248	185	108
1.65V	--	965	692	572	243	181	106
1.70V	--	919	661	553	240	176	104
1.75V	--	871	630	519	238	171	102
1.80V	--	823	597	507	231	164	100

Discharge Constant Power (Watts at 77°F25°C)

End Point Volts/Cell	15min	30min	45min	1h	2h	3h	5h
1.60V	--	1714	1292	1058	684	496	342
1.65V	--	1627	1233	1014	667	482	336
1.70V	--	1540	1171	967	654	472	331
1.75V	--	1451	1108	919	642	464	324
1.80V	--	1360	1044	869	628	452	318

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the mimimum values.All data shall be changed without notice,Vision reserves the right to explain and update the information contained hereinto.

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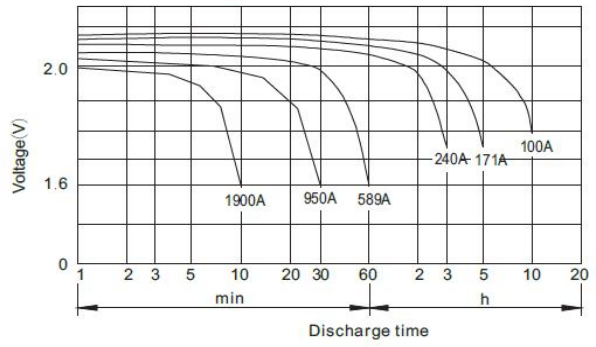
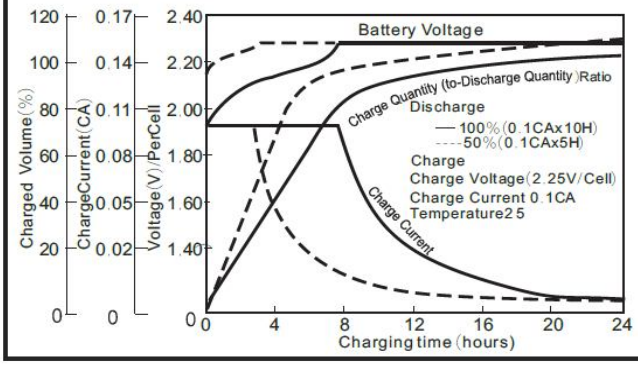
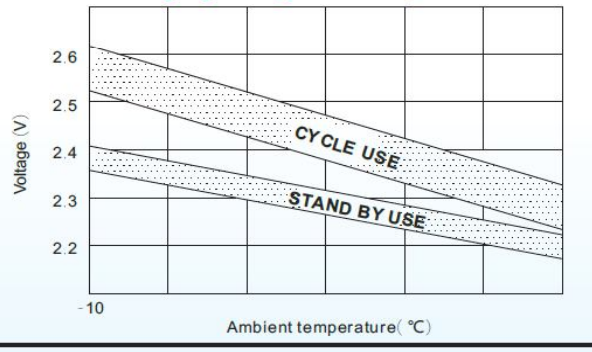
Discharge characteristic (25°C)



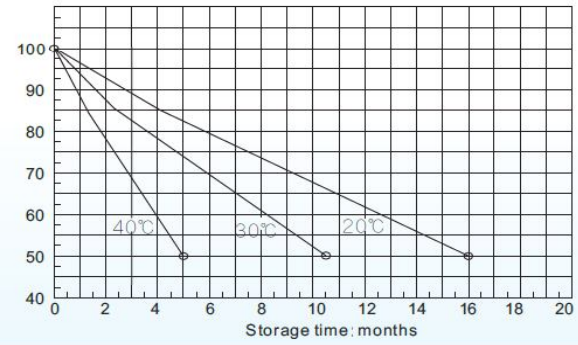
Charging characteristic for standby use



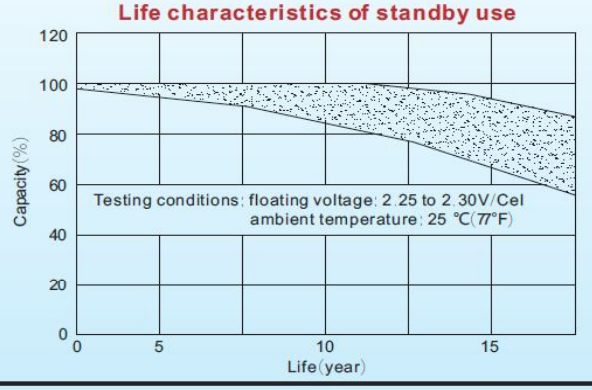
Relationship between charging voltage and temperature



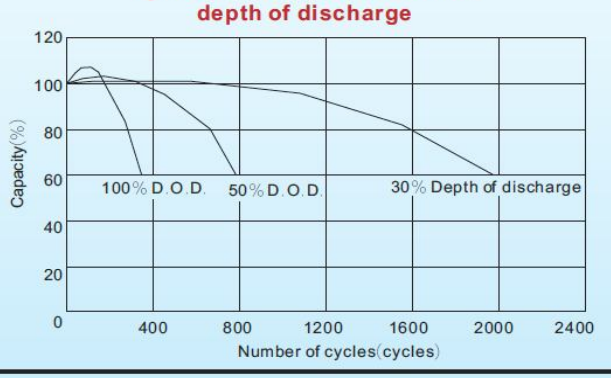
Self-discharge characteristic



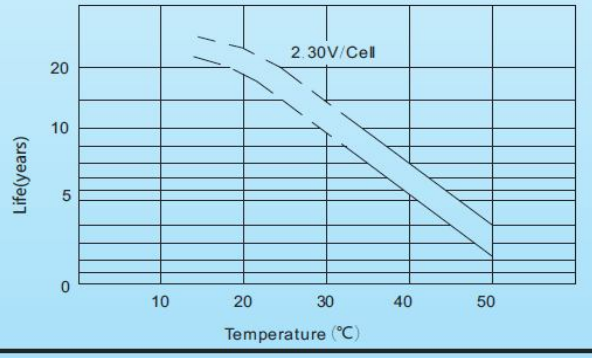
Life characteristics of standby use



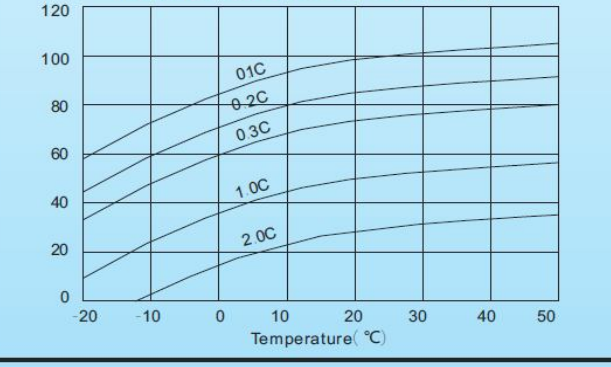
Cycle service life in relation to depth of discharge



Temperature effects on float lif



Temperature effects on capacity



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