DATASHEET

24 OPzV 3000

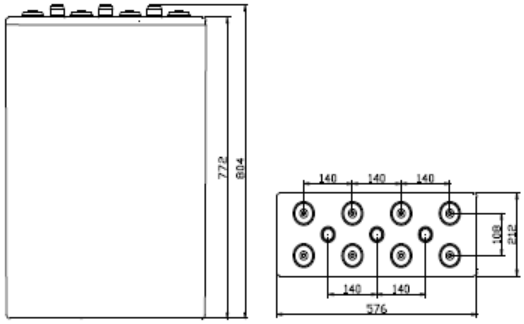
Application

- Solar energy, wind energy
- Electric power, nuclear power
- Communication
- Ship, maritime affairs
- UPS, medical facilities and emergency lighting
- Situation with high environmental protection and energy-saving

Features of performance application

- Designed service life of 20 years
- High cycle service life
- Better temperature resistance performance
- Excellent deep cycle performance
- Superior low current discharge performance
- Stronger constant power discharge capability
- Better charge acceptability
- Better safety performance and reliability
- Modular and personified installation design
- High Performance price/ratio and low yearly operating cost
- Eco-friendly, cycle applicatio

Terminal Dimensions



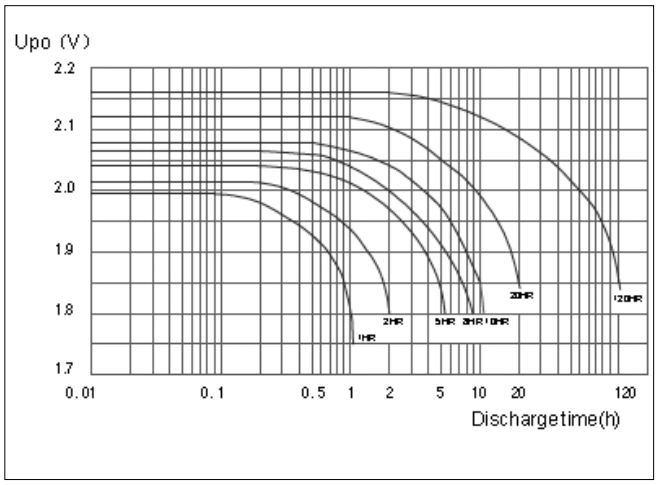
Standards & Certifications

Execution standard:
IEC60896-21/22 DIN40742
BS EN 61427-2002
YD/T 1360-2005
Q/321284KCC 03-2006
Authentication and certificate:
Certificate of Qualification on Perfecting Measurement & Measuring System
GB/T19022-2003
ISO10012:2003ÐIDT
Quality Management System Authentication
GB/T19001-2000
NO.03006Q10002R0M-2
Environmental Management System Authentication
ISO 14001:2004
NO.010607E2024R1M-2
Occupational Health Management System Authentication
GB/T28001-2001
NO.010607S10147R0M-2
Product authentication:
YD/T1360-2005
NO.030074640567R1M
CE authentication
EN 61000-6-3:2001+A11:2004
EN 61000-6-1:2001
National Industrial Product Production License
XK06-044-00012
Product Quality Test Free Certificate
(2006)GM(321630488)
Export product quality license

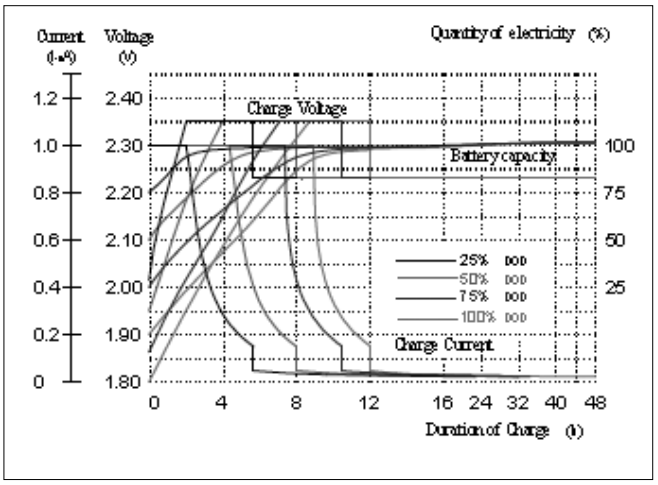
- Electrolyte: primary material adopts Germany gas silicon dioxide, the material will be the thin collosol state when it's injected initially, and it can fill the whole plate space of battery, and each part of plate can react evenly. The flooded electrolyte design can avoid dry up of battery when it's in high temperature and over charged, the thermal capacity is big and heat-elimination is fine, accordingly, thermal runaway can be avoided. The electrolyte is in the gel state in finished battery without flowing, accordingly, leakage and lamination can be avoided.
- Plate: positive plate adopts tubular type plate which can effectively prevent active substance falling, the positive plate frame is molded with multi-component alloy, the crystal particle of alloy structure is tiny and dense, the corrosion-resisting performance is fine and service life is long. Negative plate adopts pasted plate, the grid adopts radiated structure which enhances utilization ratio of active substance and discharge capability of strong current, and the charge reception capability is strong.
- Battery case: it's made of ABS material, corrosion prevention is fine, strength is high, and appearance is beautiful, it can be sealed with lid reliably which can prevent potential leakage risk.
- Separator: adopt special micro-pore PVC-SiO2 separator from Europe AMER-SIL Company, the porosity of separator is big and resistance is low. It has bigger electrolyte storage space.
- Terminal sealing: the built-in copper core lead-base terminal post has stronger current carrying capacity and corrosion resistance. The unique double sealing structure of terminal post can effectively avoid leakage, guarantee reliability of terminal post sealing.
- Safety valve: adopt Germany technology, constant opening and closing valve, high reliability, the accumulator case expansion, damage and electrolyte dry up can be avoided.

Battery Model	24 OPzV 3000
Rated voltage	2V
Capacity(25 ˚C)	3000Ah @ 10hr to 1.80V per cell
Weight	230kg (506 lb)
Reference internal Resistance (charged) Short circuit current	0.19mOhm@ 25°C(77°F) 10789A (0.1S reference value)
Max discharge current	9000A (5sec)
Self-discharge	<20% 180 days@ 25°C (77°F)
Temperature range	Application: -20°C~50°C(-4°F~122°F) Storage: 0°C~20°C(32°F~68°F) Recommendation: 20°C~25°C(68°F ~ 77°F)
Max charge current	600A
Charge voltage @ 25 ˚C	Float charge: 2.23V, average charge: 2.35V Temperature compensation factor: -3 mV/°C
Terminal output	M10 copper terminal (HPb59-1)
Recharge time	See figure 2

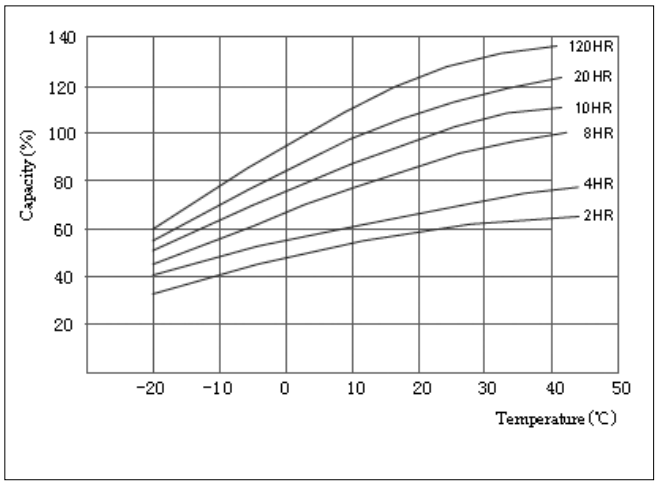
Discharge Characteristic



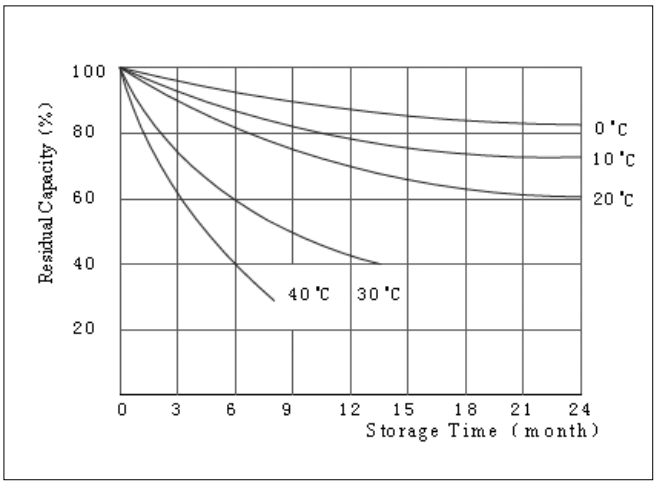
Constant voltage charge



Relationship of Capacity and Temperature



Relationship of Residual and Storage



Constant current discharge ratings-amperes at 25 ˚C

	5MIN	10MIN	15MIN	30MIN	45MIN	1HR	1,5HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	100HR	120HR
1.90V	2033	1805	1319	1200	1170	1044	930	780	614	497	423	308	255	136,6	35,62	30,21
1.85V	2313	1900	1558	1440	1240	1188	1020	864	680	548	466	326	272	150,2	37,50	31,81
1.80V	2423	2322	1996	1848	1525	1476	1290	1012	780	627	526	360	310	157,7	38,81	32,92
1.75V	2623	2592	2376	2112	1799	1650	1419	1080	816	653	544	370	315	164,0	39,78	33,74

Constant power discharge ratings-watts at 25 ˚C

	5MIN	10MIN	15MIN	30MIN	45MIN	1HR	1,5HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR	100HR	120HR
1.90V	4212	3564	1697	1603	1559	1515	1412	1309	1087	933	811	588	509	273,2	71,24	60,42
1.85V	4477	3712	2332	2039	1911	1782	1635	1487	1223	1032	893	640	550	297,4	74,25	62,98
1.80V	4635	4450	3144	2903	2684	2465	2156	1846	1485	1224	1036	731	615	309,1	76,07	64,52
1.75V	4794	4739	3680	3308	3031	2753	2402	2050	1607	1292	1075	731	615	316,5	76,78	65,12