



MSJ series MSJ-400



Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.
Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

General Design for Standby Power Applications

【Design Life】

Up to 20 Years in Standby Service at 25°C
Eurobat (20°C) : >12 YEARS VERY LONG LIFE

【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)
Discharge : -15°C ~ 50°C (5°F~122°F)
Charge: -15°C ~ 40°C (5°F~104°F)
Storage: -15°C ~ 40°C (5°F~104°F)

【Float Charging Voltage】

2.21 ~ 2.25 VDC/Unit at 25°C (77°F)

【Equalization Charging Voltage】

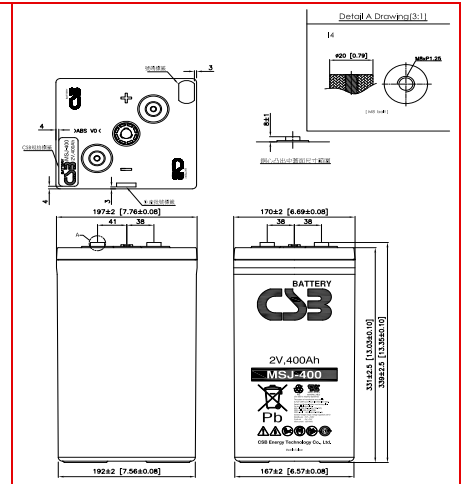
2.35 VDC/Unit at 25°C (77°F)

【Self Discharge】

Less than 10% after 90 days, can be stored up to 6 months at 25°C (77°F); Fully recharging is required before usage, and charged sooner if stored at higher temperature than 25°C (77°F).

Specification

Nominal Voltage	2V (single cell per unit)		
Nominal Capacity	400 Ah @10hr-rate to 1.80V per cell @25°C (77°F)		
Weight	Approx. 28.60 Kg (63.03 lbs)		
Maximum Discharge Current	2400 A (5sec)		
Internal Resistance	Approx. 0.30 mΩ		
Short Circuit Current	6065A		
Maximum Charge Current	120 A		
Terminal types	I4 thread copper alloy terminal to accept M8 bolt		
Terminal tightening torque	126±25 Kgf·cm / 109±22 Lbf·in / 12.3±2.5 N·m		
Container Material	Flame Retardant ABS (UL 94-V0)		
Dimensions	Depth (D)	197.0±2.0 mm	7.76±0.08 inch
	Width (W)	170.0±2.0 mm	6.69±0.08 inch
	Container height (h)	331.0±2.5 mm	13.03±0.10 inch
	Overall Height (H)	339.0±2.5 mm	13.15±0.10 inch



Constant Current Discharge Characteristics Unit: A (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	2HR	2.5HR	3HR	5HR	6HR	8HR	10HR	20HR	24HR
1.60V	711	544	316	180	150	129	81.2	68.7	54.8	46.1	23.1	19.2
1.67V	637	517	308	178	148	128	80.4	68.0	54.4	45.8	22.9	19.1
1.70V	599	500	302	177	147	127	79.9	67.6	54.1	45.6	22.8	19.0
1.75V	539	455	287	173	144	125	78.6	66.6	53.4	45.0	22.5	18.7
1.80V	461	403	265	165	139	120	76.1	64.9	52.1	43.9	22.0	18.3
1.83V	407	370	248	158	133	115	73.6	63.2	50.9	42.9	21.5	17.9

Constant Power Discharge Characteristics Unit: W (25°C, 77°F)

F.V/Time	15MIN	30MIN	60MIN	2HR	2.5HR	3HR	5HR	6HR	8HR	10HR	20HR	24HR
1.60V	1183	938	574	344	286	246	161	138	108	85.8	42.9	35.8
1.67V	1100	902	563	341	284	244	160	137	107	85.3	42.6	35.5
1.70V	1056	879	555	339	282	243	159	137	107	85.0	42.5	35.4
1.75V	965	821	532	332	277	239	157	135	105	83.8	41.9	34.9
1.80V	866	742	496	319	267	231	154	132	102	81.6	40.8	34.0
1.83V	780	692	468	306	258	224	149	129	99	79.5	39.7	33.1

Please refer to the official site for the latest rating confirmation. URL: www.csb-battery.com

Issued: 201112

Sales Offices

希世比能源科技股份有限公司
CSB Energy Technology Co., Ltd.

BUSINESS HEADQUARTERS

Tel: +886-2-2880-5600
Fax: +886-2-2888-3300

USA OFFICE

Tel: +1-817-244-7777 / 1-(800)3-CSB-USA (272872)
Fax: +1-817-244-4445

SHENZHEN OFFICE (CHINA)

Tel: +86-755-8831-6488/6775/6075
Fax: +86-755-8831-6548

EUROPE (EMEA) OFFICE

Tel: +31(0)180-418-140
Fax: +31(0)180-418-327

SHANGHAI OFFICE (CHINA)

Tel: +86-21-5046-1622/0833/0094
Fax: +86-21-5046-1046

Recognized under UL 1989,
and certified by ISO 9001, 14001, 45001, 50001.



TAIPEI OFFICE

Tel: +886-2-2880-5600
Fax: +866-2-2888-3300

BEIJING OFFICE (CHINA)

Tel: +86-10-6597-8065/8165/8265
Fax: +86-10-6597-8565