



MSV series MSV-1000



Valve Regulated Lead Acid Battery

Maintenance-Free Sealed Lead Acid Battery.

Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99%.

Design for Standby Power Applications

【Design Life】

Up to 15 Years in Standby Service at 25°C

Eurobat (20°C) : 12 years and longer, Long Life

【Operating Temperature Range】

Nominal Operating Temperature : 25°C (77°F)

Discharge : -20°C ~ 50°C (-4°F~122°F)

Charge: 0°C ~ 40°C (32°F~104°F)

Storage: -20°C ~ 40°C (-4°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)

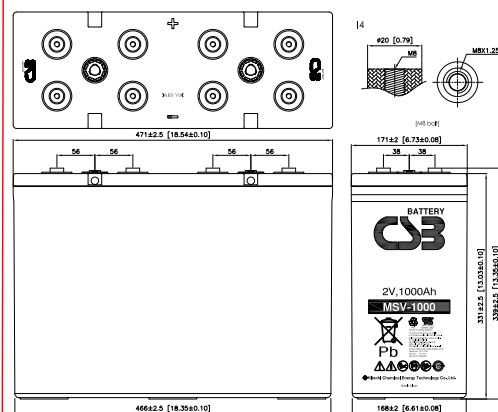
【Self Discharge】

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	1000 Ah @10hr-rate to 1.80V per cell @25°C (77°F)	
Weight	Approx. 64.40 Kg (141.94 lbs)	
Maximum Discharge Current	6000 A (5sec)	
Internal Resistance	Approx. 0.38 mΩ	
Short Circuit Current	--	
Maximum Charge Current	300 A	
Terminal type	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)	471.0±2.5 mm 18.54±0.10 inch
	Width (W)	171.0±2.0 mm 6.73±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	3HR	4HR	5HR	6HR	8HR	10HR	20HR	24HR
1.60V	1423	979	648	383	288	228	193	168	133	113	56.5	47.1
1.67V	1298	933	618	370	273	220	185	160	130	110	55.0	45.8
1.70V	1206	910	608	363	270	218	183	158	128	108	54.0	45.0
1.75V	1052	839	560	343	253	206	173	150	123	103	51.5	42.9
1.80V	915	734	528	330	243	198	168	148	120	100	50.0	41.7
1.83V	795	649	488	310	233	188	160	140	114	97.5	48.8	40.6

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

F.V/Time	15MIN	30MIN	60MIN	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR	24HR
1.60V	2332	1722	1153	693	520	418	353	310	250	210	105	87.5
1.67V	2134	1648	1150	688	513	413	350	308	248	208	104	86.7
1.70V	2033	1595	1113	673	503	410	348	303	243	205	103	85.4
1.75V	1842	1489	1040	643	483	393	333	290	238	200	100	83.3
1.80V	1679	1333	980	618	463	378	323	283	230	198	99.0	82.5
1.83V	1430	1156	903	580	443	360	308	270	220	190	95.0	79.2

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

Issued: 200218

Sales Offices

日立化成能源科技股份有限公司
Hitachi Chemical 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, 8831-6775

Fax: +86-755-8831-6075

EUROPE (EMEA) OFFICE

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

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

SHANGHAI OFFICE (CHINA)

Tel: +86-21-5046-1622, 5046-0833

Fax: +86-21-5046-1046

TAIPEI OFFICE

Tel: +886-2-2880-5600

Fax: +866-2-2888-3300

BEIJING OFFICE (CHINA)

Tel: +86-10-5820-5336, 5820-5338

Fax: +86-10-5820-3053

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

