SB12260 - 12V26Ah - General Purpose/Standby Series





SB12260 is a General Purpose/Standby Series battery with 6-8 years of design life in float service. It meets with IEC and JIS standards. With up-dated AGM valve regulated technology and high purity raw materials, the SB series battery has a reliable standby service life. It is suitable for UPS/EPS, medical equipment, emergency light and security systems applications.

Specifications

- Nominal Voltage: 12 volts
- Nominal Capacity at 77°F/25°C
 - 20 Hour rate 26.2 Ah
 - 10 Hour rate 25.2 Ah
- 5 Hour rate 22 Ah
- 1 Hour rate 16.1 Ah
- Number of cells 6
- Design Life 6-8 year(s)
- Internal resistance ±10 mΩ
- Operating Temperature Range (See Charging recommendations) Discharge: -40°C to 60°C Charge: -20°C to 50°C

Storage: -20°C to 60°C

- Max. Discharge current 260 A (5sec)
- Float Charge 13.7 to 13.9 Volts @ 25°C
- Cyclic charge 14.6 to 14.8 Volts @ 25°C
- Terminal configuration F3(M5)
- Self discharge rate at 25°C 3% per month

General Features

- AGM technology also called VRLA (Valve Regulated Lead Acid) has an efficient gas recombination process which allows for a maintenance free battery.
- · Not restricted for air transport and complies with IATA/ICAO Special Privision A67.
- UL-recognized component (MH60449)
- Manufactured in a plant with the following standards: ISO 9001:2008
- ISO 14001:2004

OHSAS 18001:2007

- Can be mounted in any orientation, but not to be charged in a inverted position.
- Computer designed lead/calcium/tin alloy grids for high power density. The lead is virgin lead of the highest purity.
- Long service life (years) designed for float/standby applications.
- · Low self discharge rate.

Dimensions: 178(L)x166(W)x125(H) mm/7 x6.54x4.92 inches

Weight: Approx. 8.1 kg



Constant Current Discharge Characteristics: Amps @ 25°C

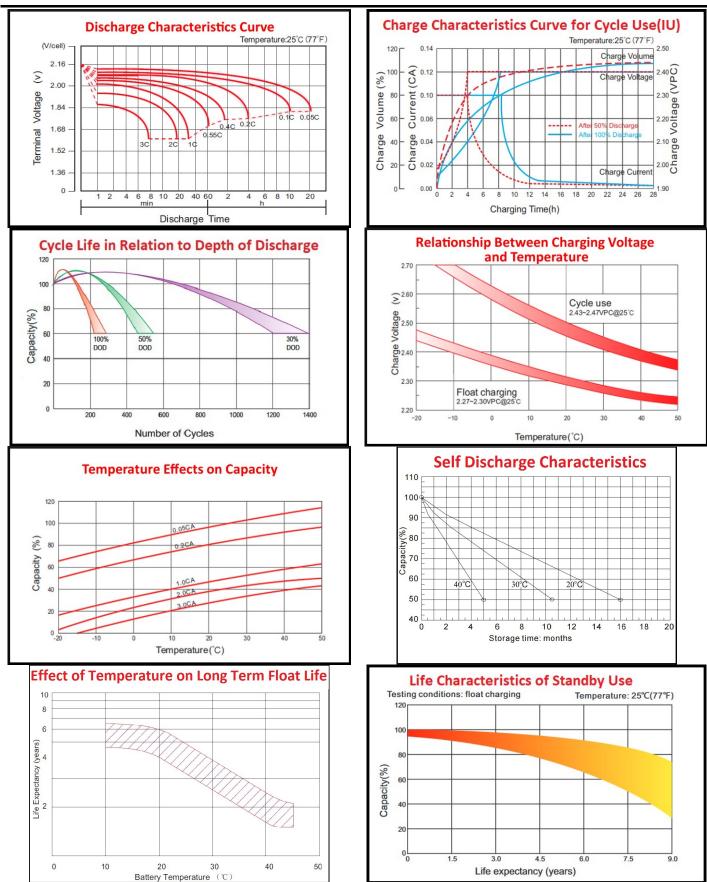
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	97.93	63.87	47.12	27.27	15.76	9.785	7.113	5.664	4.782	3.195	2.602	1.354
1.65V	94.39	61.96	45.88	26.67	15.46	9.642	7.019	5.594	4.726	3.163	2.578	1.343
1.70V	89.79	59.47	44.26	25.88	15.08	9.451	6.893	5.500	4.653	3.120	2.545	1.328
1.75V	83.88	56.24	42.15	24.84	14.57	9.199	6.726	5.376	4.555	3.063	2.501	1.309
1.80V	76.42	52.11	39.43	23.50	13.90	8.868	6.506	5.212	4.426	2.987	2.443	1.284
1.85V	67.25	46.95	36.00	21.78	13.05	8.437	6.218	4.997	4.256	2.887	2.366	1.250

Constant Power Discharge Characteristics: Watts @ 25°C

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	168.6	110.2	83.6	50.27	29.90	18.82	13.79	11.04	9.36	6.33	5.19	2.71
1.65V	166.8	109.7	83.1	49.90	29.66	18.68	13.69	10.96	9.29	6.29	5.15	2.69
1.70V	160.4	106.5	80.9	48.69	29.02	18.37	13.48	10.80	9.17	6.21	5.09	2.66
1.75V	152.6	102.5	78.1	47.22	28.18	17.96	13.21	10.60	9.01	6.11	5.01	2.63
1.80V	141.4	96.66	74.1	45.12	27.02	17.40	12.83	10.31	8.78	5.97	4.90	2.58
1.85V	126.7	88.63	68.6	42.24	25.54	16.65	12.31	9.92	8.47	5.79	4.75	2.51

SB12260 - 12V26Ah - General Purpose/Standby Series







Charging Recommendations

- For standby (float) use 2.28 to 2.32 volts per cell (@ 25°C).
- For cyclic use 2.43 to 2.47 volts per cell (@25°C)
- Recommended maximum charging current limit is 7.8 Amp.
- Charging voltage should be regulated in relation to the ambient temperature. When the temperature is higher, the charging voltage should be lower. Where the temperature is lower, the charging voltage be higher. (3 mVolts per °C per cell in standby applications and 4 mVolts per °C per cell in cyclic applications). Typical applications in a range of 0°C-30°C do not require this compensation.
- It is recommended that "refresh charging" be applied to any battery which has been stored for a long period of time, prior to putting the batteryinto service and/or within 6 months after manufacture.
- To obtain the optimum standby performance it is vital that the correct charging profile is utilised (see Charge Characteristics figures)
- Typically it takes more energy to recharge a battery that it has expended. The ratio is 1.1 1.15 has to get into battery for every 1.0 that was supplied by the battery.

Service Life

- Please refer to the life curves provided. These curves represent typical results under optimum operating conditions. Actual life will vary due to
 variability of these conditions.
- Improper charging (overcharging and lack of charging) is the <u>number one</u> reason why AGM/VRLA batteries fail prematurely. Follow charging guidelines found on this specification sheet.
- Elements that affect Cycle Life: There are various factors that will have an effect on the service life of AGM/VRLA battteries in cyclic applications; ambient operation temperature, discharge rate, depth of discharge, the manner in which the battery is recharged, and the timeliness of the recharge, to obtain maximum service life it is recommended not to go beyond 80% DOD (Depth Of Discharge) and if all possible limit it to 50 % DOD. At 50 % you will obtain the ideal trade-off for life expectancy for AGM batteries. This recommendation goes for all brands of AGM batteries.
- Elements that affect standby life: All the same factors are responsible but the most important in this case is the ambient temperature followed closely by the charging parameters. For example in an enclosed UPS cabinet with no ventilation temperatures, are most ofter than not well above 25°C, henceforth battery life is severely affected.

Warnings

- Never install AGM/VRLA batteries in an airtight container.
- Keep away from sparks, and any source of flames.
- · Connect cables tightly to avoid sparks at terminales.
- The electrolytes contains sulfuric acid which can cause serious damage to eyes and skin. Should this occur, flush profusely with water and seek medical attention.
- Do not short circuit AGM/VRLA terminals with metal object, they are capable of generating hundreds of amperes, you can seriously burn yourself in short circuiting a battery.
- Mixing batteries of different capacities, age and/or manufacturer is not recommended.