GP series

GP 645

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 5 Years in Standby Service at 25℃
Eurobat (20℃) : 3-5 YEARS STANDARD COMMERCIAL

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

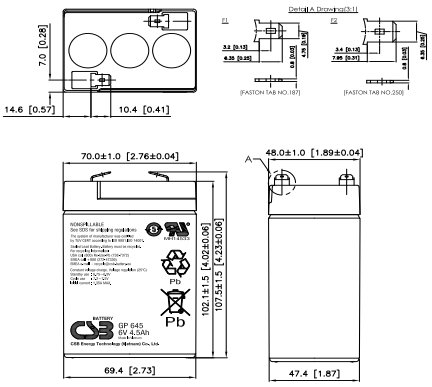
【 Float Charging Voltage】
6.75 ~ 6.90 VDC/Unit at 25℃ (77°F)

【Equalization Charging Voltage 】
7.2 ~ 7.5 VDC/Unit at 25℃ (77°F)

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

Specification — Design according with IEC 61056-1/2:2012

Nominal Voltage	6V (3 cells per unit)		
Nominal Capacity	4.5 Ah @20hr-rate to 1.75V per cell @25℃ (77°F)		
Weight	Approx. 0.84 Kg (1.85 lbs)		
Maximum Discharge Current	60/90 (5sec)		
Internal Resistance	Approx. 18.5mΩ		
Short Circuit Current	137A		
Maximum Charge Current	1.35A		
Terminal types	F1/F2 terminal -Faston Tab 187/250		
Terminal tightening torque	--		
Container Material	ABS (UL 94-HB) & Flame Retardant (94-V0) available upon request		
Dimensions	Length (L)	70.0±1.0 mm	2.76±0.04 inch
	Width (W)	48.0±1.0 mm	1.89±0.04 inch
	Container Height (h)	102.1±1.5 mm	4.02±0.06 inch
	Overall Height (H)	107.5±1.5 mm	4.23±0.06 inch



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

F.V/Time	5 MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	18.7	12.3	9.08	5.37	3.11	2.26	1.80	1.26	0.810	0.535	0.439	0.234
1.67V	17.6	11.8	8.88	5.31	3.09	2.25	1.79	1.25	0.808	0.533	0.438	0.233
1.70V	17.0	11.6	8.79	5.28	3.08	2.23	1.78	1.24	0.807	0.532	0.437	0.232
1.75V	16.1	11.2	8.62	5.21	3.06	2.22	1.77	1.23	0.804	0.531	0.435	0.229
1.80V	15.0	10.7	8.42	5.13	3.03	2.21	1.76	1.22	0.801	0.529	0.431	0.225
1.85V	13.8	10.3	8.21	5.04	3.00	2.18	1.74	1.21	0.798	0.528	0.428	0.221

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

F.V/Time	5MIN	10MIN	15MIN	30MIN	60MIN	90MIN	2HR	3HR	5HR	8HR	10HR	20HR
1.60V	111	72.4	54.8	32.9	19.3	14.0	11.1	8.05	5.33	3.55	2.90	1.60
1.67V	103	69.7	53.3	32.7	19.2	13.9	11.0	7.98	5.29	3.54	2.89	1.59
1.70V	100	68.6	52.5	32.4	19.1	13.8	10.9	7.95	5.24	3.52	2.88	1.58
1.75V	93.9	66.4	51.2	32.3	19.0	13.7	10.8	7.87	5.21	3.51	2.87	1.57
1.80V	88.5	64.1	50.0	31.8	18.8	13.5	10.7	7.85	5.16	3.48	2.85	1.56
1.85V	82.7	61.1	48.3	30.5	18.3	13.3	10.6	7.74	5.10	3.44	2.81	1.54

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

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Recognized under UL 1989,
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