

BC E7-12 | 12V 7Ah

Valve Regulated Lead Acid Battery

BLACK BATT.

Specification

Rated Voltage	12V
Nominal Capacity (20 hour rate)	7Ah
Dimensions	Length 151 ± 3 mm (5.94 inches)
	Width 65 ± 3 mm (2.56 inches)
	Container Height 93 ± 3 mm (3.68 inches)
	Total Height 99 ± 3 mm (3.92 inches)
Approximate Weight	1.70 kg ± 5% (3.75 lbs)
Short-circuit current	168A
Internal Resistance (25°C)	Approx. 27mΩ (fully charged)
Container Material	ABS
Operating Temp. Range	Discharge -15~50°C (5~122°F)
	Charge -20~40°C (-4~104°F)
	Storage -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cyclic charging voltage(25°C)	14.50 to 14.90V
	Temperature compensation: -30mV/°C
Standby usage(25°C)	13.60 to 13.80V
	Temperature compensation: -18mV/°C
Temperature Affect on the Capacity	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	≤3% per month at 25°C (77°F). Blackbatt batteries may be stored up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.
Applications	Alarm battery, fire protection etc. BC E7-12 model is not suitable for UPS usage
Designed floating life (20°C)	5 years



Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.7	12.3	9.93	8.10	6.02	4.42	3.61	2.64	2.07	1.49	1.18	1.01	0.860	0.676	0.546	0.294
1.80V/cell	18.1	12.9	10.3	8.35	6.18	4.51	3.68	2.68	2.10	1.51	1.20	1.02	0.871	0.684	0.552	0.297
1.75V/cell	19.6	13.6	10.7	8.60	6.32	4.60	3.75	2.73	2.13	1.53	1.21	1.03	0.882	0.692	0.559	0.300
1.70V/cell	21.1	14.2	11.1	8.86	6.47	4.69	3.81	2.77	2.17	1.55	1.23	1.05	0.894	0.701	0.566	0.303
1.67V/cell	21.9	14.6	11.3	9.01	6.56	4.74	3.85	2.80	2.19	1.57	1.24	1.05	0.900	0.706	0.570	0.305
1.60V/cell	23.9	15.5	11.8	9.36	6.76	4.87	3.94	2.86	2.23	1.60	1.26	1.07	0.916	0.718	0.579	0.309

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	31.8	23.5	19.1	15.6	11.6	8.58	7.03	5.15	4.05	2.92	2.33	1.98	1.70	1.34	1.08	0.588
1.80V/cell	34.3	24.6	19.7	16.0	11.9	8.72	7.14	5.22	4.10	2.96	2.36	2.01	1.72	1.35	1.10	0.594
1.75V/cell	36.8	25.7	20.3	16.4	12.1	8.86	7.24	5.29	4.15	3.00	2.39	2.03	1.74	1.37	1.11	0.600
1.70V/cell	39.3	26.7	20.9	16.8	12.3	8.99	7.34	5.37	4.21	3.03	2.41	2.06	1.76	1.39	1.12	0.606
1.67V/cell	40.7	27.3	21.3	17.1	12.5	9.07	7.40	5.41	4.24	3.06	2.43	2.07	1.77	1.40	1.13	0.610
1.60V/cell	43.9	28.8	22.1	17.6	12.8	9.26	7.54	5.50	4.31	3.11	2.47	2.10	1.80	1.42	1.15	0.619

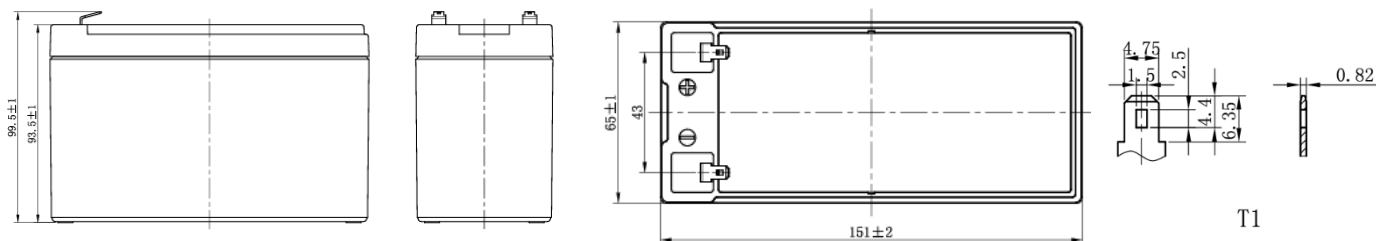
Disclaimer: Manufacturers have the right to self-modify the parameters of the product updates, please keep in touch with manufacturers to obtain the latest information.

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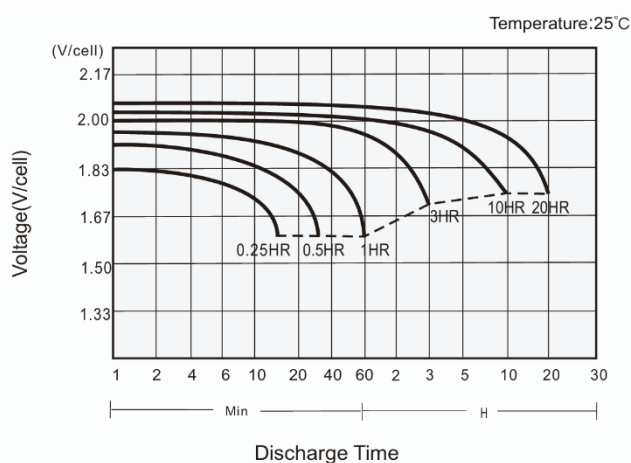
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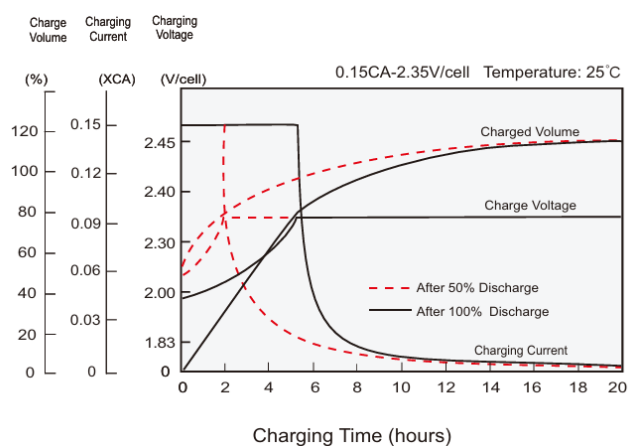
Dimensions | Terminal Type (unit:mm)



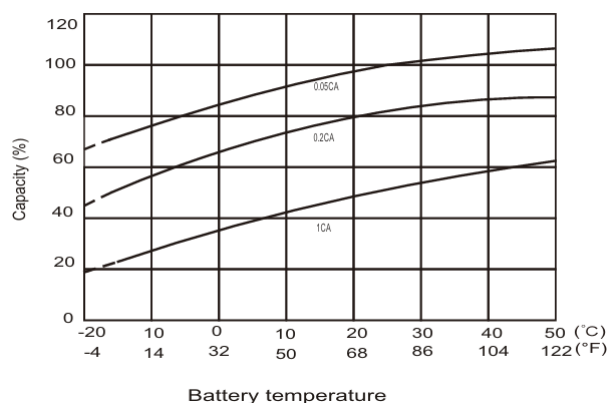
Discharge Characteristics



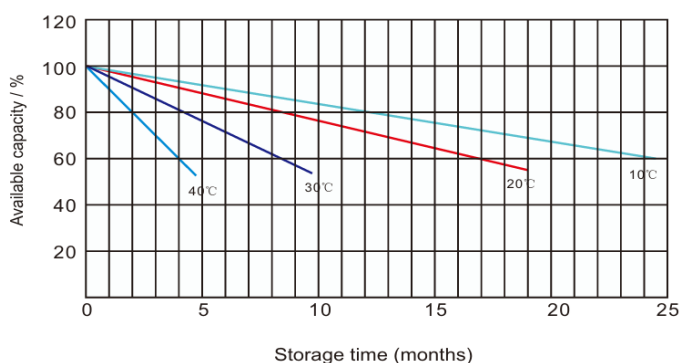
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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