



BT6-7S (6V 7.0Ah)

BT6-7S is a general purpose battery with 5 years floating design life, meet with IEC, JIS standard. With heavy duty grid, thickness plates, special additives, BT series battery have long and reliable standby service life.

EFFEKTA®
STROMVERSORGUNGEN
POWER SUPPLIES

Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	8.0Ah@20hr-rate to 1.75V per cell @25 °C
Weight	Approx. 1.2 Kg
Max. Discharge Current	80 A (5 sec)
Internal Resistance	Approx. 12 mΩ
Operating Temperature Range	Discharge: -20 °C ~ 60 °C Charge: 0 °C ~ 50 °C Storage: -20 °C ~ 60 °C
Normal Operating Temperature Range	25 °C ± 5 °C
Float charging Voltage	6.85 to 6.95 VDC/unit Average at 25 °C
Recommended Maximum Charging Current Limit	2.4 A
Equalization and Cycle Service	7.3 to 7.4 VDC/unit Average at 25 °C
Self Discharge	EFFEKTA batteries can be stored for more than 6 months at 25 °C. Self-discharge ratio less than 3% per month at 25 °C. Please charge batteries before using.
Terminal	Faston Tab 187(F1)/Faston tab 250(F2)
Constainer Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V2 can be available upon request.



MH28539



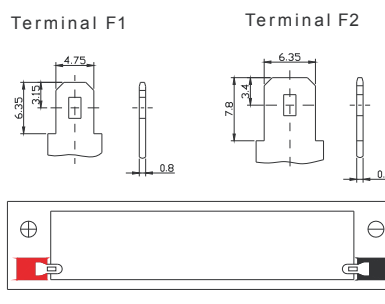
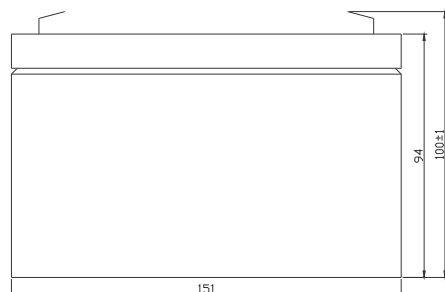
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ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 151(L) × 34(W) × 100(H)



Constant Current Discharge Characteristics : A(25 °C)

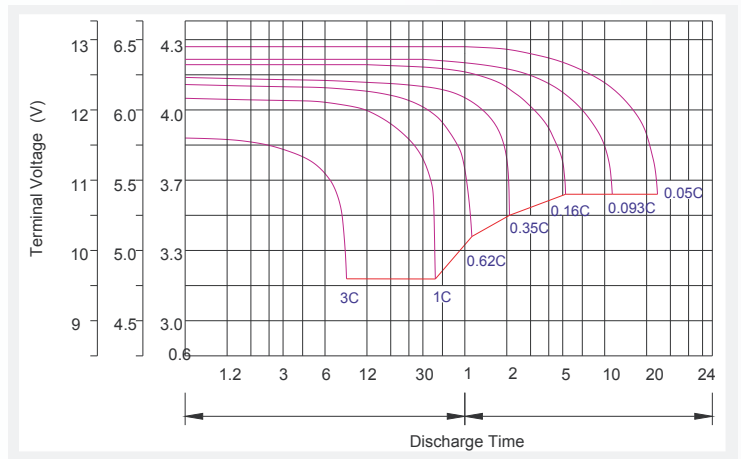
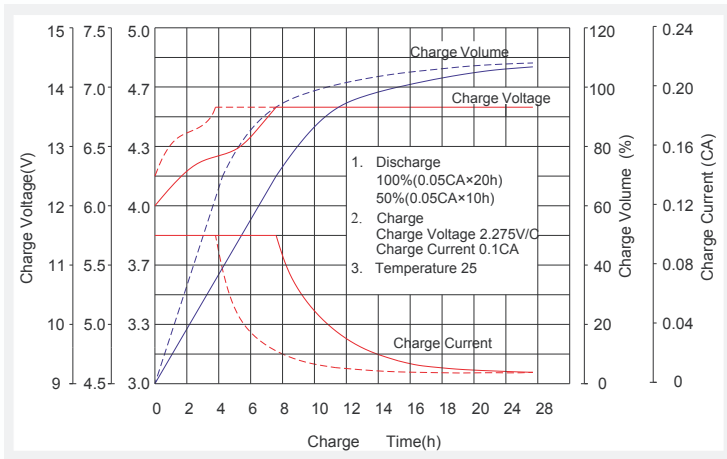
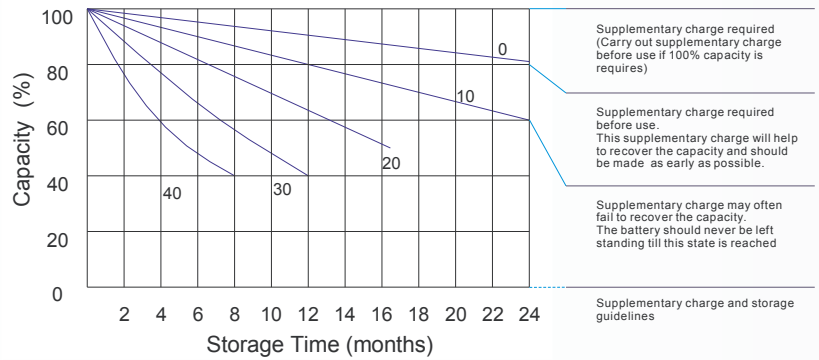
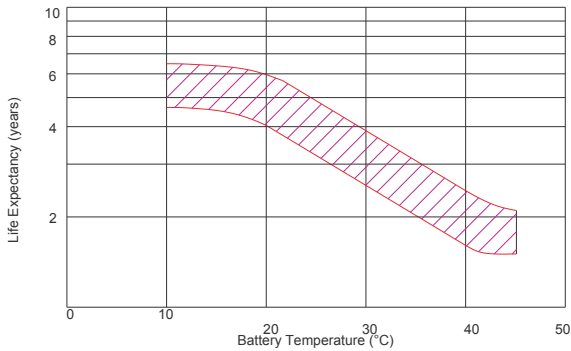
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	31.60	21.12	16.24	9.38	5.55	2.89	2.05	1.68	1.39	0.924	0.800	0.449
5.00V	30.46	20.30	15.72	9.24	5.52	2.87	2.04	1.67	1.38	0.920	0.792	0.432
5.10V	28.81	19.67	15.36	9.17	5.48	2.87	2.03	1.66	1.38	0.916	0.783	0.424
5.25V	26.03	18.41	14.56	8.96	5.40	2.83	2.02	1.66	1.37	0.913	0.775	0.408
5.40V	23.25	17.15	13.75	8.74	5.32	2.78	2.01	1.65	1.36	0.909	0.759	0.392
5.55V	20.49	15.89	12.95	8.53	5.25	2.74	1.99	1.64	1.35	0.905	0.751	0.384

Constant Power Discharge Characteristics : W(25 °C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
4.80V	172.8	112.3	91.27	56.30	33.29	17.34	12.26	10.03	9.81	5.55	4.73	2.64
5.00V	168.3	112.2	89.96	55.39	33.19	17.24	12.24	10.01	9.74	5.51	4.68	2.55
5.10V	164.9	108.8	87.90	55.03	33.12	17.20	12.22	10.01	9.71	5.50	4.63	2.50
5.25V	149.0	104.3	83.32	53.71	32.57	16.93	12.14	9.94	9.69	5.49	4.58	2.40
5.40V	133.1	97.61	78.72	52.44	32.02	16.70	12.05	9.86	9.67	5.46	4.51	2.33
5.55V	117.2	90.88	74.14	51.17	31.46	16.45	11.95	9.79	9.64	5.46	4.44	2.25

All mentioned values are average values.

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Capacity Factors With Different Temperature

Battery Type		-20	-10	0	5	10	20	25	30	40	45
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge	(A) <0.2C	0.2C<(A)<1.0C	(A)≥1.0C

Charge the batteries at least once every six months if they are stored at 25 C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Float Service:
- Every month, recommend inspection every battery voltage.
- Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.
- Effect of temperature on float charge voltage: -3mV/ /Cell.
- Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.