

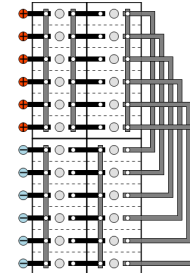
SBM 1220 - Cell data sheet

Classification

Brand	Saft
Cell type	SBM 1220
Cell P/N	310310171
Capacity at 5 hours rate	1,220 Ah
IEC Designation	KM1220P
According to IEC 60623	



Wiring principle



Crosswise

Physical data

Overall height	410 mm		
Cell height			
Width	195 mm	Weight per cell	69.0 Kg
Length	511 mm	Block length - 2 cells	-
Block length - 3 cells	-	Block length - 4 cells	-
Block length - 5 cells	-	Block length - 6 cells	-
Block length - 7 cells	-	Block length - 8 cells	-
Block length - 9 cells	-	Block length - 10 cells	-

Construction

Container material	Polypropylene	No. of terminals/polarity	6
Separator type	Grid	Terminal material	Steel
Connection torque	30.0 +/- 3.0 Nm	Vent type	flame arresting vent (large)
Terminal size	M10 SW 16 mm	Handle	Yes

Plates

Positive		Negative	
Type of plates	Pocket	Type of plates	Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	18.5 liters		

Connection

Cable area of internal connection cables	120 mm ²	End-lug (and external cable)	120 mm ²
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Charging

Float voltage	1.4 V/Cell	High rate voltage (min)	1.45 V/Cell
Single-level voltage	1.43 V/Cell		

Resistance/Short circuit

Internal resistance	0.07 mOhm	Short circuit current	19167 A
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Performance data

Current discharge

After prolonged float charge of fully charged cells. Available amperes at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	124	154	244	399	583	726	1,024	1,392	1,613	1,744	1,989	2,343	3,161	3,529	4,213	4,457
1.05	123	152	242	394	548	699	923	1,179	1,390	1,515	1,656	1,919	2,685	3,018	3,557	3,830
1.1	121	150	237	368	511	618	752	939	1,142	1,187	1,356	1,625	2,265	2,526	2,981	3,166
1.14	118	146	230	346	447	515	605	736	843	913	1,047	1,307	1,827	2,025	2,341	2,412
1.16	114	140	212	321	376	407	503	629	721	753	841	1,044	1,532	1,707	1,921	2,042

Power discharge

Available power (W), after prolonged float charged of fully charged cells at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	148	182	285	445	621	760	1,055	1,412	1,627	1,754	1,995	2,343	3,161	3,529	4,213	4,457
1.05	147	181	283	441	601	759	990	1,251	1,468	1,597	1,742	2,015	2,820	3,170	3,735	4,022
1.1	144	178	279	422	577	693	837	1,038	1,260	1,309	1,493	1,788	2,492	2,779	3,280	3,484
1.14	141	174	271	403	516	593	694	841	963	1,042	1,195	1,491	2,083	2,308	2,669	2,750
1.16	137	167	250	376	439	475	586	731	837	874	976	1,211	1,778	1,980	2,228	2,369

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Kt Factor

Current discharge

After prolonged float charge of fully charged cells. Kt factor at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	9.8	7.94	5.00	3.06	2.09	1.68	1.19	0.88	0.76	0.70	0.61	0.52	0.39	0.35	0.29	0.27
1.05	9.9	8.00	5.05	3.09	2.23	1.74	1.32	1.03	0.88	0.81	0.74	0.64	0.45	0.40	0.34	0.32
1.1	10.1	8.12	5.14	3.31	2.39	1.98	1.62	1.30	1.07	1.03	0.90	0.75	0.54	0.48	0.41	0.39
1.14	10.4	8.36	5.31	3.52	2.73	2.37	2.02	1.66	1.45	1.34	1.16	0.93	0.67	0.60	0.52	0.51
1.16	10.7	8.70	5.77	3.80	3.25	3.00	2.42	1.94	1.69	1.62	1.45	1.17	0.80	0.71	0.64	0.60

Power discharge

Kt factor power, after prolonged float charged of fully charged cells at +20°C +/- 5°C (+68°F +/- 9°F)

V/Cell	10h	8h	5h	3h	2h	1.5h	1h	30m	20m	15m	10m	5m	1m	30s	5s	1s
1	8.24	6.72	4.28	2.74	1.96	1.60	1.16	0.86	0.75	0.70	0.61	0.52	0.39	0.35	0.29	0.27
1.05	8.31	6.75	4.31	2.76	2.03	1.61	1.23	0.98	0.83	0.76	0.70	0.61	0.43	0.38	0.33	0.30
1.1	8.45	6.84	4.37	2.89	2.11	1.76	1.46	1.17	0.97	0.93	0.82	0.68	0.49	0.44	0.37	0.35
1.14	8.68	7.03	4.50	3.03	2.36	2.06	1.76	1.45	1.27	1.17	1.02	0.82	0.59	0.53	0.46	0.44
1.16	8.92	7.31	4.88	3.24	2.78	2.57	2.08	1.67	1.46	1.40	1.25	1.01	0.69	0.62	0.55	0.52