

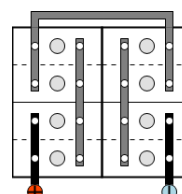
UP1M 270 - Cell data sheet

Classification

Brand	Saft
Cell type	UP1M 270
Cell P/N	310561872
Capacity at 5 hours rate	270 Ah
IEC Designation	KGM270P
According to IEC 62259	

Wiring principle

Normal



Physical data

Overall height	16.57 In		
Cell height	16.57 In		
Width	7.68 In	Weight per cell	16.0 Kg
Block length - 2 cells	9.49 In	Block length - 3 cells	13.98 In

Construction

Container material	Polypropylene	No. of terminals/polarity	2
Separator type	Felt	Terminal material	Steel
Connection torque	265.5 +/- 26.6 Lbf.in	Vent type	Low pressure flame arresting vent (large)
Terminal size	M10 SW 0.630 In	Handle	Yes

Plates

Positive		Negative	
Type of plates	Maintenance Free Pocket	Type of plates	Maintenance Free Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	1.97 In
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	3.6 liters		

Connection

Cable area of internal connection cables	8.83 sq.ft.	End-lug (and external cable)	8.83 sq.ft.
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Charging

Float voltage	1.42 V/Cell	High rate voltage (recommended)	1.45 V/Cell
Single-level voltage	1.42 V/Cell		

Resistance/Short circuit

Internal resistance	0.42 mOhm	Short circuit current	2927 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	27.9	34.5	54.0	88.2	129	169	244	339	382	410	452	503	524	557	635	681
1.05	27.5	34.4	53.8	87.4	128	166	216	283	316	337	368	412	441	472	537	575
1.1	27.2	33.8	52.9	85.1	120	147	184	226	247	265	287	323	365	394	449	477
1.14	26.5	32.8	50.8	80.5	105	121	140	176	194	205	224	256	292	315	362	382

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	33.2	40.8	63.0	96.9	138	178	252	344	386	413	453	503	524	557	635	681
1.05	32.8	40.7	63.0	98.1	140	180	232	301	334	355	387	433	464	496	564	603
1.1	32.5	40.0	62.2	97.5	136	165	205	250	273	292	316	355	402	433	494	525
1.14	31.7	39.0	59.9	93.6	121	139	161	201	222	234	255	292	332	359	412	435

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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	9.7	7.83	5.00	3.06	2.09	1.59	1.10	0.80	0.71	0.66	0.60	0.54	0.52	0.48	0.43	0.40
1.05	9.8	7.86	5.02	3.09	2.11	1.63	1.25	0.95	0.85	0.80	0.73	0.66	0.61	0.57	0.50	0.47
1.1	9.9	8.00	5.10	3.17	2.25	1.83	1.47	1.20	1.09	1.02	0.94	0.84	0.74	0.69	0.60	0.57
1.14	10.2	8.24	5.32	3.36	2.57	2.23	1.92	1.54	1.39	1.32	1.21	1.05	0.93	0.86	0.75	0.71

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	8.13	6.62	4.28	2.79	1.96	1.52	1.07	0.78	0.70	0.65	0.60	0.54	0.52	0.48	0.43	0.40
1.05	8.22	6.63	4.29	2.75	1.92	1.50	1.17	0.90	0.81	0.76	0.70	0.62	0.58	0.54	0.48	0.45
1.1	8.30	6.74	4.34	2.77	1.99	1.63	1.32	1.08	0.99	0.93	0.85	0.76	0.67	0.62	0.55	0.51
1.14	8.52	6.93	4.51	2.88	2.22	1.94	1.68	1.35	1.22	1.15	1.06	0.92	0.81	0.75	0.66	0.62