



VTX 1 M 270 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 270
Cell P/N	310561882
Capacity at 5 hours rate	270 Ah
IEC Designation	KGM270P
According to IEC 62259	



Wiring principle

Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	16,0 Kg
Block length - 2 cells	240 mm	Block length - 3 cells	354 mm

Construction

Container material	Polypropylene	No. of terminals/polarity	2
Separator type	Felt	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	Low pressure flame arresting vent (large)
Terminal size	M10 SW 16 mm	Handle	Yes

Plates

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

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	3,6 liters		

Connection

Cable area of internal connection cables	95 mm ²	End-lug (and external cable)	95 mm ²
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Charging

Float voltage	1,42 V/Cell	High rate voltage (min)	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	27,1	33,6	54,0	86,5	127	166	221	302	341	366	398	461	486	557	635	681
1,05	26,9	33,4	52,5	85,5	125	158	196	251	284	303	326	378	414	472	537	575
1,1	26,6	33,0	51,7	83,4	116	136	160	197	217	229	252	296	342	394	449	477
1,14	26,1	32,3	50,1	76,7	95,9	107	123	151	164	174	190	232	270	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	32,2	39,7	63,0	96,4	138	177	228	306	344	369	399	461	486	557	635	681
1,05	32,1	39,5	61,3	95,7	136	170	210	267	300	319	343	397	435	496	564	603
1,1	31,8	39,2	60,8	95,5	131	152	179	218	239	253	277	326	376	433	494	525
1,14	31,2	38,4	59,1	89,3	111	123	141	172	188	199	216	264	307	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	10,0	8,04	5,00	3,12	2,13	1,63	1,22	0,89	0,79	0,74	0,68	0,59	0,56	0,48	0,43	0,40
1,05	10,0	8,09	5,14	3,16	2,17	1,71	1,38	1,07	0,95	0,89	0,83	0,71	0,65	0,57	0,50	0,47
1,1	10,1	8,18	5,22	3,24	2,33	1,99	1,68	1,37	1,25	1,18	1,07	0,91	0,79	0,69	0,60	0,57
1,14	10,3	8,35	5,38	3,52	2,82	2,53	2,20	1,79	1,64	1,55	1,42	1,16	1,00	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	8,37	6,80	4,28	2,80	1,96	1,53	1,18	0,88	0,78	0,73	0,68	0,59	0,56	0,48	0,43	0,40
1,05	8,41	6,84	4,40	2,82	1,98	1,59	1,28	1,01	0,90	0,85	0,79	0,68	0,62	0,54	0,48	0,45
1,1	8,50	6,89	4,44	2,83	2,06	1,77	1,51	1,24	1,13	1,07	0,97	0,83	0,72	0,62	0,55	0,51
1,14	8,65	7,02	4,57	3,02	2,44	2,20	1,91	1,57	1,44	1,36	1,25	1,02	0,88	0,75	0,66	0,62