



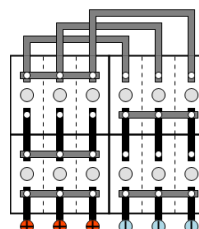
VTX 1 M 540 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 540
Cell P/N	310562781
Capacity at 5 hours rate	540 Ah
IEC Designation	KGM540P
According to	IEC 62259



Wiring principle



Crosswise

Physical data

Overall height	411 mm		
Cell height			
Width	195 mm	Weight per cell	31,4 Kg
Length	243 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	3
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	7,7 liters		

Connection

Cable area of internal connection cables	70 mm ²	End-lug (and external cable)	70 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	0,21 mOhm	Short circuit current	5855 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	54,1	67,2	108	173	254	332	443	604	683	733	796	922	973	1.115	1.269	1.362
1,05	53,8	66,8	105	171	249	315	392	503	568	606	653	756	829	944	1.074	1.149
1,1	53,2	66,0	103	167	232	271	321	395	433	459	503	593	684	788	898	954
1,14	52,2	64,7	100	153	192	213	246	302	329	349	379	464	539	630	723	763

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	64,5	79,4	126	193	276	353	457	613	689	737	798	922	973	1.115	1.269	1.362
1,05	64,2	78,9	123	191	273	340	421	533	599	639	687	794	870	991	1.127	1.207
1,1	63,6	78,3	122	191	262	304	358	437	478	506	554	652	753	866	987	1.050
1,14	62,4	76,9	118	179	222	245	282	345	376	398	433	529	615	718	824	870



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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