



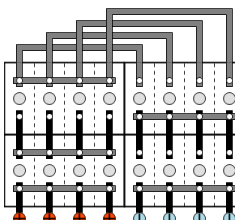
VTX 1 M 690 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 690
Cell P/N	310563081
Capacity at 5 hours rate	690 Ah
IEC Designation	KGM690P
According to IEC 62259	



Wiring principle



Crosswise

Physical data

Overall height	411 mm		
Cell height			
Width	195 mm	Weight per cell	39,6 Kg
Length	304 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	4
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	9,6 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	0,17 mOhm	Short circuit current	7481 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	69,2	85,9	138	221	325	424	566	772	872	937	1.016	1.178	1.243	1.424	1.622	1.740
1,05	68,8	85,3	134	218	319	403	501	643	725	774	834	966	1.059	1.206	1.372	1.469
1,1	68,0	84,3	132	213	296	347	410	505	554	586	643	757	875	1.006	1.147	1.220
1,14	66,8	82,6	128	196	245	272	314	386	420	445	485	592	689	805	924	975

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	82,4	101	161	246	352	451	584	783	880	942	1.019	1.178	1.243	1.424	1.622	1.740
1,05	82,0	101	157	244	348	435	537	681	766	816	878	1.014	1.112	1.267	1.440	1.542
1,1	81,2	100	155	244	334	389	457	558	611	646	708	833	962	1.107	1.262	1.341
1,14	79,8	98,2	151	228	283	313	361	441	480	508	553	675	786	917	1.053	1.112



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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