



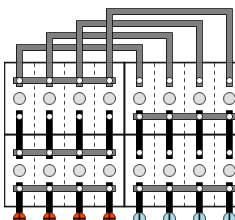
VTX 1 M 835 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 835
Cell P/N	310563381
Capacity at 5 hours rate	835 Ah
IEC Designation	KGM835P
According to IEC 62259	



Wiring principle



Crosswise

Physical data

Overall height	411 mm		
Cell height			
Width	195 mm	Weight per cell	45,9 Kg
Length	340 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	11,1 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	0,14 mOhm	Short circuit current	9053 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	83,7	104	167	267	393	513	685	934	1.056	1.133	1.230	1.426	1.504	1.723	1.963	2.105
1,05	83,2	103	162	264	386	488	606	778	878	937	1.010	1.169	1.282	1.460	1.660	1.777
1,1	82,3	102	160	258	358	420	496	611	670	709	778	916	1.058	1.218	1.388	1.476
1,14	80,8	100	155	237	297	329	380	467	508	539	587	717	834	974	1.118	1.180

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	100	123	195	298	426	546	706	948	1.065	1.140	1.234	1.426	1.504	1.723	1.963	2.105
1,05	99,2	122	190	296	422	527	650	824	927	987	1.062	1.227	1.346	1.533	1.743	1.866
1,1	98,3	121	188	295	405	471	553	676	740	782	857	1.008	1.164	1.340	1.527	1.623
1,14	96,5	119	183	276	343	379	436	533	581	615	669	817	951	1.110	1.275	1.345



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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