



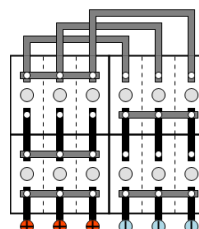
VTX 1 M 640 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 640
Cell P/N	310562981
Capacity at 5 hours rate	640 Ah
IEC Designation	KGM640P
According to IEC 62259	



Wiring principle



Crosswise

Physical data

Overall height	411 mm		
Cell height			
Width	195 mm	Weight per cell	35,5 Kg
Length	268 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	8,7 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	0,18 mOhm	Short circuit current	6939 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	64,2	79,6	128	205	301	393	525	716	809	869	943	1.093	1.153	1.321	1.504	1.614
1,05	63,8	79,2	125	203	295	374	465	596	673	718	774	896	982	1.119	1.273	1.362
1,1	63,1	78,2	123	198	275	322	380	468	514	543	597	702	811	933	1.064	1.131
1,14	61,9	76,6	119	182	227	253	292	358	390	413	450	550	639	746	857	904

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	76,4	94,1	149	229	327	419	541	726	816	874	945	1.093	1.153	1.321	1.504	1.614
1,05	76,1	93,6	145	227	323	404	498	632	710	757	814	941	1.031	1.175	1.336	1.430
1,1	75,3	92,8	144	226	310	361	424	518	567	599	657	773	892	1.027	1.170	1.244
1,14	74,0	91,1	140	212	263	291	334	409	445	472	513	626	729	851	977	1.031



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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