



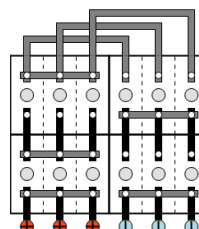
VTX 1 L 650 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 L 650
Cell P/N	310558781
Capacity at 5 hours rate	650 Ah
IEC Designation	KGL650P
According to	IEC 62259



Wiring principle



Crosswise

Physical data

Overall height	411 mm		
Cell height			
Width	195 mm	Weight per cell	28,2 Kg
Length	219 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	6,6 liters		

Connection

Cable area of internal connection cables	70 mm ²	End-lug (and external cable)	35 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	0,37 mOhm	Short circuit current	3641 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	67,6	83,8	130	209	272	312	367	446	486	515	542	598	598	655	773	847
1,05	66,9	82,4	128	190	237	269	306	365	397	410	432	474	502	545	647	706
1,1	65,0	80,0	119	164	198	218	245	292	316	330	347	373	412	449	533	575
1,14	61,8	73,5	101	128	153	169	189	221	240	257	276	312	324	359	427	454

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	78,3	95,7	145	224	285	323	375	450	488	517	543	598	598	655	773	847
1,05	77,8	95,0	146	209	257	289	327	386	419	431	455	498	527	572	679	742
1,1	76,0	93,1	138	186	222	243	272	323	348	364	382	411	453	494	587	633
1,14	72,4	86,1	118	148	176	194	217	252	274	293	315	356	369	410	486	518



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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	9,6	7,76	5,00	3,11	2,39	2,08	1,77	1,46	1,34	1,26	1,20	1,09	1,09	0,99	0,84	0,77
1,05	9,7	7,89	5,06	3,43	2,74	2,42	2,12	1,78	1,64	1,59	1,50	1,37	1,29	1,19	1,01	0,92
1,1	10,0	8,12	5,45	3,97	3,28	2,98	2,65	2,22	2,06	1,97	1,87	1,74	1,58	1,45	1,22	1,13
1,14	10,5	8,84	6,41	5,08	4,26	3,85	3,44	2,94	2,71	2,53	2,35	2,08	2,01	1,81	1,52	1,43

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	8,30	6,79	4,47	2,90	2,28	2,01	1,73	1,44	1,33	1,26	1,20	1,09	1,09	0,99	0,84	0,77
1,05	8,35	6,84	4,45	3,11	2,53	2,25	1,99	1,68	1,55	1,51	1,43	1,30	1,23	1,14	0,96	0,88
1,1	8,55	6,98	4,72	3,50	2,93	2,67	2,39	2,01	1,87	1,79	1,70	1,58	1,44	1,32	1,11	1,03
1,14	8,97	7,55	5,49	4,40	3,70	3,35	3,00	2,57	2,37	2,22	2,06	1,83	1,76	1,59	1,34	1,26