



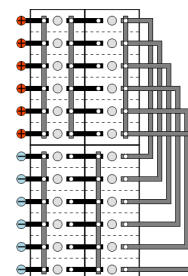
LBE1690P - Cell data sheet

Classification

Brand	Alcad
Cell type	LBE1690P
Cell P/N	311033281
Capacity at 5 hours rate	1.690 Ah
IEC Designation	KL1690P
According to	IEC 60623



Wiring principle



Crosswise

Physical data

Overall height	410 mm		
Cell height	400 mm		
Width	195 mm	Weight per cell	69,8 Kg
Length	523 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	6
Separator type	Grid	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	
Terminal size	M10 SW 16 mm		
		Handle	Yes

Plates

Positive		Negative	
Type of plates	Pocket	Type of plates	Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	17,8 liters		

Connection

Cable area of internal connection cables	70 mm ²	End-lug (and external cable)	50 mm ²
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Charging

Float voltage	1,42 V/Cell	High rate voltage (min)	1,47 V/Cell
Single-level voltage	1,43 V/Cell		

Resistance/Short circuit

Internal resistance	0,10 mOhm	Short circuit current	14059 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	174	215	338	541	722	869	1.113	1.435	1.610	1.729	1.858	2.131	2.366	2.535	3.042	3.269
1,05	173	215	334	524	654	746	931	1.214	1.342	1.392	1.546	1.765	1.903	2.079	2.498	2.711
1,1	169	207	318	441	554	638	753	945	1.021	1.120	1.233	1.295	1.550	1.690	2.057	2.256
1,14	165	195	280	382	458	508	585	748	801	831	935	1.088	1.264	1.381	1.719	1.903
1,16	155	178	242	328	391	423	480	629	700	756	829	992	1.153	1.260	1.568	1.736

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	202	246	378	579	755	898	1.138	1.450	1.619	1.736	1.862	2.131	2.366	2.535	3.042	3.269
1,05	201	247	380	577	709	802	993	1.284	1.415	1.466	1.626	1.853	1.998	2.183	2.623	2.847
1,1	198	241	367	499	621	712	836	1.044	1.126	1.234	1.358	1.424	1.706	1.859	2.263	2.482
1,14	194	228	327	442	528	583	670	855	915	949	1.067	1.240	1.441	1.575	1.960	2.170
1,16	182	209	285	384	456	493	558	731	813	878	962	1.151	1.337	1.462	1.819	2.014



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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	9,7	7,85	5,00	3,12	2,34	1,95	1,52	1,18	1,05	0,98	0,91	0,79	0,71	0,67	0,56	0,52
1,05	9,8	7,88	5,05	3,23	2,58	2,26	1,81	1,39	1,26	1,21	1,09	0,96	0,89	0,81	0,68	0,62
1,1	10,0	8,16	5,31	3,83	3,05	2,65	2,25	1,79	1,66	1,51	1,37	1,31	1,09	1,00	0,82	0,75
1,14	10,2	8,68	6,04	4,42	3,69	3,33	2,89	2,26	2,11	2,03	1,81	1,55	1,34	1,22	0,98	0,89
1,16	10,9	9,5	6,98	5,15	4,32	3,99	3,52	2,69	2,41	2,23	2,04	1,70	1,47	1,34	1,08	0,97

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	8,38	6,87	4,47	2,92	2,24	1,88	1,49	1,17	1,04	0,97	0,91	0,79	0,71	0,67	0,56	0,52
1,05	8,41	6,83	4,45	2,93	2,38	2,11	1,70	1,32	1,19	1,15	1,04	0,91	0,85	0,77	0,64	0,59
1,1	8,55	7,01	4,60	3,39	2,72	2,37	2,02	1,62	1,50	1,37	1,24	1,19	0,99	0,91	0,75	0,68
1,14	8,71	7,41	5,17	3,82	3,20	2,90	2,52	1,98	1,85	1,78	1,58	1,36	1,17	1,07	0,86	0,78
1,16	9,27	8,09	5,94	4,41	3,71	3,43	3,03	2,31	2,08	1,93	1,76	1,47	1,26	1,16	0,93	0,84