



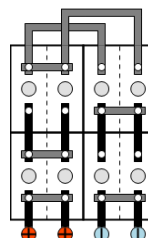
# LBE510P - Cell data sheet

## Classification

Brand	Alcad
Cell type	LBE510P
Cell P/N	310547281
Capacity at 5 hours rate	510 Ah
IEC Designation	KL510P
According to	IEC 60623



Wiring principle



Crosswise

## Physical data

Overall height	410 mm		
Cell height	400 mm		
Width	195 mm	Weight per cell	21,8 Kg
Length	171 mm		

## Construction

Container material	Polypropylene	No. of terminals/polarity	2
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	5,6 liters		

## Connection

Cable area of internal connection cables	70 mm <sup>2</sup>	End-lug (and external cable)	50 mm <sup>2</sup>
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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	0,32 mOhm	Short circuit current	4243 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	52,6	65,0	102	163	218	262	336	433	486	522	561	643	714	765	918	987
1,05	52,1	64,8	101	158	197	225	281	366	405	420	467	533	574	628	754	818
1,1	51,0	62,5	96,0	133	167	192	227	285	308	338	372	391	468	510	621	681
1,14	49,9	58,8	84,5	115	138	153	177	226	242	251	282	328	381	417	519	574
1,16	46,8	53,6	73,1	99,0	118	128	145	190	211	228	250	299	348	380	473	524

### 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	60,9	74,2	114	175	228	271	343	438	489	524	562	643	714	765	918	987
1,05	60,6	74,6	115	174	214	242	300	387	427	442	491	559	603	659	792	859
1,1	59,6	72,7	111	151	187	215	252	315	340	372	410	430	515	561	683	749
1,14	58,5	68,8	98,7	133	159	176	202	258	276	286	322	374	435	475	592	655
1,16	55,0	63,0	85,9	116	138	149	169	220	245	265	290	347	404	441	549	608



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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