



LCE220P - Cell data sheet

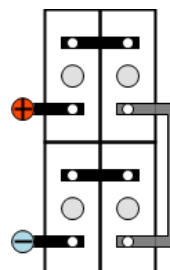
Classification

Brand	Alcad
Cell type	LCE220P
Cell P/N	310550051
Capacity at 5 hours rate	220 Ah
IEC Designation	KL220P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	357 mm		
Cell height	349 mm		
Width	192 mm	Weight per cell	10,4 Kg
Length	93 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Grid	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	
Terminal size	M10 SW 16 mm		
		Handle	No

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	2,9 liters		

Connection

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



LCE220P - Cell data sheet

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	0,73 mOhm	Short circuit current	2157 A
---------------------	-----------	-----------------------	--------

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	22,2	27,8	44,0	70,4	95,6	116	149	191	215	229	242	290	331	355	452	502
1,05	22,0	27,5	43,1	68,9	84,5	99,3	123	162	184	196	213	229	266	293	372	411
1,1	21,8	26,7	41,1	58,7	74,1	87,0	102	130	144	146	161	189	215	241	302	337
1,14	21,1	24,8	36,1	50,4	62,4	69,6	79,8	101	115	115	132	142	176	195	250	282
1,16	19,8	22,6	31,3	43,4	53,2	58,0	65,5	84,7	100	105	117	129	161	178	228	257

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	25,8	31,7	49,2	75,3	100	120	153	193	217	230	242	290	331	355	452	502
1,05	25,6	31,7	49,0	75,9	91,5	107	131	171	194	207	224	241	279	308	391	431
1,1	25,5	31,0	47,4	66,4	83,1	97,0	113	144	158	161	177	208	237	265	332	371
1,14	24,8	29,1	42,2	58,4	71,8	79,9	91,4	115	131	131	150	162	201	222	285	321
1,16	23,3	26,6	36,8	50,7	62,1	67,6	76,2	98,4	116	122	135	150	186	206	264	298



LCE220P - Cell data sheet

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	9,9	7,92	5,00	3,12	2,30	1,90	1,47	1,15	1,02	0,96	0,91	0,76	0,66	0,62	0,49	0,44
1,05	10,0	8,00	5,10	3,19	2,60	2,22	1,79	1,36	1,20	1,12	1,03	0,96	0,83	0,75	0,59	0,54
1,1	10,1	8,24	5,36	3,75	2,97	2,53	2,16	1,69	1,53	1,51	1,37	1,16	1,02	0,91	0,73	0,65
1,14	10,4	8,87	6,10	4,36	3,53	3,16	2,76	2,18	1,92	1,91	1,67	1,55	1,25	1,13	0,88	0,78
1,16	11,1	9,7	7,03	5,07	4,13	3,79	3,36	2,60	2,19	2,10	1,89	1,70	1,37	1,24	0,97	0,86

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	8,54	6,93	4,47	2,92	2,20	1,83	1,44	1,14	1,02	0,96	0,91	0,76	0,66	0,62	0,49	0,44
1,05	8,59	6,94	4,49	2,90	2,40	2,06	1,68	1,29	1,14	1,07	0,98	0,91	0,79	0,71	0,56	0,51
1,1	8,63	7,09	4,64	3,31	2,65	2,27	1,95	1,53	1,39	1,37	1,24	1,06	0,93	0,83	0,66	0,59
1,14	8,88	7,57	5,22	3,77	3,06	2,75	2,41	1,91	1,68	1,67	1,47	1,36	1,10	0,99	0,77	0,69
1,16	9,45	8,27	5,98	4,34	3,54	3,26	2,89	2,24	1,89	1,81	1,63	1,47	1,18	1,07	0,83	0,74