



LCE235P - Cell data sheet

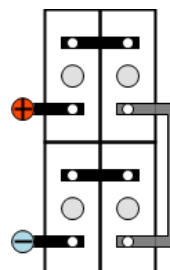
Classification

Brand	Alcad
Cell type	LCE235P
Cell P/N	310550151
Capacity at 5 hours rate	235 Ah
IEC Designation	KL235P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	413 mm		
Cell height	405 mm		
Width	192 mm	Weight per cell	11,6 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	3,7 liters		

Connection

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



LCE235P - 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	0,70 mOhm	Short circuit current	1955 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	24,2	29,9	47,0	75,2	100	121	155	200	224	240	258	296	329	352	423	455
1,05	24,0	29,8	46,5	72,8	90,9	104	129	169	187	194	215	245	265	289	347	377
1,1	23,5	28,8	44,2	61,3	77,0	88,7	105	131	142	156	171	180	216	235	286	314
1,14	23,0	27,1	38,9	53,1	63,7	70,6	81,4	104	111	116	130	151	176	192	239	265
1,16	21,6	24,7	33,7	45,6	54,4	58,8	66,8	87,5	97,3	105	115	138	160	175	218	241

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	28,1	34,2	52,6	80,5	105	125	158	202	225	241	259	296	329	352	423	455
1,05	28,0	34,4	52,8	80,2	98,5	112	138	178	197	204	226	258	278	304	365	396
1,1	27,5	33,5	51,0	69,4	86,3	99,0	116	145	157	172	189	198	237	259	315	345
1,14	27,0	31,7	45,5	61,5	73,4	81,1	93,2	119	127	132	148	172	200	219	273	302
1,16	25,4	29,0	39,6	53,3	63,4	68,5	77,7	102	113	122	134	160	186	203	253	280



LCE235P - 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	9,7	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