



LCE280P - Cell data sheet

Classification

Brand	Alcad
Cell type	LCE280P
Cell P/N	310550251
Capacity at 5 hours rate	280 Ah
IEC Designation	KL280P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	413 mm		
Cell height	405 mm		
Width	192 mm	Weight per cell	12,3 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	3,4 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	0,59 mOhm	Short circuit current	2329 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	28,8	35,7	56,0	89,6	120	144	184	238	267	286	308	353	392	420	504	542
1,05	28,6	35,6	55,4	86,8	108	124	154	201	222	231	256	292	315	345	414	449
1,1	28,0	34,3	52,7	73,0	91,7	106	125	157	169	186	204	215	257	280	341	374
1,14	27,4	32,3	46,4	63,3	75,9	84,1	97,0	124	133	138	155	180	209	229	285	315
1,16	25,7	29,4	40,1	54,4	64,8	70,1	79,6	104	116	125	137	164	191	209	260	288

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	33,4	40,8	62,6	95,9	125	149	188	240	268	288	308	353	392	420	504	542
1,05	33,3	41,0	62,9	95,6	117	133	164	213	234	243	269	307	331	362	435	472
1,1	32,7	39,9	60,8	82,7	103	118	138	173	187	204	225	236	283	308	375	411
1,14	32,1	37,8	54,2	73,2	87,4	96,6	111	142	152	157	177	205	239	261	325	359
1,16	30,2	34,6	47,2	63,6	75,6	81,6	92,5	121	135	145	159	191	222	242	301	334



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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