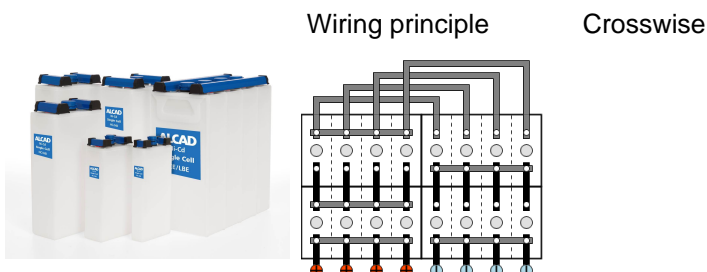




# LBE1020P - Cell data sheet

## Classification

Brand	Alcad
Cell type	LBE1020P
Cell P/N	310548081
Capacity at 5 hours rate	1.020 Ah
IEC Designation	KL1020P
According to IEC 60623	



## Physical data

Overall height	410 mm		
Cell height	400 mm		
Width	195 mm	Weight per cell	43,0 Kg
Length	329 mm		

## Construction

Container material	Polypropylene	No. of terminals/polarity	4
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	11,1 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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# LBE1020P - 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	0,16 mOhm	Short circuit current	8485 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	105	130	204	326	436	524	672	866	972	1.043	1.121	1.286	1.428	1.530	1.836	1.973
1,05	104	130	202	316	395	450	562	733	810	840	933	1.065	1.149	1.255	1.508	1.636
1,1	102	125	192	266	334	385	454	571	616	676	744	781	936	1.020	1.242	1.361
1,14	100	118	169	231	277	306	353	452	484	502	564	656	763	834	1.038	1.149
1,16	93,6	107	146	198	236	255	290	380	422	457	500	599	696	760	946	1.048

### 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	122	148	228	349	456	542	687	875	977	1.048	1.124	1.286	1.428	1.530	1.836	1.973
1,05	121	149	229	348	428	484	599	775	854	885	981	1.118	1.206	1.318	1.583	1.718
1,1	119	145	222	301	375	430	504	630	680	745	819	860	1.029	1.122	1.366	1.498
1,14	117	138	197	267	318	352	405	516	552	572	644	748	870	951	1.183	1.310
1,16	110	126	172	232	275	297	337	441	490	530	580	694	807	882	1.098	1.215



# LBE1020P - 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

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