



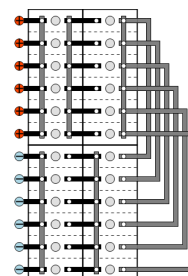
MB1390P - Cell data sheet

Classification

Brand	Alcad
Cell type	MB1390P
Cell P/N	310310281
Capacity at 5 hours rate	1.390 Ah
IEC Designation	KM1390P
According to IEC 60623	



Wiring principle



Crosswise

Physical data

Overall height	410 mm	Weight per cell	73,7 Kg
Cell height	400 mm		
Width	195 mm		
Length	523 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	6
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	17,7 liters		

Connection

Cable area of internal connection cables	120 mm ²	End-lug (and external cable)	120 mm ²
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Charging

Float voltage	1,4 V/Cell	High rate voltage (min)	1,45 V/Cell
Single-level voltage	1,43 V/Cell		

Resistance/Short circuit

Internal resistance	0,06 mOhm	Short circuit current	21838 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	141	175	278	454	664	827	1.166	1.586	1.838	1.987	2.266	2.669	3.602	4.021	4.800	5.079
1,05	140	174	276	449	624	797	1.051	1.344	1.584	1.726	1.887	2.187	3.059	3.439	4.052	4.364
1,1	138	171	271	420	582	704	856	1.069	1.301	1.352	1.545	1.852	2.581	2.878	3.396	3.608
1,14	134	166	262	395	509	587	689	838	960	1.040	1.193	1.490	2.081	2.307	2.667	2.748
1,16	130	160	241	366	428	464	573	717	821	858	958	1.189	1.746	1.944	2.188	2.327

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	169	207	324	508	707	866	1.203	1.608	1.854	1.998	2.273	2.669	3.602	4.021	4.800	5.079
1,05	167	206	323	503	685	865	1.128	1.425	1.673	1.819	1.985	2.296	3.212	3.611	4.256	4.583
1,1	164	203	318	481	657	790	954	1.183	1.436	1.491	1.701	2.037	2.839	3.166	3.737	3.969
1,14	160	198	309	459	588	675	791	959	1.097	1.187	1.361	1.698	2.373	2.630	3.041	3.133
1,16	156	190	285	429	500	541	667	832	953	996	1.112	1.380	2.026	2.256	2.539	2.699



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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	9,8	7,94	5,00	3,06	2,09	1,68	1,19	0,88	0,76	0,70	0,61	0,52	0,39	0,35	0,29	0,27
1,05	9,9	8,00	5,05	3,09	2,23	1,74	1,32	1,03	0,88	0,81	0,74	0,64	0,45	0,40	0,34	0,32
1,1	10,1	8,12	5,14	3,31	2,39	1,98	1,62	1,30	1,07	1,03	0,90	0,75	0,54	0,48	0,41	0,39
1,14	10,4	8,36	5,31	3,52	2,73	2,37	2,02	1,66	1,45	1,34	1,16	0,93	0,67	0,60	0,52	0,51
1,16	10,7	8,70	5,77	3,80	3,25	3,00	2,42	1,94	1,69	1,62	1,45	1,17	0,80	0,71	0,64	0,60

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	8,24	6,72	4,28	2,74	1,96	1,60	1,16	0,86	0,75	0,70	0,61	0,52	0,39	0,35	0,29	0,27
1,05	8,31	6,75	4,31	2,76	2,03	1,61	1,23	0,98	0,83	0,76	0,70	0,61	0,43	0,38	0,33	0,30
1,1	8,45	6,84	4,37	2,89	2,11	1,76	1,46	1,17	0,97	0,93	0,82	0,68	0,49	0,44	0,37	0,35
1,14	8,68	7,03	4,50	3,03	2,36	2,06	1,76	1,45	1,27	1,17	1,02	0,82	0,59	0,53	0,46	0,44
1,16	8,92	7,31	4,88	3,24	2,78	2,57	2,08	1,67	1,46	1,40	1,25	1,01	0,69	0,62	0,55	0,52