



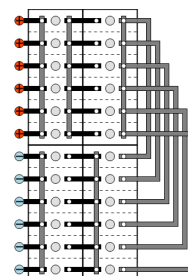
MB1440P - Cell data sheet

Classification

Brand	Alcad
Cell type	MB1440P
Cell P/N	311037681
Capacity at 5 hours rate	1.440 Ah
IEC Designation	KM 1440P
According to IEC 60623	



Wiring principle



Crosswise

Physical data

Overall height	410 mm		
Cell height	400 mm		
Width	195 mm	Weight per cell	73,7 Kg
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 mm²	End-lug (and external cable)	120 mm²
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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	22623 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	147	181	288	471	688	856	1.208	1.643	1.904	2.058	2.348	2.765	3.732	4.165	4.972	5.261
1,05	145	180	285	465	647	826	1.089	1.392	1.641	1.788	1.954	2.265	3.169	3.563	4.198	4.521
1,1	143	177	280	435	603	729	887	1.108	1.348	1.401	1.600	1.918	2.674	2.981	3.518	3.737
1,14	139	172	271	409	527	608	714	869	995	1.078	1.236	1.543	2.156	2.390	2.763	2.847
1,16	135	166	250	379	443	480	594	742	851	889	992	1.232	1.809	2.014	2.267	2.410

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	175	214	336	526	733	898	1.246	1.666	1.920	2.070	2.355	2.765	3.732	4.165	4.972	5.261
1,05	173	213	334	521	710	896	1.168	1.476	1.733	1.885	2.056	2.379	3.328	3.741	4.409	4.748
1,1	170	211	330	498	681	818	988	1.226	1.488	1.545	1.762	2.110	2.941	3.280	3.871	4.112
1,14	166	205	320	476	609	700	819	993	1.136	1.230	1.410	1.759	2.459	2.725	3.150	3.246
1,16	161	197	295	444	518	560	691	862	988	1.031	1.152	1.429	2.099	2.337	2.630	2.796



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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