



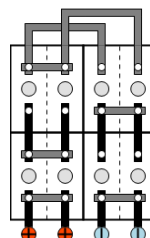
MB440P - Cell data sheet

Classification

Brand	Alcad
Cell type	MB440P
Cell P/N	310099681
Capacity at 5 hours rate	440 Ah
IEC Designation	KM440P
According to IEC 60623	



Wiring principle



Crosswise

Physical data

Overall height	410 mm		
Cell height	400 mm		
Width	195 mm	Weight per cell	24,2 Kg
Length	183 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	2
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	6,1 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	0,20 mOhm	Short circuit current	6913 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	44,8	55,4	88,0	144	210	262	369	502	582	629	717	845	1.140	1.273	1.519	1.608
1,05	44,4	55,0	87,2	142	198	252	333	425	501	546	597	692	968	1.089	1.283	1.381
1,1	43,6	54,2	85,6	133	184	223	271	338	412	428	489	586	817	911	1.075	1.142
1,14	42,4	52,6	82,9	125	161	186	218	265	304	329	378	472	659	730	844	870
1,16	41,3	50,6	76,3	116	135	147	181	227	260	272	303	376	553	615	693	737

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	53,4	65,5	103	161	224	274	381	509	587	633	720	845	1.140	1.273	1.519	1.608
1,05	53,0	65,1	102	159	217	274	357	451	530	576	628	727	1.017	1.143	1.347	1.451
1,1	52,1	64,3	101	152	208	250	302	375	455	472	538	645	899	1.002	1.183	1.256
1,14	50,7	62,6	97,8	145	186	214	250	303	347	376	431	538	751	833	963	992
1,16	49,3	60,2	90,1	136	158	171	211	264	302	315	352	437	641	714	804	854



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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