



MC220P - Cell data sheet

Classification

Brand	Alcad
Cell type	MC220P
Cell P/N	311038651
Capacity at 5 hours rate	220 Ah
IEC Designation	KM220P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	413 mm		
Cell height	405 mm		
Width	192 mm	Weight per cell	13,0 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	3,3 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	0,39 mOhm	Short circuit current	3456 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	22,4	27,7	44,0	71,9	105	131	185	251	291	314	359	422	570	636	760	804
1,05	22,2	27,5	43,6	71,1	98,8	126	166	213	251	273	299	346	484	544	641	691
1,1	21,8	27,1	42,8	66,4	92,1	111	136	169	206	214	244	293	408	455	538	571
1,14	21,2	26,3	41,4	62,5	80,5	92,8	109	133	152	165	189	236	329	365	422	435
1,16	20,6	25,3	38,2	57,9	67,7	73,4	90,7	113	130	136	152	188	276	308	346	368

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	26,7	32,7	51,4	80,3	112	137	190	255	293	316	360	422	570	636	760	804
1,05	26,5	32,6	51,1	79,6	108	137	178	226	265	288	314	363	508	572	674	725
1,1	26,0	32,2	50,4	76,1	104	125	151	187	227	236	269	322	449	501	591	628
1,14	25,4	31,3	48,9	72,7	93,0	107	125	152	174	188	215	269	376	416	481	496
1,16	24,7	30,1	45,1	67,8	79,1	85,6	106	132	151	158	176	218	321	357	402	427



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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