



VTX 1 M 320 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 320
Cell P/N	310562082
Capacity at 5 hours rate	320 Ah
IEC Designation	KGM320P
According to	IEC 62259



Wiring principle

Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	18,3 Kg
Block length - 2 cells	278 mm	Block length - 3 cells	411 mm

Construction

Container material	Polypropylene	No. of terminals/polarity	2
Separator type	Felt	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	Low pressure flame arresting vent (large)
Terminal size	M10 SW 16 mm	Handle	Yes

Plates

Positive		Negative	
Type of plates	Maintenance Free Pocket	Type of plates	Maintenance Free Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	4,3 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	1,42 V/Cell	High rate voltage (min)	1,45 V/Cell
Single-level voltage	1,42 V/Cell		

Resistance/Short circuit

Internal resistance	0,36 mOhm	Short circuit current	3469 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	32,1	39,8	64,0	102	151	197	263	358	405	434	471	546	577	660	752	807
1,05	31,9	39,6	62,3	101	148	187	232	298	336	359	387	448	491	559	636	681
1,1	31,5	39,1	61,3	98,9	137	161	190	234	257	272	298	351	406	467	532	566
1,14	31,0	38,3	59,4	90,9	114	126	146	179	195	207	225	275	320	373	428	452

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	38,2	47,1	74,7	114	163	209	271	363	408	437	473	546	577	660	752	807
1,05	38,0	46,8	72,7	113	162	202	249	316	355	378	407	470	516	587	668	715
1,1	37,7	46,4	72,1	113	155	180	212	259	283	300	329	386	446	513	585	622
1,14	37,0	45,6	70,1	106	131	145	167	204	223	236	256	313	364	425	488	516



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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	10,0	8,04	5,00	3,12	2,13	1,63	1,22	0,89	0,79	0,74	0,68	0,59	0,56	0,48	0,43	0,40
1,05	10,0	8,09	5,14	3,16	2,17	1,71	1,38	1,07	0,95	0,89	0,83	0,71	0,65	0,57	0,50	0,47
1,1	10,1	8,18	5,22	3,24	2,33	1,99	1,68	1,37	1,25	1,18	1,07	0,91	0,79	0,69	0,60	0,57
1,14	10,3	8,35	5,38	3,52	2,82	2,53	2,20	1,79	1,64	1,55	1,42	1,16	1,00	0,86	0,75	0,71

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	8,37	6,80	4,28	2,80	1,96	1,53	1,18	0,88	0,78	0,73	0,68	0,59	0,56	0,48	0,43	0,40
1,05	8,41	6,84	4,40	2,82	1,98	1,59	1,28	1,01	0,90	0,85	0,79	0,68	0,62	0,54	0,48	0,45
1,1	8,50	6,89	4,44	2,83	2,06	1,77	1,51	1,24	1,13	1,07	0,97	0,83	0,72	0,62	0,55	0,51
1,14	8,65	7,02	4,57	3,02	2,44	2,20	1,91	1,57	1,44	1,36	1,25	1,02	0,88	0,75	0,66	0,62