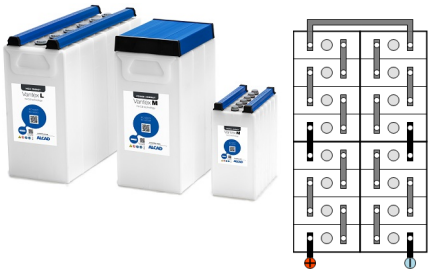
Reliability inside

VTX 1 M 100 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 M 100
Cell P/N	310561184
Capacity at 5 hours rate	100 Ah
IEC Designation	KGM100P
According to IEC 62259	



Wiring principle Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	6,3 Kg
Block length - 4 cells	186 mm	Block length - 5 cells	230 mm
Block length - 6 cells	273 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Felt	Terminal material	Steel
Connection torque	20,0 +/- 2,0 Nm	Vent type	Low pressure flame arresting vent (large)
Terminal size	M8 SW 13 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	1,4 liters		

Connection

Cable area of internal connection cables	35 mm²	End-lug (and external cable)	35 mm²

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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	1,14 mOhm	Short circuit current	1084 A

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	10,0	12,4	20,0	32,0	47,0	61,4	82,0	112	126	136	147	171	180	206	235	252
1,05	10,0	12,4	19,5	31,7	46,2	58,4	72,6	93,1	105	112	121	140	153	175	199	213
1,1	9,9	12,2	19,2	30,9	42,9	50,2	59,4	73,1	80,2	84,9	93,2	110	127	146	166	177
1,14	9,7	12,0	18,6	28,4	35,5	39,4	45,6	55,9	60,9	64,6	70,3	85,9	100	117	134	141

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	12,0	14,7	23,3	35,7	51,0	65,4	84,6	113	128	136	148	171	180	206	235	252
1,05	11,9	14,6	22,7	35,4	50,5	63,1	77,9	98,7	111	118	127	147	161	184	209	224
1,1	11,8	14,5	22,5	35,4	48,5	56,4	66,2	80,9	88,6	93,6	103	121	139	160	183	194
1,14	11,6	14,2	21,9	33,1	41,0	45,4	52,3	63,9	69,6	73,7	80,2	97,9	114	133	153	161

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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

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