



VTX 1 M 445 - Cell data sheet

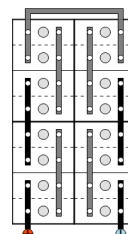
Classification

Brand	Alcad
Cell type	VTX 1 M 445
Cell P/N	310562582
Capacity at 5 hours rate	445 Ah
IEC Designation	KGM445P
According to IEC 62259	



Wiring principle

Normal



Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	24,0 Kg
Block length - 2 cells	352 mm	Block length - 3 cells	522 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	5,8 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	0,26 mOhm	Short circuit current	4825 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	44,6	55,4	89,0	143	209	273	365	498	563	604	656	760	802	918	1.046	1.122
1,05	44,3	55,0	86,6	141	205	260	323	414	468	499	538	623	683	778	885	947
1,1	43,9	54,4	85,3	138	191	224	264	325	357	378	415	488	564	649	740	786
1,14	43,1	53,3	82,6	126	158	176	203	249	271	287	313	382	445	519	596	629

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	53,2	65,5	104	159	227	291	376	505	567	607	657	760	802	918	1.046	1.122
1,05	52,9	65,0	101	158	225	281	347	439	494	526	566	654	717	817	929	995
1,1	52,4	64,6	100	157	216	251	295	360	394	417	457	537	620	714	814	865
1,14	51,4	63,4	97,5	147	183	202	233	284	309	328	357	436	507	592	679	717



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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