



VTX 1 L 420 - Cell data sheet

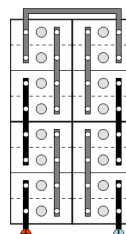
Classification

Brand	Alcad
Cell type	VTX 1 L 420
Cell P/N	310558282
Capacity at 5 hours rate	420 Ah
IEC Designation	KGL420P
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	70 mm ²	End-lug (and external cable)	70 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	0,58 mOhm	Short circuit current	2353 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	43,6	54,2	84,0	135	176	202	237	288	314	333	350	386	386	423	499	547
1,05	43,2	53,2	83,0	122	153	174	198	236	257	265	279	307	324	352	418	456
1,1	42,0	51,7	77,0	106	128	141	159	189	204	213	224	241	266	290	345	372
1,14	39,9	47,5	65,5	82,6	98,7	109	122	143	155	166	178	202	209	232	276	294

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	50,6	61,9	93,9	145	184	208	242	291	316	334	351	386	386	423	499	547
1,05	50,3	61,4	94,3	135	166	187	211	249	271	279	294	322	341	369	439	479
1,1	49,1	60,1	88,9	120	144	157	176	209	225	235	247	265	292	319	379	409
1,14	46,8	55,6	76,6	95,6	114	125	140	163	177	189	203	230	239	265	314	335



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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	9,6	7,76	5,00	3,11	2,39	2,08	1,77	1,46	1,34	1,26	1,20	1,09	1,09	0,99	0,84	0,77
1,05	9,7	7,89	5,06	3,43	2,74	2,42	2,12	1,78	1,64	1,59	1,50	1,37	1,29	1,19	1,01	0,92
1,1	10,0	8,12	5,45	3,97	3,28	2,98	2,65	2,22	2,06	1,97	1,87	1,74	1,58	1,45	1,22	1,13
1,14	10,5	8,84	6,41	5,08	4,26	3,85	3,44	2,94	2,71	2,53	2,35	2,08	2,01	1,81	1,52	1,43

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	8,30	6,79	4,47	2,90	2,28	2,01	1,73	1,44	1,33	1,26	1,20	1,09	1,09	0,99	0,84	0,77
1,05	8,35	6,84	4,45	3,11	2,53	2,25	1,99	1,68	1,55	1,51	1,43	1,30	1,23	1,14	0,96	0,88
1,1	8,55	6,98	4,72	3,50	2,93	2,67	2,39	2,01	1,87	1,79	1,70	1,58	1,44	1,32	1,11	1,03
1,14	8,97	7,55	5,49	4,40	3,70	3,35	3,00	2,57	2,37	2,22	2,06	1,83	1,76	1,59	1,34	1,26