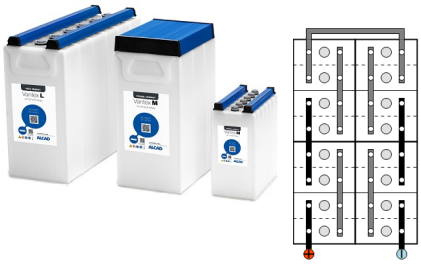
Reliability inside

VTX 1 L 470 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 L 470
Cell P/N	310558382
Capacity at 5 hours rate	470 Ah
IEC Designation	KGL470P
According to IEC 62259	



Wiring principle Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	19,8 Kg
Block length - 2 cells	304 mm	Block length - 3 cells	450 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	4,6 liters		

Connection

Cable area of internal connection cables	95 mm²	End-lug (and external cable)	95 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	0,51 mOhm	Short circuit current	2633 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	48,8	60,6	94,0	151	197	226	265	322	351	372	392	432	432	473	559	612
1,05	48,3	59,6	92,9	137	172	194	222	264	287	296	313	343	363	394	468	511
1,1	47,0	57,9	86,2	119	143	158	177	211	228	239	251	270	298	325	386	416
1,14	44,6	53,2	73,3	92,4	110	122	137	160	173	186	200	226	234	260	308	328

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	56,6	69,2	105	162	206	233	271	326	353	374	393	432	432	473	559	612
1,05	56,3	68,7	106	151	186	209	236	279	303	312	329	360	381	413	491	536
1,1	54,9	67,3	99,5	134	161	176	197	234	252	263	276	297	327	357	424	458
1,14	52,4	62,3	85,7	107	127	140	157	183	198	212	228	257	267	296	352	374

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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