



VTX 1 L 280 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 L 280
Cell P/N	310557984
Capacity at 5 hours rate	280 Ah
IEC Designation	KGL280P
According to IEC 62259	



Wiring principle

Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	11,5 Kg
Block length - 4 cells	352 mm	Block length - 5 cells	437 mm
Block length - 6 cells	522 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
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	2,9 liters		

Connection

Cable area of internal connection cables	70 mm ²	End-lug (and external cable)	50 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	0,86 mOhm	Short circuit current	1569 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	29,1	36,1	56,0	90,2	117	134	158	192	209	222	234	257	258	282	333	365
1,05	28,8	35,5	55,3	81,7	102	116	132	157	171	176	186	204	216	235	279	304
1,1	28,0	34,5	51,4	70,6	85,4	93,9	106	126	136	142	149	161	177	194	230	248
1,14	26,6	31,7	43,7	55,1	65,8	72,8	81,5	95,2	103	111	119	135	140	155	184	196

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	33,7	41,2	62,6	96,5	123	139	161	194	210	223	234	257	258	282	333	365
1,05	33,5	40,9	62,8	89,9	111	124	141	166	181	186	196	215	227	246	292	319
1,1	32,7	40,1	59,3	79,9	95,7	105	117	139	150	157	164	177	195	213	253	273
1,14	31,2	37,1	51,0	63,7	75,7	83,6	93,3	109	118	126	136	153	159	177	210	223



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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