



VTX 1 L 140 - Cell data sheet

Classification

Brand	Alcad
Cell type	VTX 1 L 140
Cell P/N	310557684
Capacity at 5 hours rate	140 Ah
IEC Designation	KGL140P
According to IEC 62259	



Wiring principle

Normal

Physical data

Overall height	421 mm		
Cell height			
Width	195 mm	Weight per cell	6,7 Kg
Block length - 4 cells	204 mm	Block length - 5 cells	252 mm
Block length - 6 cells	300 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	1,5 liters		

Connection

Cable area of internal connection cables	35 mm ²	End-lug (and external cable)	25 mm ²
--	--------------------	------------------------------	--------------------



VTX 1 L 140 - Cell data sheet

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	1,73 mOhm	Short circuit current	784 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	14,6	18,0	28,0	45,1	58,7	67,2	79,0	96,0	105	111	117	129	129	141	166	182
1,05	14,4	17,8	27,7	40,8	51,1	57,9	66,0	78,6	85,6	88,2	93,1	102	108	117	139	152
1,1	14,0	17,2	25,7	35,3	42,7	47,0	52,8	63,0	68,0	71,1	74,7	80,4	88,6	96,8	115	124
1,14	13,3	15,8	21,8	27,5	32,9	36,4	40,7	47,6	51,7	55,3	59,5	67,3	69,8	77,4	91,9	97,8

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	16,9	20,6	31,3	48,2	61,4	69,5	80,7	97,0	105	111	117	129	129	141	166	182
1,05	16,8	20,5	31,4	45,0	55,4	62,2	70,4	83,1	90,3	92,9	97,9	107	114	123	146	160
1,1	16,4	20,0	29,6	40,0	47,9	52,4	58,7	69,6	75,0	78,3	82,2	88,5	97,5	106	126	136
1,14	15,6	18,6	25,5	31,8	37,9	41,8	46,7	54,4	59,0	63,0	67,8	76,7	79,5	88,3	105	112



VTX 1 L 140 - Cell data sheet

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