



XHP21 - Cell data sheet

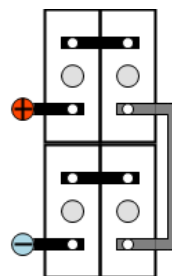
Classification

Brand	Alcad
Cell type	XHP21
Cell P/N	210672
Capacity at 5 hours rate	21 Ah
IEC Designation	KH21P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	276 mm		
Cell height			
Width	86 mm	Weight per cell	1,5 Kg
Length	46 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Microporous	Terminal material	Copper
Connection torque	10,0 +/- 2,0 Nm	Vent type	Flame arresting vent
Terminal size	M10 SW 16 mm		
		Handle	No

Plates

Positive		Negative	
Type of plates	Sintered	Type of plates	Plastic bonded

Electrolyte

Electrolyte type: Renewal		Max/Min	27 mm
Electrolyte type: Initial	E4	Vent oil quantity	
Electrolyte per cell: Liquid	0,4 liters		

Connection

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

Float voltage	1,4 V/Cell	High rate voltage (min)	1,45 V/Cell
Single-level voltage	1,41 V/Cell		

Resistance/Short circuit

Internal resistance	1,90 mOhm	Short circuit current	821 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	2,15	2,66	4,20	6,96	10,4	13,7	20,2	39,4	56,4	68,6	86,4	101	127	140	172	191
1,05	2,13	2,64	4,17	6,91	10,3	13,6	20,0	38,5	52,5	62,5	73,2	84,0	106	119	147	164
1,1	2,10	2,61	4,12	6,76	10,0	13,2	18,9	33,5	43,0	49,2	56,9	66,5	86,1	98,6	122	136
1,14	2,07	2,57	4,05	6,48	9,5	12,3	16,4	28,9	35,1	39,8	45,4	52,6	71,2	82,0	103	115

Engine starting performance

For a fully charged cell by a constant current charge according to IEC 60623 standard at +20°C +/- 5°C (+68°F +/- 9°F), 30 seconds discharge down to 0,85 V

Available amperes	237 A
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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	2,60	3,22	5,02	8,25	12,2	15,5	22,0	40,9	57,8	69,7	87,1	101	127	140	172	191
1,05	2,57	3,20	4,98	8,19	12,2	15,5	22,2	41,6	56,0	66,4	77,3	88,2	111	125	154	172
1,1	2,54	3,16	4,92	8,01	11,8	15,3	21,5	37,4	47,8	54,4	62,8	73,1	94,7	108	134	150
1,14	2,51	3,11	4,84	7,68	11,2	14,4	19,1	33,2	40,2	45,5	51,8	60,0	81,2	93,5	117	131

Engine starting performance

For a fully charged cell by a constant current charge according to IEC 60623 standard at +20°C +/- 5°C (+68°F +/- 9°F), 30 seconds discharge down to 0,85 V

Available amperes	237 A
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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	9,8	7,88	5,00	3,02	2,03	1,53	1,04	0,53	0,37	0,31	0,24	0,21	0,17	0,15	0,12	0,11
1,05	9,9	7,95	5,04	3,04	2,04	1,55	1,05	0,54	0,40	0,34	0,29	0,25	0,20	0,18	0,14	0,13
1,1	10,0	8,05	5,10	3,10	2,10	1,60	1,11	0,63	0,49	0,43	0,37	0,32	0,24	0,21	0,17	0,15
1,14	10,1	8,16	5,18	3,24	2,21	1,71	1,28	0,73	0,60	0,53	0,46	0,40	0,30	0,26	0,20	0,18

Engine starting performance

For a fully charged cell by a constant current charge according to IEC 60623 standard at +20°C +/- 5°C (+68°F +/- 9°F), 30 seconds discharge down to 0,85 V

Available amperes 237 A

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	8,08	6,51	4,18	2,55	1,72	1,35	0,95	0,51	0,36	0,30	0,24	0,21	0,17	0,15	0,12	0,11
1,05	8,16	6,57	4,22	2,57	1,73	1,35	0,94	0,51	0,37	0,32	0,27	0,24	0,19	0,17	0,14	0,12
1,1	8,26	6,65	4,27	2,62	1,78	1,38	0,98	0,56	0,44	0,39	0,33	0,29	0,22	0,19	0,16	0,14
1,14	8,37	6,74	4,33	2,73	1,87	1,46	1,10	0,63	0,52	0,46	0,41	0,35	0,26	0,22	0,18	0,16

Engine starting performance

Kt factor power, after prolonged float charged of fully charged cells at +20°C +/- 5°C (+68°F +/- 9°F)

Available amperes 237 A