



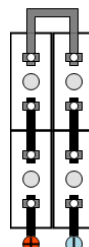
XHP45 - Cell data sheet

Classification

Brand	Alcad
Cell type	XHP45
Cell P/N	210676
Capacity at 5 hours rate	45 Ah
IEC Designation	KH45P
According to IEC 60623	



Wiring principle



Crosswise

Physical data

Overall height	276 mm		
Cell height			
Width	86 mm	Weight per cell	2,7 Kg
Length	86 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	55 mm
Electrolyte type: Initial	E4	Vent oil quantity	
Electrolyte per cell: Liquid	0,8 liters		

Connection

Cable area of internal connection cables	50 mm ²	End-lug (and external cable)	50 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	0,89 mOhm	Short circuit current	1759 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	4,60	5,71	9,00	14,9	22,2	29,4	43,4	84,4	121	147	185	216	271	300	369	409
1,05	4,56	5,66	8,93	14,8	22,1	29,0	42,9	82,6	112	134	157	180	226	254	315	352
1,1	4,50	5,59	8,82	14,5	21,5	28,2	40,5	71,8	92,2	105	122	142	184	211	262	292
1,14	4,44	5,51	8,69	13,9	20,4	26,3	35,2	61,9	75,1	85,2	97,2	113	153	176	221	246

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	509 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	5,57	6,91	10,8	17,7	26,2	33,3	47,1	87,7	124	149	187	216	271	300	369	409
1,05	5,52	6,85	10,7	17,5	26,0	33,3	47,7	89,0	120	142	166	189	237	267	331	369
1,1	5,45	6,76	10,5	17,2	25,4	32,7	46,1	80,2	102	117	135	157	203	232	288	321
1,14	5,38	6,67	10,4	16,5	24,0	30,8	40,8	71,1	86,0	97,5	111	129	174	200	252	280

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	509 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 509 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 509 A