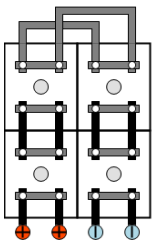
XHP320 - Cell data sheet

Classification

Brand	Alcad
Cell type	XHP320
Cell P/N	212427
Capacity at 5 hours rate	320 Ah
IEC Designation	KH320P
According to IEC 60623	

Wiring principle Crosswise



Physical data

Overall height	339 mm		
Cell height			
Width	165 mm	Weight per cell	16,4 Kg
Length	198 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	2
Separator type	Microporous	Terminal material	Copper
Connection torque	15,0 +/- 2,0 Nm	Vent type	Flame arresting vent
Terminal size	M12		
		Handle	No

Plates

Positive		Negative	
Type of plates	Sintered	Type of plates	Plastic bonded

Electrolyte

Electrolyte type: Renewal		Max/Min	65 mm
Electrolyte type: Initial	E4	Vent oil quantity	
Electrolyte per cell: Liquid	3,8 liters		

Connection

Cable area of internal connection cables	185 mm²	End-lug (and external cable)	185 mm²

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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	0,13 mOhm	Short circuit current	11563 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	32,7	40,6	64,0	106	158	209	309	585	816	952	1.127	1.333	1.818	2.038	2.500	2.689
1,05	32,4	40,2	63,5	105	157	206	305	558	719	818	933	1.092	1.546	1.739	2.133	2.319
1,1	32,0	39,8	62,8	103	153	201	288	453	548	618	711	865	1.255	1.455	1.778	1.916
1,14	31,6	39,2	61,8	98,8	145	187	251	358	424	481	558	681	1.046	1.217	1.502	1.649

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 3.330 A

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	39,6	49,1	76,5	126	186	237	335	608	836	967	1.136	1.333	1.818	2.038	2.500	2.689
1,05	39,2	48,7	75,9	125	185	237	339	602	767	869	985	1.147	1.624	1.826	2.241	2.435
1,1	38,8	48,1	75,0	122	180	233	328	506	608	684	785	952	1.380	1.600	1.956	2.108
1,14	38,2	47,4	73,8	117	171	219	290	411	486	550	638	776	1.192	1.387	1.713	1.881

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 3.330 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	0,55	0,39	0,34	0,28	0,24	0,18	0,16	0,13	0,12
1,05	9,9	7,95	5,04	3,04	2,04	1,55	1,05	0,57	0,44	0,39	0,34	0,29	0,21	0,18	0,15	0,14
1,1	10,0	8,05	5,10	3,10	2,10	1,60	1,11	0,71	0,58	0,52	0,45	0,37	0,26	0,22	0,18	0,17
1,14	10,1	8,16	5,18	3,24	2,21	1,71	1,28	0,90	0,75	0,66	0,57	0,47	0,31	0,26	0,21	0,19

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 3.330 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	0,53	0,38	0,33	0,28	0,24	0,18	0,16	0,13	0,12
1,05	8,16	6,57	4,22	2,57	1,73	1,35	0,94	0,53	0,42	0,37	0,32	0,28	0,20	0,18	0,14	0,13
1,1	8,26	6,65	4,27	2,62	1,78	1,38	0,98	0,63	0,53	0,47	0,41	0,34	0,23	0,20	0,16	0,15
1,14	8,37	6,74	4,33	2,73	1,87	1,46	1,10	0,78	0,66	0,58	0,50	0,41	0,27	0,23	0,19	0,17

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 3.330 A