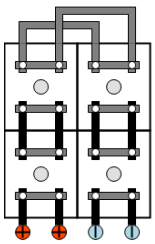
Reliability inside

XHP280 - Cell data sheet

Classification

Brand	Alcad
Cell type	XHP280
Cell P/N	212425
Capacity at 5 hours rate	280 Ah
IEC Designation	KH280P
According to IEC 60623	

Wiring principle Crosswise



Physical data

Overall height	339 mm		
Cell height			
Width	165 mm	Weight per cell	15,7 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	4,2 liters		

Connection

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

XHP280 - Cell data sheet

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	0,14 mOhm	Short circuit current	10118 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	28,6	35,5	56,0	92,8	138	183	270	512	714	833	986	1.167	1.591	1.783	2.188	2.353
1,05	28,4	35,2	55,6	92,1	137	181	267	489	629	716	816	956	1.353	1.522	1.867	2.029
1,1	28,0	34,8	54,9	90,2	134	176	252	396	479	541	622	757	1.098	1.273	1.556	1.677
1,14	27,6	34,3	54,0	86,4	127	164	219	313	371	421	489	596	915	1.065	1.315	1.443

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 3.000 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	34,6	43,0	66,9	110	163	207	293	532	731	846	994	1.167	1.591	1.783	2.188	2.353
1,05	34,3	42,6	66,4	109	162	207	297	527	671	760	862	1.004	1.421	1.598	1.961	2.131
1,1	33,9	42,1	65,6	107	158	203	287	443	532	598	687	833	1.208	1.400	1.711	1.845
1,14	33,4	41,5	64,6	102	150	192	254	359	425	482	558	679	1.043	1.214	1.499	1.646

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 3.000 A

XHP280 - 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	9,8	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 3.000 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 3.000 A