



XHP100 - Cell data sheet

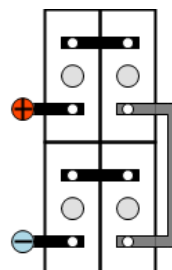
Classification

Brand	Alcad
Cell type	XHP100
Cell P/N	210682
Capacity at 5 hours rate	100 Ah
IEC Designation	KH100P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	339 mm		
Cell height			
Width	166 mm	Weight per cell	6,1 Kg
Length	78 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
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	60 mm
Electrolyte type: Initial	E4	Vent oil quantity	
Electrolyte per cell: Liquid	1,5 liters		

Connection

Cable area of internal connection cables	95 mm ²	End-lug (and external cable)	95 mm ²
--	--------------------	------------------------------	--------------------



XHP100 - 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	0,40 mOhm	Short circuit current	3613 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	10,2	12,7	20,0	33,1	49,3	65,3	96,4	183	255	298	352	417	568	637	781	840
1,05	10,1	12,6	19,8	32,9	49,0	64,5	95,2	175	225	256	292	341	483	543	667	725
1,1	10,0	12,4	19,6	32,2	47,7	62,7	90,0	141	171	193	222	270	392	455	556	599
1,14	9,9	12,2	19,3	30,9	45,2	58,5	78,3	112	133	150	175	213	327	380	469	515

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	1.110 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	12,4	15,4	23,9	39,3	58,2	74,0	105	190	261	302	355	417	568	637	781	840
1,05	12,3	15,2	23,7	39,0	57,8	73,9	106	188	240	271	308	358	507	571	700	761
1,1	12,1	15,0	23,4	38,2	56,3	72,7	102	158	190	214	245	297	431	500	611	659
1,14	11,9	14,8	23,1	36,6	53,4	68,4	90,8	128	152	172	199	243	373	433	535	588

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	1.110 A
-------------------	---------



XHP100 - 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 1.110 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 1.110 A