



XHP190 - Cell data sheet

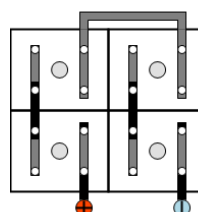
Classification

Brand	Alcad
Cell type	XHP190
Cell P/N	210687
Capacity at 5 hours rate	190 Ah
IEC Designation	KH190P
According to IEC 60623	



Wiring principle

Normal



Physical data

Overall height	339 mm		
Cell height			
Width	166 mm	Weight per cell	10,0 Kg
Length	117 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	60 mm
Electrolyte type: Initial	E4	Vent oil quantity	
Electrolyte per cell: Liquid	2,1 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	0,21 mOhm	Short circuit current	6866 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	19,4	24,1	38,0	63,0	93,7	124	183	347	485	565	669	792	1.080	1.210	1.484	1.597
1,05	19,2	23,9	37,7	62,5	93,1	123	181	332	427	486	554	648	918	1.033	1.267	1.377
1,1	19,0	23,6	37,2	61,2	90,7	119	171	269	325	367	422	514	745	864	1.056	1.138
1,14	18,8	23,3	36,7	58,6	86,0	111	149	212	252	286	332	404	621	722	892	979

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 2.100 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	23,5	29,2	45,4	74,6	111	141	199	361	496	574	674	792	1.080	1.210	1.484	1.597
1,05	23,3	28,9	45,0	74,1	110	140	201	358	456	516	585	681	964	1.084	1.331	1.446
1,1	23,0	28,6	44,5	72,5	107	138	195	300	361	406	466	565	820	950	1.161	1.252
1,14	22,7	28,2	43,8	69,5	101	130	172	244	289	327	379	461	708	824	1.017	1.117

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 2.100 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 2.100 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 2.100 A