



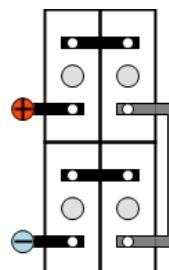
# HC12P - Cell data sheet

## Classification

Brand	
Cell type	HC12P
Cell P/N	310450851
Capacity at 5 hours rate	12 Ah
IEC Designation	KH12P
According to IEC 60623	



Wiring principle Normal



## Physical data

Overall height	270 mm		
Cell height	267 mm		
Width	121 mm	Weight per cell	1,9 Kg
Length	42 mm		

## Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Grid	Terminal material	Steel
Connection torque	11,0 +/- 1,1 Nm	Vent type	Flame arresting vent (small)
Terminal size	M6 SW 10 mm	Handle	No

## Plates

Positive		Negative	
Type of plates	Pocket	Type of plates	Pocket

## Electrolyte

Electrolyte type: Renewal	E13	Max/Min	35 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	0,7 liters		

## Connection

Cable area of internal connection cables	16 mm <sup>2</sup>	End-lug (and external cable)	16 mm <sup>2</sup>
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## Charging

Float voltage	1,4 V/Cell	High rate voltage (min)	1,45 V/Cell
Single-level voltage	1,43 V/Cell		

## Resistance/Short circuit

Internal resistance	2,50 mOhm	Short circuit current	406 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	1,20	1,50	2,40	3,95	5,86	7,72	11,2	20,4	27,2	31,3	37,3	46,3	62,2	70,2	89,2	94,5
1,05	1,19	1,49	2,36	3,89	5,74	7,57	11,0	19,4	23,2	26,9	31,8	37,9	51,3	60,3	73,7	79,5
1,1	1,16	1,46	2,30	3,78	5,56	7,26	10,2	15,6	18,6	21,0	23,9	29,6	40,8	47,4	60,0	63,2
1,14	1,12	1,40	2,22	3,62	5,08	6,47	8,49	12,4	14,9	16,9	19,4	23,9	32,8	38,2	46,5	55,8
1,16	1,09	1,36	2,17	3,48	4,66	5,77	6,88	10,2	12,4	13,8	15,6	19,6	27,8	32,0	38,6	47,4

### 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	112 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	1,45	1,82	2,87	4,67	6,91	8,75	12,2	21,2	27,9	31,8	37,6	46,3	62,2	70,2	89,2	94,5
1,05	1,44	1,80	2,82	4,60	6,77	8,68	12,2	20,9	24,8	28,5	33,6	39,8	53,9	63,3	77,4	83,5
1,1	1,41	1,76	2,75	4,48	6,56	8,42	11,7	17,4	20,6	23,3	26,4	32,6	44,9	52,2	66,0	69,5
1,14	1,36	1,70	2,65	4,29	6,00	7,57	9,8	14,3	17,0	19,3	22,2	27,3	37,4	43,6	53,0	63,6
1,16	1,32	1,65	2,59	4,12	5,50	6,78	8,05	11,9	14,4	16,1	18,1	22,7	32,3	37,1	44,8	55,0

### 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	112 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	10,0	8,00	5,00	3,04	2,05	1,55	1,07	0,59	0,44	0,38	0,32	0,26	0,19	0,17	0,13	0,13
1,05	10,1	8,08	5,08	3,09	2,09	1,58	1,10	0,62	0,52	0,45	0,38	0,32	0,23	0,20	0,16	0,15
1,1	10,3	8,25	5,21	3,17	2,16	1,65	1,17	0,77	0,65	0,57	0,50	0,41	0,29	0,25	0,20	0,19
1,14	10,7	8,56	5,41	3,31	2,36	1,86	1,41	0,97	0,81	0,71	0,62	0,50	0,37	0,31	0,26	0,22
1,16	11,0	8,81	5,54	3,45	2,57	2,08	1,74	1,18	0,97	0,87	0,77	0,61	0,43	0,38	0,31	0,25

### 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 112 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	8,26	6,61	4,18	2,57	1,74	1,37	0,98	0,57	0,43	0,38	0,32	0,26	0,19	0,17	0,13	0,13
1,05	8,35	6,68	4,25	2,61	1,77	1,38	0,99	0,58	0,48	0,42	0,36	0,30	0,22	0,19	0,16	0,14
1,1	8,52	6,82	4,36	2,68	1,83	1,43	1,03	0,69	0,58	0,52	0,45	0,37	0,27	0,23	0,18	0,17
1,14	8,84	7,07	4,52	2,80	2,00	1,59	1,22	0,84	0,71	0,62	0,54	0,44	0,32	0,28	0,23	0,19
1,16	9,10	7,28	4,64	2,91	2,18	1,77	1,49	1,01	0,83	0,75	0,66	0,53	0,37	0,32	0,27	0,22

### 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 112 A