



HC110P - Cell data sheet

Classification

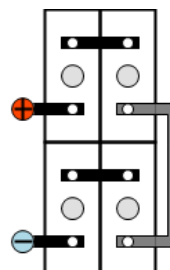
Brand
Cell type
Cell P/N
Capacity at 5 hours rate
IEC Designation
According to IEC 60623

HC110P
310452151
110 Ah
KH110P



Wiring principle

Normal



Physical data

Overall height	357 mm		
Cell height	349 mm		
Width	192 mm	Weight per cell	11,1 Kg
Length	93 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Grid	Terminal material	Steel
Connection torque	30,0 +/- 3,0 Nm	Vent type	
Terminal size	M10 SW 16 mm	Handle	No

Plates

Positive		Negative	
Type of plates	Pocket	Type of plates	Pocket

Electrolyte

Electrolyte type: Renewal	E13	Max/Min	50 mm
Electrolyte type: Initial	E22	Vent oil quantity	
Electrolyte per cell: Liquid	3,2 liters		

Connection

Cable area of internal connection cables	120 mm²	End-lug (and external cable)	120 mm²
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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	0,35 mOhm	Short circuit current	3846 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	11,0	13,8	22,0	36,1	53,6	70,7	103	190	255	297	353	438	567	647	815	894
1,05	11,0	13,7	21,7	35,7	52,6	69,1	100	180	220	254	301	357	483	550	679	728
1,1	10,7	13,4	21,1	34,7	51,0	66,7	94,8	147	176	198	225	277	380	440	539	604
1,14	10,3	12,9	20,3	33,3	48,7	63,1	83,8	115	136	153	173	212	304	352	440	462
1,16	10,0	12,5	19,8	32,0	44,7	56,2	67,9	94,1	115	125	139	174	258	295	366	394

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	1.047 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	13,4	16,7	26,3	42,8	63,3	80,1	112	197	261	301	356	438	567	647	815	894
1,05	13,3	16,6	25,9	42,3	62,1	79,2	111	194	235	269	318	375	507	578	713	765
1,1	12,9	16,2	25,2	41,1	60,1	77,3	108	164	195	220	248	304	419	484	593	664
1,14	12,5	15,6	24,3	39,5	57,5	73,8	97,1	132	156	175	198	242	347	402	502	527
1,16	12,1	15,2	23,7	37,9	52,8	66,1	79,4	110	133	145	161	202	299	342	425	457

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	1.047 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	7,97	5,00	3,04	2,05	1,56	1,06	0,58	0,43	0,37	0,31	0,25	0,19	0,17	0,14	0,12
1,05	10,0	8,03	5,08	3,08	2,09	1,59	1,10	0,61	0,50	0,43	0,37	0,31	0,23	0,20	0,16	0,15
1,1	10,3	8,24	5,21	3,17	2,16	1,65	1,16	0,75	0,63	0,55	0,49	0,40	0,29	0,25	0,20	0,18
1,14	10,7	8,52	5,41	3,30	2,26	1,74	1,31	0,96	0,81	0,72	0,64	0,52	0,36	0,31	0,25	0,24
1,16	11,0	8,77	5,55	3,44	2,46	1,96	1,62	1,17	0,96	0,88	0,79	0,63	0,43	0,37	0,30	0,28

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 1.047 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	8,23	6,58	4,18	2,57	1,74	1,37	0,98	0,56	0,42	0,36	0,31	0,25	0,19	0,17	0,14	0,12
1,05	8,30	6,64	4,25	2,60	1,77	1,39	0,99	0,57	0,47	0,41	0,35	0,29	0,22	0,19	0,15	0,14
1,1	8,51	6,81	4,36	2,68	1,83	1,42	1,02	0,67	0,56	0,50	0,44	0,36	0,26	0,23	0,19	0,17
1,14	8,80	7,04	4,53	2,78	1,91	1,49	1,13	0,84	0,70	0,63	0,56	0,46	0,32	0,27	0,22	0,21
1,16	9,06	7,25	4,64	2,90	2,08	1,66	1,38	1,00	0,83	0,76	0,68	0,54	0,37	0,32	0,26	0,24

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 1.047 A