



HC50P - Cell data sheet

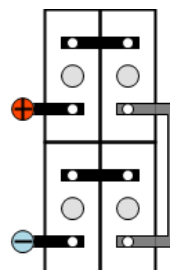
Classification

Brand	
Cell type	HC50P
Cell P/N	310451551
Capacity at 5 hours rate	50 Ah
IEC Designation	KH50P
According to	IEC 60623



Wiring principle

Normal



Physical data

Overall height	357 mm		
Cell height	349 mm		
Width	192 mm	Weight per cell	6,9 Kg
Length	68 mm		

Construction

Container material	Polypropylene	No. of terminals/polarity	1
Separator type	Grid	Terminal material	Steel
Connection torque	20,0 +/- 2,0 Nm	Vent type	
Terminal size	M8 SW 13 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	2,6 liters		

Connection

Cable area of internal connection cables	70 mm ²	End-lug (and external cable)	50 mm ²
--	--------------------	------------------------------	--------------------



HC50P - Cell data sheet

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	0,78 mOhm	Short circuit current	1748 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	5,02	6,28	10,0	16,4	24,4	32,1	47,0	86,2	116	135	160	199	258	294	370	406
1,05	4,98	6,22	9,8	16,2	23,9	31,4	45,4	81,6	100	115	137	162	219	250	309	331
1,1	4,86	6,07	9,6	15,8	23,2	30,3	43,1	66,7	80,0	90,2	102	126	173	200	245	274
1,14	4,69	5,87	9,23	15,2	22,1	28,7	38,1	52,1	62,0	69,5	78,7	96,3	138	160	200	210
1,16	4,56	5,70	9,01	14,6	20,3	25,6	30,9	42,8	52,1	56,7	63,2	79,3	117	134	167	179

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 476 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	6,07	7,59	12,0	19,5	28,8	36,4	51,0	89,6	119	137	162	199	258	294	370	406
1,05	6,03	7,53	11,8	19,2	28,2	36,0	50,5	88,0	107	122	144	170	230	263	324	348
1,1	5,88	7,35	11,5	18,7	27,3	35,1	49,0	74,5	88,8	100	113	138	190	220	269	302
1,14	5,68	7,10	11,0	18,0	26,1	33,5	44,2	59,8	71,0	79,5	89,9	110	158	183	228	240
1,16	5,52	6,90	10,8	17,2	24,0	30,0	36,1	49,8	60,6	65,8	73,3	92,0	136	155	193	208

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 476 A



HC50P - 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	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 476 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 476 A