

电机温升实验报告

产品名称	HPM水冷电机	型号	HPM5000	测试仪器	MTS-11电机测试系统; 温度巡检仪			RK-8/16多路
主要参数	电压(V)	48	环境温度t0(℃)		6.1	负载(Nm)	13	
起始	输入电流A	电机电流A	扭矩Nm	转速RPM	功率W	测试功率范围		
	132.3	113.5	12.97	3720	6077			
结束	输入电流A	电机电流A	扭矩Nm	转速RPM	功率W	6077W-6176W		
	135.1	123.3	13	3815.8	6176			
时间/分钟	温度t1 (℃)	温升△t1 (K)	温度t2 (℃)	温升△t1(K)	输入电流(A)	输出电流(A)	转速(RPM)	备注
1	19.2	13.1	19.4	13.3				温升过程
2	30.2	24.1	29.5	23.4	132.3	113.5	3720	
3	40.6	34.5	39.5	33.4	134.2	115.8	3755.8	
4	45.3	39.2	44.2	38.1	134.6	116.2	3761	
5	50.3	44.2	49	42.9	133.5	116.8	3713.2	
6	55.6	49.5	54.1	48	134.2	117.6	3719	
7	60.6	54.5	58.9	52.8	134.6	117.7	3726.8	
8	65.4	59.3	63.5	57.4	134.2	118.9	3725.3	
9	68.8	62.7	66.8	60.7	134.4	119.5	3728.5	
10	71.7	65.6	69.7	63.6	134.5	120.1	3722.1	
11	75	68.9	73.6	67.5	134.3	120.5	3726.2	
12	79.00	72.9	76.9	70.8	134.2	121	3722	
13	81.1	75	78.8	72.7	134.4	121.5	3722.2	
14	83.4	77.3	81.1	75	134.6	121.5	3736.1	
15	86.4	80.3	84	77.9	134.4	121	3768.5	
16	87.9	81.8	85.5	79.4	134.5	121.1	3774.6	
17	89.6	83.5	87.1	81	134.6	121	3785.4	
18	91.4	85.3	88.9	82.8	134.7	121.4	3786.2	
19	92.9	86.8	90.3	84.2	135	121.7	3786.3	
20	94.4	88.3	91.8	85.7	134.7	122.5	3770.9	
21	95.8	89.7	93.2	87.1	134.7	121.3	3813.3	
22	97.30	91.2	94.5	88.4	133.1	121.4	3819.4	
23	98.4	92.3	95.7	89.6	135.4	121.7	3834.7	
24	99.2	93.1	96.4	90.3	134.6	122	3818.4	
25	100.2	94.1	97.4	91.3	135	122.3	3819.1	
26	101.1	95	98.3	92.2	134.9	122.4	3816.2	
27	102.1	96	99.1	93	135.1	122.9	3809.5	
28	102.9	96.8	99.9	93.8	135.2	122.9	3812.9	
29	103.8	97.7	100.8	94.7	135.3	122.3	3806.1	
30	104.3	98.2	101.3	95.2	135	123	3816.1	
31	105.2	99.1	102.1	96	135.1	123	3817.2	
32	105.8	99.7	102.7	96.6	135.3	123.2	3818.2	
33	106.3	100.2	103.2	97.1	135.1	123.3	3815.8	
34	102.4	96.3	98.1	92	0	0	0	
35	92.7	86.6	95.4	89.3	0	0	0	
36	82.8	76.7	87.7	81.6	0	0	0	
37	76.1	70	81.2	75.1	0	0	0	
38	69.8	63.7	74.4	68.3	0	0	0	
39	66.5	60.4	70.7	64.6	0	0	0	
40	63.1	57	66.9	60.8	0	0	0	
41	60	53.9	63.4	57.3	0	0	0	

42	56.7	50.6	59.7	53.6	0	0	0
43	53.9	47.8	56.5	50.4	0	0	0
44	51.3	45.2	53.6	47.5	0	0	0
45	49.1	43	51.2	45.1	0	0	0
46	47.1	41	48.8	42.7	0	0	0
47	45.2	39.1	46.8	40.7	0	0	0
48	43.9	37.8	45.2	39.1	0	0	0
49	42.3	36.2	43.5	37.4	0	0	0
50	41	34.9	42	35.9	0	0	0
51	39.8	33.7	40.7	34.6	0	0	0
52	38.6	32.5	39.4	33.3	0	0	0
53	37.6	31.5	38.4	32.3	0	0	0
54	36.5	30.4	37.2	31.1	0	0	0
55	35.7	29.6	36.3	30.2	0	0	0
56	34.8	28.7	35.3	29.2	0	0	0
57	33.8	27.7	34.3	28.2	0	0	0
58	33.5	27.4	33.9	27.8	0	0	0
59	32.9	26.8	33.2	27.1	0	0	0
60	32.3	26.2	32.6	26.5	0	0	0
61	31.8	25.7	32	25.9	0	0	0
62	31.3	25.2	31.5	25.4	0	0	0
63	30.8	24.7	31	24.9	0	0	0
64	30.3	24.2	30.4	24.3	0	0	0
65	29.8	23.7	29.9	23.8	0	0	0
66	29.5	23.4	29.6	23.5	0	0	0

冷却过程

