DAFTAR PUSTAKA

Anwar, Khairil. 2010. “Efek Beban Pendingin Terhadap Performa Sistem Mesin Pendingin”. Jurnal SMARTek 8(3):203.

Darmawan, Awan Satya. 2016. “Studi Eksperimen Pengaruh Dimensi Pipa pada Sistem *Air Conditioning* Dengan *Pre-Cooling*”. Teknik Mesin, Institut Teknologi Sepuluh Nopember, Surabaya.

Kusnanto, S. 2004. “Optimasi Pengaruh Kecepatan Udara Pendingin pada AC Mobil”. Tugas Akhir S-1 Teknik Mesin, Universitas Muhammadiyah, Surakarta.

Yawara, Eka. 2003. “Koefisien Perpindahan Kalor Kondensasi Petrozon di dalam Pipa Vertikal”. Tesis S-2 Teknik Mesin, Universitas Gadjah Mada, Jogjakarta.

Stoecker, Wilbert F., and Jones, Jerold W.,1982, “Refrigerasi dan Pengkondisian Udara edisi kedua”. Jakarta, Indonesia, Erlangga.

Cengel, Y.A. and Boles, M.A., 1994. Thermodynamics An Engineering Approach. 2nd ed. McGraw Hill: New York.

LAMPIRAN

Lampiran 1. Tabel Data Pengamatan

1. Pengujian Kalibrasi

P. Katup	Section I			Section II			Section III			Section IV		
	P1	Twb	Tdb	P1	Twb	Tdb	P1	Twb	Tdb	P1	Twb	Tdb
1	52	26,8182	28,8182	53	26,6262	28,6262	52	26,5681	28,5681	53	27,1231	29,1231
2	51	26,8783	28,8783	53	26,7380	28,7380	52	26,6841	28,6841	51	27,0434	29,0434
3	50	26,9214	28,9214	50	26,8270	28,8270	48	26,7636	28,7636	48	26,9929	28,9929
4	50	27,0185	29,0185	48	26,9274	28,9274	48	26,8591	28,8591	46	27,0152	29,0152
5	49	27,0983	29,0983	44	27,0377	29,0377	44	26,9640	28,9640	46	27,0909	29,0909
6	48	27,1682	29,1682	42	27,1224	29,1224	42	27,0531	29,0531	43	27,1521	29,1521
7	48	27,1989	29,1989	39	27,1785	29,1785	35	27,1317	29,1317	41	27,1933	29,1933
8	47	27,2275	29,2275	35	27,2154	29,2154	30	27,1641	29,1641	38	27,2211	29,2211
9	47	27,2869	29,2869	35	27,2665	29,2665	30	27,2295	29,2295	37	27,2809	29,2809
10	46	27,2699	29,2699	34	27,2661	29,2661	30	27,2382	29,2382	37	27,2769	29,2769

2. Pengujian Pemanasan Udara Atmosfir 1 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T1)		Setelah Heater (T2)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	1000	26,9515	28,9515	26,9515	28,9515	35,4119	37,4119
2	1000	26,9014	28,9014	26,9014	28,9014	35,8039	37,8039
3	1000	26,9489	28,9489	26,9489	28,9489	35,0645	37,0645
4	1000	26,9011	28,9011	26,9011	28,9011	33,7530	35,7530
5	1000	26,8010	28,8010	26,8010	28,8010	32,4944	34,4944
6	1000	26,7990	28,7990	26,7990	28,7990	31,4584	33,4584
7	1000	26,7949	28,7949	26,7949	28,7949	30,9650	32,9650
8	1000	26,7099	28,7099	26,7099	28,7099	30,8350	32,8350
9	1000	26,7000	28,7000	26,7000	28,7000	30,8549	32,8549
10	1000	26,6505	28,6505	26,6505	28,6505	30,8291	32,8291

3. Pengujian Pemanasan Udara Atmosfir 1,5 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T2)		Setelah Heater (T5)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	1500	26,6692	28,6692	32,3547	34,3547	33,6891	35,6891
2	1500	26,6937	28,6937	32,0360	34,0360	36,9818	38,9818
3	1500	26,7986	28,7986	31,0109	33,0109	39,2946	41,2946
4	1500	26,8791	28,8791	30,2266	32,2266	39,8612	41,8612
5	1500	26,8506	28,8506	29,6091	31,6091	39,2567	41,2567
6	1500	26,9710	28,9710	29,1249	31,1249	38,1867	40,1867
7	1500	26,9448	28,9448	28,9891	30,9891	37,2566	39,2566
8	1500	26,9806	28,9806	29,0700	31,0700	36,6995	38,6995
9	1500	27,0062	29,0062	29,1143	31,1143	36,4315	38,4315
10	1500	26,9885	28,9885	29,1312	31,1312	36,3529	38,3529

4. Pengujian Pemanasan Udara Atmosfir 2 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T4)		Setelah Heater (T5)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	2000	26,9806	28,9806	29,7555	31,7555	36,4730	38,4730
2	2000	27,0517	29,0517	30,2708	32,2708	41,3052	43,3052
3	2000	27,0797	29,0797	30,3839	32,3839	46,4789	48,4789
4	2000	27,1403	29,1403	29,8437	31,8437	47,1444	49,1444
5	2000	27,1409	29,1409	29,1761	31,1761	45,5848	47,5848
6	2000	27,0502	29,0502	28,6578	30,6578	43,6360	45,6360
7	2000	27,1025	29,1025	28,3346	30,3346	41,9670	43,9670
8	2000	27,1022	29,1022	28,1758	30,1758	40,8266	42,8266
9	2000	26,9723	28,9723	28,0869	30,0869	40,2869	42,2869
10	2000	26,9715	28,9715	28,0166	30,0166	40,0711	42,0711

5. Pengujian Pemanasan Udara Lembab 1 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T1)		Setelah Heater (T2)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	1000	26,9809	28,9809	26,9809	28,9809	29,7597	31,7597
2	1000	26,9403	28,9403	26,9403	28,9403	31,9055	33,9055
3	1000	26,8824	28,8824	26,8824	28,8824	32,5593	34,5593
4	1000	26,8039	28,8039	26,8039	28,8039	32,2336	34,2336
5	1000	26,8506	28,8506	26,8506	28,8506	31,6946	33,6946
6	1000	26,8038	28,8038	26,8038	28,8038	31,4312	33,4312
7	1000	26,7996	28,7996	26,7996	28,7996	31,1567	33,1567
8	1000	26,7997	28,7997	26,7997	28,7997	31,0495	33,0495
9	1000	26,7670	28,7670	26,7670	28,7670	31,0494	33,0494
10	1000	26,7702	28,7702	26,7702	28,7702	31,0018	33,0018

6. Pengujian Pemanasan Udara Lembab 1,5 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T2)		Setelah Heater (T5)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	1500	27,0798	29,0798	30,8034	32,8034	40,2211	42,2211
2	1500	27,1109	29,1109	30,7688	32,7688	40,8079	42,8079
3	1500	27,0931	29,0931	30,2571	32,2571	41,4613	43,4613
4	1500	27,0419	29,0419	29,6162	31,6162	41,0291	43,0291
5	1500	26,9741	28,9741	29,1120	31,1120	39,7361	41,7361
6	1500	26,8844	28,8844	28,7235	30,7235	38,3657	40,3657
7	1500	26,8413	28,8413	28,6271	30,6271	37,2079	39,2079
8	1500	26,8001	28,8001	28,7292	30,7292	36,6434	38,6434
9	1500	26,7990	28,7990	28,8279	30,8279	36,4199	38,4199
10	1500	26,7999	28,7999	28,8896	30,8896	36,3382	38,3382

7. Pengujian Pemanasan Udara Lembab 2 kW

P. Katup	Posisi Heater	Kondisi Ruangan (T1)		Sebelum Heater (T4)		Setelah Heater (T5)	
		Twb	Tdb	Twb	Tdb	Twb	Tdb
1	2000	26,8043	28,8043	30,2973	32,2973	42,9466	44,9466
2	2000	26,9587	28,9587	30,7883	32,7883	48,0292	50,0292
3	2000	27,1914	29,1914	30,5634	32,5634	48,0298	50,0298
4	2000	27,3377	29,3377	30,0276	32,0276	48,0298	50,0298
5	2000	27,3491	29,3491	29,4924	31,4924	47,2114	49,2114
6	2000	27,3495	29,3495	29,0587	31,0587	44,9240	46,9240
7	2000	27,3808	29,3808	28,7684	30,7684	42,9661	44,9661
8	2000	27,3299	29,3299	28,4422	30,4422	41,5295	43,5295
9	2000	27,2782	29,2782	28,1244	30,1244	40,6174	42,6174
10	2000	27,1818	29,1818	27,9048	29,9048	40,1426	42,1426

8. Pengujian Pendinginan Udara Atmosfir

P. Katup	Temperatur	Kondisi Ruangan (T1)		Sebelum Evaporator (T2)		Setelah Evaporator (T3)	
	Evaporator	Twb	Tdb	Twb	Tdb	Twb	Tdb
1	24,1081	26,5005	28,5005	26,4597	28,4597	25,0625	27,0625
2	27,5739	26,5191	28,5191	26,4660	28,4660	24,8945	26,8945
3	24,9709	26,5420	28,5420	26,4724	28,4724	25,2350	27,2350
4	28,3930	26,5092	28,5092	26,5652	28,5652	25,3067	27,3067
5	26,0448	26,4209	28,4209	26,6092	28,6092	25,7073	27,7073
6	28,5874	26,4168	28,4168	26,6972	28,6972	25,8506	27,8506
7	26,1659	26,4207	28,4207	26,8020	28,8020	26,1665	28,1665
8	28,6679	26,4434	28,4434	26,8985	28,8985	26,2634	28,2634
9	25,6072	26,4684	28,4684	26,9497	28,9497	26,4485	28,4485
10	28,5540	26,5100	28,5100	26,9790	28,9790	26,3860	28,3860

9. Pengujian Pendinginan Udara Lembab

P. Katup	Temperatur	Kondisi Ruangan (T1)		Sebelum Evaporator (T2)		Setelah Evaporator (T4)	
	Evaporator	Twb	Tdb	Twb	Tdb	Twb	Tdb
1	13,7315	26,9800	28,9800	26,6868	28,6868	24,1502	26,1502
2	12,8878	26,9898	28,9898	26,8720	28,8720	20,3267	22,3267
3	17,8892	26,9769	28,9769	27,1494	29,1494	17,9987	19,9987
4	23,3891	26,6910	28,6910	26,7746	28,7746	20,3037	22,3037
5	23,8337	26,4684	28,4684	26,4657	28,4657	20,9269	22,9269
6	24,1139	26,3151	28,3151	26,3418	28,3418	21,3056	23,3056
7	21,8474	26,2112	28,2112	26,3077	28,3077	21,3655	23,3655
8	26,8810	26,1878	28,1878	26,4513	28,4513	21,4191	23,4191
9	25,5206	26,1789	28,1789	26,4902	28,4902	23,4486	25,4486
10	28,4829	26,2444	28,2444	26,6209	28,6209	24,7028	26,7028

Lampiran 2. Dokumentasi Penelitian

1. Foto proses pengambilan data

2. Foto pengambilan data menggunakan aplikasi ET 600