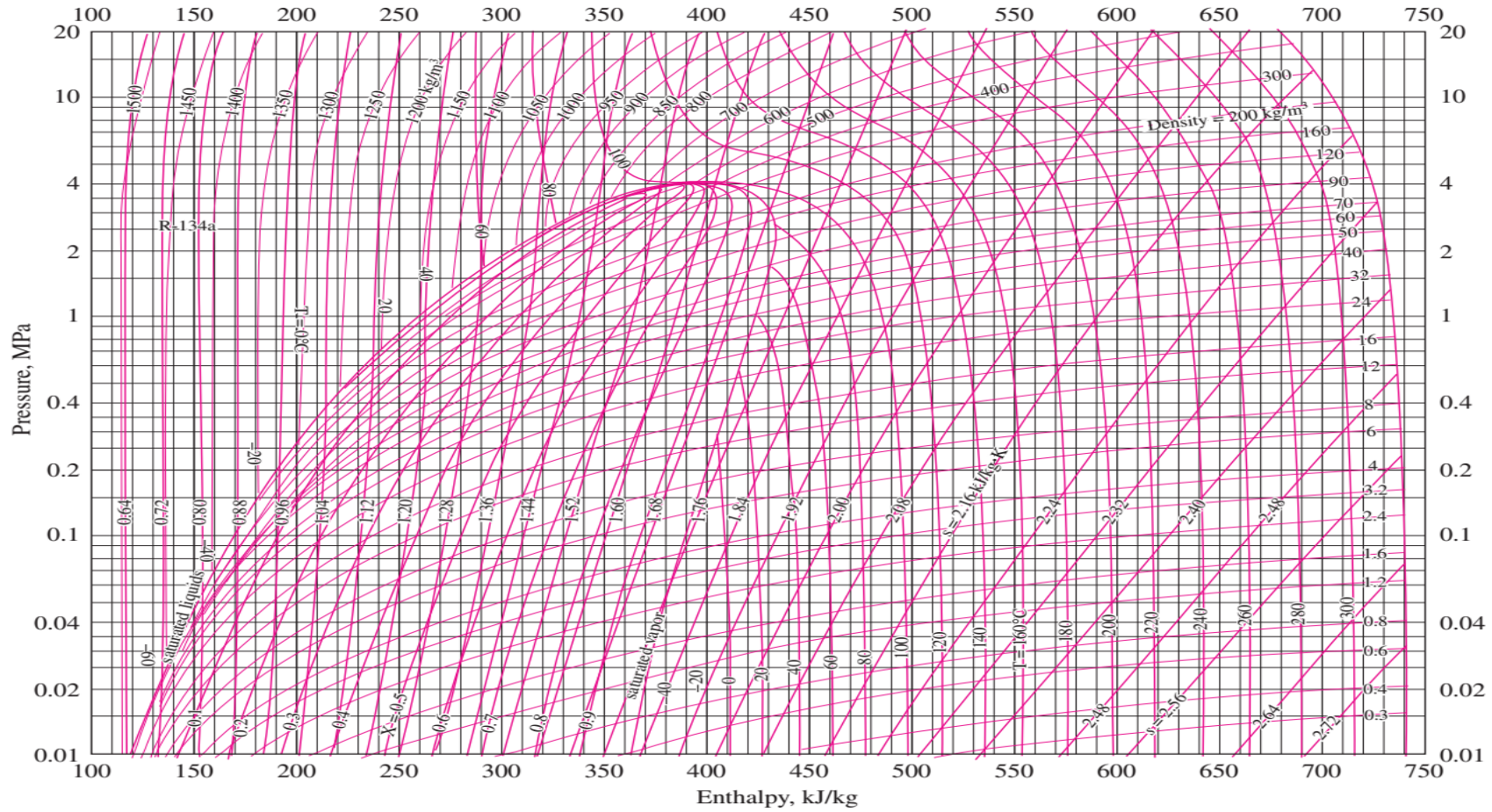


LAMPIRAN 1. Diagram P-h



LAMPIRAN 2. Kalibrasi Orifice

Keterangan $D_1 = 0,0127$ m diameter pipa tembaga $A_1 = 0,000127$ m² $\mu_{air} = 0,001$ N.s/m²

$D_2 = 0,002$ m diameter lubang orifice $A_2 = 3,14 \times 10^{-6}$ m² $\rho_{air} = 1000$ kg/m³

Percobaan	Vair (LPM)	Vair (m ³ /s)	Exp. 1				Δ Prata- rata	v1 (orifice)	Re	A2. (2/rair) ^{0.5} (DP) ^{0.5}	(1- (A2/A1) ²) ^{0.5}	Vair,ideal (m ³ /dt)	Vair,aktua (m ³ /s)	C Rumus 52	p.D1.mai r/(4.rair)	C Rumus 57
			zkiri (cm)	zkanan (cm)	Δ z (cm)	Δ P (N/m ²)										
			1	0	0	74.5										
2	1	1.67E-05	82.3	64.8	17.5	23,347.80	23,347.80	0.13157	1,671	2.15E-05	0.999692	2.10E-05	3.60E-10	1.67E-05	9.97E-09	0.776117
3	1.2	0.00002	86.4	60.6	25.8	34,421.30	34,421.30	0.15788	2,005	2.61E-05	0.999692	2.60E-05	4.30E-10	2.00E-05	9.97E-09	0.767039
4	1.4	2.33E-05	90	56.9	33.1	44,160.70	44,160.70	0.1842	2,339	2.95E-05	0.999692	3.00E-05	4.90E-10	2.33E-05	9.97E-09	0.790061
5	1.6	2.67E-05	95.8	51.1	44.7	59,637.00	59,637.00	0.21051	2,673	3.43E-05	0.999692	3.40E-05	5.70E-10	2.67E-05	9.97E-09	0.776985
6	1.8	0.00003	102	45.2	56.8	75,780.30	75,780.30	0.23682	3,008	3.87E-05	0.999692	3.90E-05	6.40E-10	3.00E-05	9.97E-09	0.775434
7	2	3.33E-05	107	40	67	89,388.70	89,388.70	0.26314	3,342	4.20E-05	0.999692	4.20E-05	7.00E-10	3.33E-05	9.97E-09	0.793303

LAMPIRAN 3. Kalibrasi Termokopel

T1	T Standard (°C)	T2	T Standard (°C)	T3	T Standard (°C)	T4	T Standard (°C)	T5	T Standard (°C)	T6	T Standard (°C)	T7	T Standard (°C)	T8	T Standard (°C)	T9	T Standard (°C)	T10	T Standard (°C)
6	6	5.8	6	5.8	6	5.8	6	6.7	6	6.7	6	6.8	6	6.7	6	5.8	6	5.5	6
6.8	7	6.5	7	6.5	7	6.5	7	7.3	7	7.6	7	7.6	7	7.5	7	7.1	7	6	7
9.9	10	9.8	10	9.8	10	10	10	10.7	10	10.6	10	10.7	10	10.7	10	9.6	10	9.5	10
12.1	12	12	12	12	12	12.1	12	12.7	12	12.7	12	12.9	12	12.8	12	11.7	12	11.6	12
13.1	13	13.1	13	13.1	13	13.2	13	13.9	13	13.9	13	13.9	13	13.9	13	12.8	13	12.8	13
15.2	15	15.2	15	15.2	15	15.2	15	15.9	15	15.9	15	15.9	15	15.9	15	14.8	15	14.8	15
17	17	17	17	17	17	17.1	17	17.8	17	17.7	17	17.8	17	17.8	17	16.7	17	16.7	17
19	19	19	19	19	19	19	19	19.7	19	19.7	19	19.7	19	19.7	19	18.7	19	18.6	19
20.1	20	20	20	20.1	20	20.1	20	20.7	20	20.7	20	20.8	20	20.8	20	19.8	20	19.7	20
22.2	22	22.2	22	22.2	22	22.3	22	22.8	22	22.8	22	22.9	22	23	22	21.8	22	21.9	22
23.2	23	23.2	23	23.2	23	23.2	23	23.8	23	23.9	23	23.9	23	24	23	22.9	23	22.9	23
25	25	25.1	25	25.1	25	25.2	25	25.7	25	25.8	25	25.8	25	25.8	25	24.7	25	24.8	25
26.9	27	26.9	27	26.9	27	27	27	27.5	27	27.5	27	27.6	27	26.5	27	26.6	27	26.7	27
29	29	29.1	29	29.1	29	29.2	29	29.7	29	29.7	29	29.5	29	29.8	29	28.7	29	28.8	29
31.2	31	31.3	31	31.4	31	31.4	31	31.9	31	31.9	31	31.8	31	31.9	31	31	31	31	31
33.5	33	33.8	33	33.7	33	33.8	33	34.3	33	34.1	33	33.5	33	34.5	33	33.2	33	33.4	33
36.2	36	36.3	36	36.3	36	36.4	36	36.7	36	36.8	36	36.6	36	36.8	36	35.9	36	36.6	36
39.2	39	39.3	39	39.4	39	39.4	39	39.6	39	39.8	39	39.6	39	39.8	39	38.9	39	39	39
41.2	41	41.4	41	41.5	41	41.6	41	41.8	41	41.9	41	41.6	41	41.9	41	41.1	41	41.2	41
44.3	44	44.4	44	44.5	44	44.5	44	44.8	44	44.9	44	44.5	44	44.9	44	44.1	44	44.2	44
46.2	46	46.6	46	46.5	46	46.5	46	46.8	46	47.4	46	46	46	46.8	46	46.1	46	46.3	46
48.3	48	48.5	48	48.5	48	48.6	48	48.8	48	48.8	48	48.5	48	48.9	48	48	48	48.2	48
49.5	49	49.8	49	49.9	49	49.9	49	50.1	49	50.2	49	49.4	49	50	49	49.3	49	49.5	49
51.5	51	51.7	51	51.7	51	51.8	51	51.9	51	52	51	51.7	51	52.1	51	51.3	51	51.4	51
53.7	53	53.9	53	54	53	54	53	54.1	53	54.1	53	53.6	53	54.2	53	53.5	53	53.7	53
56.5	56	56.7	56	56.8	56	56.8	56	56.9	56	57	56	56.6	56	57	56	56.3	56	56.4	56
60	59	60.4	59	60.5	59	60.7	59	60.6	59	60.8	59	59.9	59	60.4	59	59.8	59	60.2	59
61.8	61	61.9	61	61.9	61	62.2	61	62.2	61	62.2	61	61.7	61	62.5	61	61.4	61	61.7	61
65.1	64	65.1	64	65.4	64	65.4	64	65.4	64	65.5	64	64.9	64	65.8	64	64.8	64	64.7	64
67.9	67	67.9	67	68.2	67	68	67	68.1	67	68.3	67	67.8	67	68.5	67	67.7	67	67.6	67
70.5	69	70.8	69	70.8	69	70.6	69	70.7	69	71	69	70.3	69	70.8	69	70.3	69	70.3	69
72.6	71	72.9	71	72.9	71	73.1	71	73.1	71	73.3	71	72.2	71	72.8	71	72.4	71	72.7	71
74.8	73	75	73	75	73	75.3	73	75.1	73	75.1	73	74.3	73	74.8	73	74.6	73	74.8	73

LAMPIRAN 3. Kalibrasi Termokopel (Lanjutan)

T11	T Standard (°C)	T12	T Standard (°C)	T13	T Standard (°C)	T14	T Standard (°C)	T15	T Standard (°C)	T16	T Standard (°C)	T17	T Standard (°C)	T18	T Standard (°C)	T19	T Standard (°C)	T20	T Standard (°C)
5.5	6	5.5	6	5.6	6	5.3	6	5.3	6	5.4	6	6.2	6	6.4	6	6.7	6	6.3	6
6.2	7	6.2	7	6.5	7	6.1	7	5.9	7	6.1	7	7.2	7	6.9	7	6.9	7	7.2	7
9.6	10	9.7	10	9.3	10	9.3	10	9.5	10	9.5	10	10.3	10	10.4	10	10.4	10	10.4	10
11.6	12	11.7	12	11.5	12	11.4	12	11.5	12	11.6	12	12.5	12	12.5	12	12.5	12	12.6	12
12.8	13	12.9	13	12.7	13	12.6	13	12.7	13	12.7	13	13.6	13	13.6	13	13.6	13	13.7	13
14.9	15	14.9	15	14.7	15	14.5	15	14.7	15	14.7	15	15.6	15	15.6	15	15.7	15	15.7	15
16.7	17	16.8	17	16.7	17	16.4	17	16.6	17	16.6	17	17.5	17	17.5	17	17.6	17	17.6	17
18.7	19	18.8	19	18.6	19	18.4	19	18.5	19	18.5	19	19.4	19	19.4	19	19.5	19	19.5	19
19.8	20	19.9	20	19.6	20	19.5	20	19.6	20	19.6	20	20.5	20	20.5	20	20.5	20	20.6	20
21.9	22	22	22	21.7	22	21.7	22	21.8	22	21.8	22	22.6	22	22.6	22	22.6	22	22.7	22
22.9	23	23	23	22.8	23	22.7	23	22.8	23	22.8	23	23.6	23	23.7	23	23.7	23	23.8	23
24.8	25	24.9	25	24.6	25	24.6	25	24.7	25	24.7	25	25.5	25	25.5	25	25.6	25	25.6	25
26.7	27	26.4	27	26.4	27	26.4	27	26.5	27	26.5	27	27.2	27	27.3	27	27.4	27	27.4	27
28.9	29	28.9	29	28.6	29	28.6	29	28.7	29	28.7	29	29.4	29	29.5	29	29.5	29	29.6	29
31.1	31	31.3	31	30.8	31	30.7	31	30.9	31	31	31	31.7	31	31.7	31	31.8	31	31.8	31
33.4	33	33.4	33	33.3	33	33	33	33.1	33	34.4	33	34	33	33.9	33	34	33	34	33
36.1	36	36.1	36	35.8	36	35.8	36	35.9	36	36	36	36.6	36	36.8	36	36.8	36	36.8	36
39	39	39.2	39	38.9	39	38.8	39	38.9	39	38.9	39	39.6	39	39.7	39	39.8	39	39.8	39
41.2	41	41.3	41	40.9	41	40.9	41	41.1	41	41.1	41	41.8	41	41.9	41	41.9	41	42	41
44.2	44	44.3	44	43.9	44	43.9	44	44.1	44	44.1	44	44.8	44	44.9	44	44.9	44	45	44
46.3	46	46.3	46	45.9	46	45.9	46	46	46	46.3	46	47.1	46	46.9	46	47.3	46	47.3	46
48.2	48	48.2	48	47.9	48	47.9	48	48	48	48.1	48	48.7	48	48.8	48	48.9	48	49	48
49.6	49	49.7	49	49.1	49	49.1	49	49.4	49	49.5	49	50.1	49	50.3	49	50.3	49	50.5	49
51.5	51	51.6	51	51.1	51	51.1	51	51.4	51	51.4	51	51.9	51	52.1	51	52.1	51	52.2	51
53.8	53	53.8	53	53.3	53	53.3	53	53.6	53	53.7	53	54.3	53	54.3	53	54.5	53	54.5	53
56.5	56	56.6	56	56	56	56.1	56	56.4	56	56.4	56	56.9	56	57.1	56	57.2	56	57.2	56
60.3	59	60.4	59	59.6	59	59.6	59	60.1	59	60.1	59	60.5	59	60.8	59	60.8	59	61	59
61.6	61	61.8	61	61.2	61	61.4	61	61.5	61	61.6	61	62.2	61	62.4	61	62.5	61	62.3	61
64.6	64	65.1	64	64.6	64	64.7	64	64.5	64	64.9	64	65.5	64	65.6	64	65.6	64	65.8	64
67.7	67	68	67	67.4	67	67.5	67	67.3	67	67.5	67	68.2	67	68.3	67	68.4	67	68.5	67
70.4	69	70.6	69	70	69	70.1	69	70.2	69	70.4	69	70.8	69	71.1	69	71.1	69	71.2	69
72.7	71	72.7	71	71.8	71	72.1	71	72.5	71	72.5	71	72.7	71	73.2	71	73.2	71	73.3	71
74.8	73	74.8	73	74.2	73	74.1	73	74.6	73	74.6	73	74.9	73	75.2	73	75.3	73	75.2	73

LAMPIRAN 4. Data Pengujian

No	Inverter			RPM		Rotameter		TEMPERATUR terbaca °C									
	Frekuensi	Arus	Voltase			LPM		T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond										
1	16	3.6	130	429.5	300.8	1.4	5.8	15.4	16.5	16.3	16.4	25.1	36.3	15	47.3	15.6	15.6
2	18	3.7	142	482.2	337.4		5.6	14.9	15.4	15.3	15.5	24.8	36.7	14	50.5	15	15.3
3	20	3.9	156	532	372.1		5.6	15.3	16.5	16	16	24.8	36.4	14	54.1	15.7	15.5
4	22	4.1	172	584.1	407.4		5.7	16.1	17.1	17	17	24.8	36.8	14	57.5	16.2	16.2
5	24	4.3	184	635	442.5		5.8	17.2	17.5	17.4	17.4	25	36.8	14	61.3	16.8	17.4

No	Inverter			RPM		Rotameter		TEMPERATUR terbaca °C									
	Frekuensi	Arus	Voltase			LPM		T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond										
1	16	3.6	130	429.5	300.8	1.4	5.8	15.6	15.5	32.3	15.9	27	33	34	33.4	33	33.1
2	18	3.7	142	482.2	337.4		5.6	15.4	15.5	34.2	15.5	28	35	37	36.1	36	35.6
3	20	3.9	156	532	372.1		5.6	15.6	16	36	16.1	29	37	40	38.6	39	38
4	22	4.1	172	584.1	407.4		5.7	16.2	16	37.7	17	31	39	41	40.1	40	39.4
5	24	4.3	184	635	442.5		5.8	17.3	17.4	39.4	18.3	32	41	44	42.9	43	42

No	Inverter			RPM		Rotameter		TEMPERATUR KALIBRASI °C									
	Frekuensi	Arus	Voltase			LPM		T1	T2	T3	T4	T5	T6	T7	T8	T9	T10
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond										
1	16	3.6	130	429.5	300.8	1.4	5.8	15.47	16.57	16.37	16.41	24.34	35.30	14.32	46.15	15.92	16.00
2	18	3.7	142	482.2	337.4		5.6	14.98	15.50	15.40	15.54	24.04	35.69	13.32	49.30	15.33	15.70
3	20	3.9	156	532	372.1		5.6	15.37	16.57	16.08	16.02	24.04	35.40	13.32	52.85	16.01	15.90
4	22	4.1	172	584.1	407.4		5.7	16.15	17.15	17.05	16.99	24.04	35.79	13.32	56.19	16.50	16.58
5	24	4.3	184	635	442.5		5.8	17.23	17.54	17.44	17.38	24.24	35.79	13.32	59.93	17.09	17.75

LAMPIRAN 4. Data Pengujian (Lanjutan)

No	Inverter			RPM		Rotameter		TEMPERATUR KALIBRASI °C									
	Frekuensi	Arus	Voltase			LPM		T11	T12	T13	T14	T15	T16	T17	T18	T19	T20
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond										
1	16	3.6	130	429.5	300.8	1.4	5.8	14.38	15.82	32.43	16.50	27.19	32.96	33.26	32.60	32.15	32.20
2	18	3.7	142	482.2	337.4		5.6	14.19	15.82	34.29	16.11	28.16	34.90	36.20	35.23	35.07	34.64
3	20	3.9	156	532	372.1		5.6	14.38	16.31	36.06	16.69	29.13	36.85	39.13	37.67	38.00	36.98
4	22	4.1	172	584.1	407.4		5.7	14.97	16.31	37.72	17.57	31.08	38.79	40.11	39.14	38.98	38.34
5	24	4.3	184	635	442.5		5.8	16.04	17.67	39.39	18.84	32.05	40.73	43.05	41.87	41.90	40.88

No	Inverter			RPM		Rotameter		TEKANAN Psi								
	Frekuensi	Arus	Voltase			LPM		P1 Suc. Komp			P2 In Ekp.			P3 Out Eks.		
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond	psi	kPa	MPa(abs)	psi	kPa	MPa(abs)	psi	kPa	MPa (abs)
1	16	3.6	130	429.5	300.8	1.4	5.8	52	358.528	0.45853	150	1034.21	1.13421	64	441.265	0.54126
2	18	3.7	142	482.2	337.4		5.6	50	344.738	0.44474	170	1172.11	1.27211	62	427.475	0.52748
3	20	3.9	156	532	372.1		5.6	50	344.738	0.44474	190	1310	1.41	64	441.265	0.54126
4	22	4.1	172	584.1	407.4		5.7	51	351.633	0.45163	210	1447.9	1.5479	68	468.844	0.56884
5	24	4.3	184	635	442.5		5.8	52	358.528	0.45853	230	1585.79	1.68579	68	468.844	0.56884

No	Inverter			RPM		Rotameter		TEKANAN Psi								
	Frekuensi	Arus	Voltase			LPM		P4 In SU			P5 Out SU			P6 Dis. Komp.		
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond	psi	kPa	MPa(abs)	psi	kPa	MPa(abs)	psi	kPa	MPa(abs)
1	16	3.6	130	429.5	300.8	1.4	5.8	58	399.896	0.4999	60	413.686	0.51369	170	1172.11	1.27211
2	18	3.7	142	482.2	337.4		5.6	60	413.686	0.51369	60	413.686	0.51369	182	1254.85	1.35485
3	20	3.9	156	532	372.1		5.6	60	413.686	0.51369	64	441.265	0.54126	205	1413.43	1.51343
4	22	4.1	172	584.1	407.4		5.7	62	427.475	0.52748	60	413.686	0.51369	224	1544.43	1.64443
5	24	4.3	184	635	442.5		5.8	65	448.159	0.54816	64	441.265	0.54126	245	1689.22	1.78922

LAMPIRAN 4. Data Pengujian (Lanjutan)

No	Inverter			RPM		Rotameter		V Udara	Durasi	Air Raksa		Δh Raksa	Δz Raksa	ΔP Orifice	Diagram P-h
	Frekuensi	Arus	Voltase			LPM				h1	h2				
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond	m/s	menit			cm	m	[Pa]	ρ refrigerant
1	16	3.6	130	429.5	300.8	1.4	5.8	3.6	10	77.8	73.3	4.5	0.045	6003.72	1159.565
2	18	3.7	142	482.2	337.4		5.6	3.6	10	78.1	73.3	4.8	0.048	6403.97	1153.47
3	20	3.9	156	532	372.1		5.6	3.6	10	78.4	72.9	5.5	0.055	7337.88	1165.217
4	22	4.1	172	584.1	407.4		5.7	3.6	10	79	72.5	6.5	0.065	8672.04	1161.478
5	24	4.3	184	635	442.5		5.8	3.6	10	79.5	72	7.5	0.075	10006.2	1157.847

No	Inverter			RPM		Rotameter		Perhitungan ṁ Refrigerant					
	Frekuensi	Arus	Voltase			LPM		Re	C	V ideal		Hasil V Aktual	ṁ ref
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond			$C \cdot A_2 \cdot ((2/\rho_{Ref})^{0.5})$	$(1 - (A_2/A_1))^{0.5}$		
1	16	3.6	130	429.5	300.8	1.4	5.8	6908.977	0.846088	8.55349E-06	0.999692431	8.55612E-06	0.00992138
2	18	3.7	142	482.2	337.4		5.6	6957.867	0.845337	8.84945E-06	0.999692431	8.85217E-06	0.01021071
3	20	3.9	156	532	372.1		5.6	7071.944	0.843607	9.4056E-06	0.999692431	9.4085E-06	0.01096294
4	22	4.1	172	584.1	407.4		5.7	7234.91	0.841188	1.02121E-05	0.999692431	1.02152E-05	0.01186473
5	24	4.3	184	635	442.5		5.8	7397.877	0.838831	1.09559E-05	0.999692431	1.09593E-05	0.01268916

LAMPIRAN 4. Data Pengujian (Lanjutan)

No	Inverter			RPM		Rotameter		Perhitunga h Evap				
	Frekuensi	Arus	Voltase			LPM		Q evap	Q evap	A1	Ln (r2/r1)	Twin 2
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond	kJ/s	J/s (watt)			
1	16	3.6	130	429.5	300.8	1.4	5.8	0.02825	28.24989	0.065155	0.113758885	16.56712909
2	18	3.7	142	482.2	337.4		5.6	0.030024	30.02419	0.065155	0.113758885	15.49643497
3	20	3.9	156	532	372.1		5.6	0.029265	29.26457	0.065155	0.113758885	16.56709242
4	22	4.1	172	584.1	407.4		5.7	0.030277	30.27739	0.065155	0.113758885	17.15103582
5	24	4.3	184	635	442.5		5.8	0.02977	29.76974	0.065155	0.113758885	17.54037416

No	Inverter			RPM		Rotameter		Perhitunga h Evap				
	Frekuensi	Arus	Voltase			LPM		Twin 3	Twin 4	Twin Rata-rata	Tw out 10	Tw out 11
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond					
1	16	3.6	130	429.5	300.8	1.4	5.8	57.809	399.705	154.4380138	1171.918181	1.081089933
2	18	3.7	142	482.2	337.4		5.6	60	413.686	159.7618667	1254.84632	1.35484632
3	20	3.9	156	532	372.1		5.6	60	413.686	159.7618667	1413.4258	1.5134258
4	22	4.1	172	584.1	407.4		5.7	62	427.475	165.0583733	1544.42624	1.64442624
5	24	4.3	184	635	442.5		5.8	65	448.159	172.9864667	1689.2162	1.7892162

No	Inverter			RPM		Rotameter		Perhitunga h Evap				
	Frekuensi	Arus	Voltase			LPM		Tw out 12	Twout rata-rata	Twi	Tsat	h evap
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond					
1	16	3.6	130	429.5	300.8	1.4	5.8	15.82092909	15.39972242	15.92381242	15.69188	1869.423046
2	18	3.7	142	482.2	337.4		5.6	15.82086497	15.2375983	15.3565583	15.153715	2271.762059
3	20	3.9	156	532	372.1		5.6	16.30634242	15.52909575	15.87511075	15.69186	2451.030081
4	22	4.1	172	584.1	407.4		5.7	16.30630582	15.95042582	16.50700415	16.327915	2594.785427
5	24	4.3	184	635	442.5		5.8	17.66558416	17.14903083	17.30076916	17.15969	3238.653497

LAMPIRAN 4. Data Pengujian (Lanjutan)

No	Inverter			RPM		Rotameter		Perhitungan Kualitas					
	Frekuensi	Arus	Voltase			LPM		h3=h4	hf	hg	hfg	X	X rata-rata
	Hz	A	V	Motor	Kompresor	Debit air evap	Debit air Kond						
1	16	3.6	130	429.5	300.8	1.4	5.8	252	228	415	187	0.128342246	0.14816816
2	18	3.7	142	482.2	337.4		5.6	254	226	414	188	0.14893617	
3	20	3.9	156	532	372.1		5.6	256	228	415	187	0.14973262	
4	22	4.1	172	584.1	407.4		5.7	257	228	416	188	0.154255319	
5	24	4.3	184	635	442.5		5.8	258	228	416	188	0.159574468	

Keterangan : ρ air raksa : 13600 kg/m²

D pipa orifice : 0,0127 m

D lubang orifice : 0,002 m

cp udara : 1.005 kJ/kg.K

D dudukan anemometer : 0,0275 m

m udara : 0.002564595 kg/s

L (panjang SU) : 1.25 m

r₂ : 0.0093 m

g : 9,81 m/s²

A₁ : 0,00013 m²

A₂ : 0,00000134 m²

ρ udara : 1,2 kg/m³

\dot{V} udara : 0,002137163 m³/s

D seksi uji : 0.0166 m

r₁ : 0.0083 m

K tembaga : 401 watt/m.°C