

Product name: Air Conditioner

Brand name: KOLIN

Type(s)/Model(s): Air Conditioner ST Inverter/ Indoor: KS-IW20-GPAI13P1M32
Outdoor: KS-IW20-GPAI13P1M32

Purpose of Testing: PELP Product Registration

Rating(s): 230 V~ 60 Hz 10.58 A 2,200 W
Cooling rating: 1,410 W 6.13 A 20,052 kJ/h
Refrigerant: R32/ 0.90 kg

Manufacturer: Made in China

Standard: PNS ISO 5151: 2014 (Non – ducted air conditioners and heat pumps)
PNS ISO 16358 – 1:2014 (Cooling seasonal performance factor)

Test procedure: DOE – Philippine Energy Labeling Program

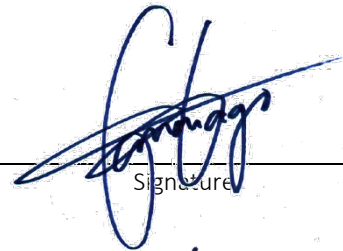
Client name: KOLIN PHILIPPINES INTERNATIONAL, INC.
Address: 1854 STA RITA ST., GUADALUPE NUEVO, MAKATI CITY. METRO MANILA

Testing Laboratory: Duinus Smart Tech Inc.
Address: 1238 EDSA, Apolonio Samson, Quezon City

Date of Issue: 05 September 2025

Tested By:

Michelle Ann Margarette L. Mañago



Signature

Reviewed By:

Reynaldo F. Macaranas Jr.



Signature

Approved By:

Dane Pio de Roda



Signature

General Remarks

This test report shall not be reproduced except in full without written approval of testing laboratory.

This test results presented in this report relate only to the test item tested.

Throughout this report a comma is used as a decimal separator.

Testing

Date of Receipt of test item:

11 August 2025

Date(s) of performance of test:

12 – 27 August 2025

Particulars

Electrical safety class:

Class I

IP number:

IPX4 at outdoor side

Switch:

Yes

Electronic Circuit:

Yes

Oscillating Mechanism:

Yes

Accessories:

Yes

Type of supply cord attachment:

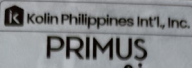
Terminal

Summary of Testing

ENERGY PERFORMANCE TEST			
Test Condition	MEASURED VALUES		
	Cooling Capacity (W)	Power Input (W)	CSPF
Full Load	5899	1357	6,59
Half Load	3093	531	

COMPLIANCE TO PERFORMANCE REQUIREMENTS			
PARAMETERS	REQUIREMENTS	PERCENTAGE %	REMARKS
MEP	[$\geq 3,08$ for units with rated cooling capacity below 3,33kW / $\geq 2,81$ for units with rated cooling capacity of 3,33kW to 9,99kW / NA For units with rated cooling capacity of 10,0kW to 14,0kW]	-	P
Cooling Capacity	$\geq 90\%$	105,9	P

Copy of marking plate:



PRIMUS
AJ

INVERTER SPLIT TYPE AIR CONDITIONER

Model : KS-W20-GPA13P1M32-4

Phase : Single

Voltage : 230 V~

Frequency : 60 Hz

Nominal Capacity : 2.0 hp

Cooling Capacity : 20,052 (6,016 - 22,057) kJ/h

Power Input : 5.57 (1.67 - 6.13) kW

Input Current : 1,410 (282 - 1,692) W

Max. Power Input : 6.13 A

Max. Power Input : 2,200 W / 10.58 A

CSPF: 5.96

Max. Allowable Pressure : 4.3 MPa

Max. Discharge Pressure : 4.3 MPa

Max. Suction Pressure : 2.5 MPa

Sound Pressure Level : 59 dB(A)

Moisture Protection : IPX4

Net Weight : 15 kg

Unit Dimension (WxDxH) : 970x257x347 mm

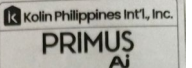
Refrigerant : R32

Refrigerant Charge : 0.90 kg

Refrigerant Piping : 1/4" / 3/8"

Lot No. : 188125001

Serial No. : 18812505-10003



PRIMUS
AJ

INVERTER SPLIT TYPE AIR CONDITIONER

Model : KS-W20-GPA13P1M32-0

Phase : Single

Voltage : 230 V~

Frequency : 60 Hz

Nominal Capacity : 2.0 hp

Cooling Capacity : 20,052 (6,016 - 22,057) kJ/h

Power Input : 5.57 (1.67 - 6.13) kW

Input Current : 1,410 (282 - 1,692) W

Max. Power Input : 6.13 A

Max. Power Input : 2,200 W / 10.58 A

CSPF: 5.96

Max. Allowable Pressure : 4.3 MPa

Max. Discharge Pressure : 4.3 MPa

Max. Suction Pressure : 2.5 MPa

Sound Pressure Level : 59 dB(A)

Moisture Protection : IPX4

Net Weight : 15 kg

Unit Dimension (WxDxH) : 970x257x347 mm

Refrigerant : R32

Refrigerant Charge : 0.90 kg

Refrigerant Piping : 1/4" / 3/8"

Lot No. : 188225001

Serial No. : 18822505-10003

CAUTION

1. Before to release the air inside the indoor unit and please with the manual.

2. Make sure the additional amount of refrigerant to be charged is based on the gas size and length, please refer to the INSTALLATION INSTRUCTIONS for details.

3. Please be responsible for the gas filling of the installation and please be aware of the problems to the machine.

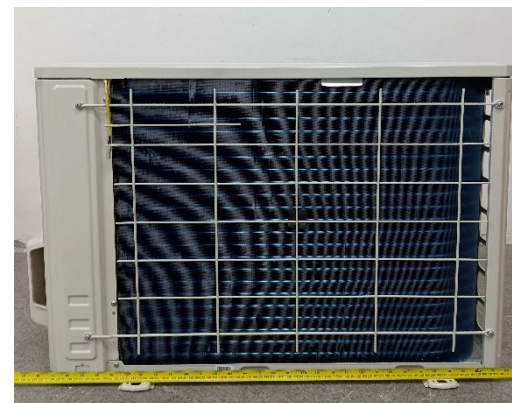
PNS ISO 5151:2014 / PNS ISO 16358 – 1:2014

PHOTO DOCUMENTATION

Front View



Back View



Top View



PNS ISO 5151:2014 / PNS ISO 16358 – 1:2014

PHOTO DOCUMENTATION

Right Side View



Left Side View



Evaporator Section

Air Discharge



Dimension: 69,4cm – 41cm

Tubes



Number of tubes: 21 – 19
Number of rows: 2

Fins



Fins/Inch: 21 – 22 – 22

Tube Diameter



Tube Diameter: 5,94mm Grooving: (✓) Y () N

PNS ISO 5151:2014 / PNS ISO 16358 – 1:2014

PHOTO DOCUMENTATION

Condenser Section

Condenser



Dimension: 87cm – 53,5cm

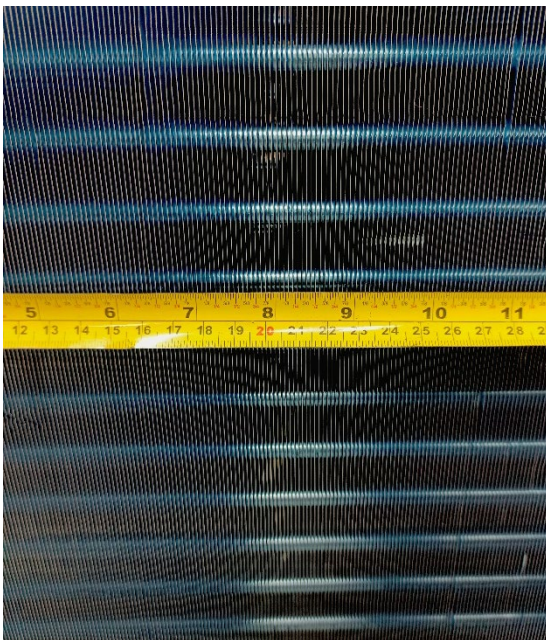
Tubes



Number of tubes: 24 – 24

Number of rows: 2

Fins



Fins/Inch: 19 – 19 – 19

Tube Diameter



Tube Diameter: 6,97mm Grooving: (✓) Y () N

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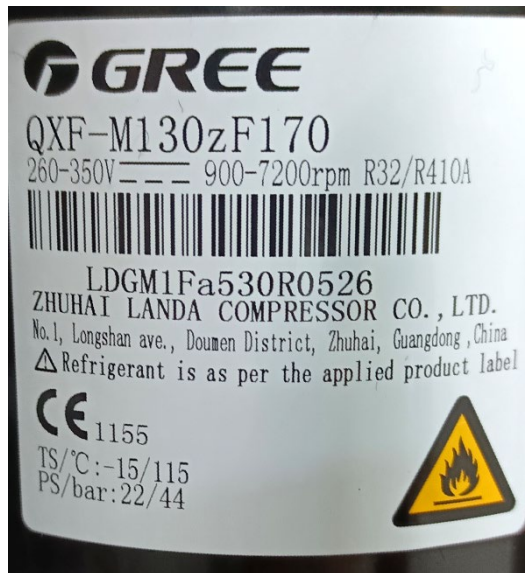
PNS ISO 5151:2014 / PNS ISO 16358 – 1:2014

PHOTO DOCUMENTATION

Compressor

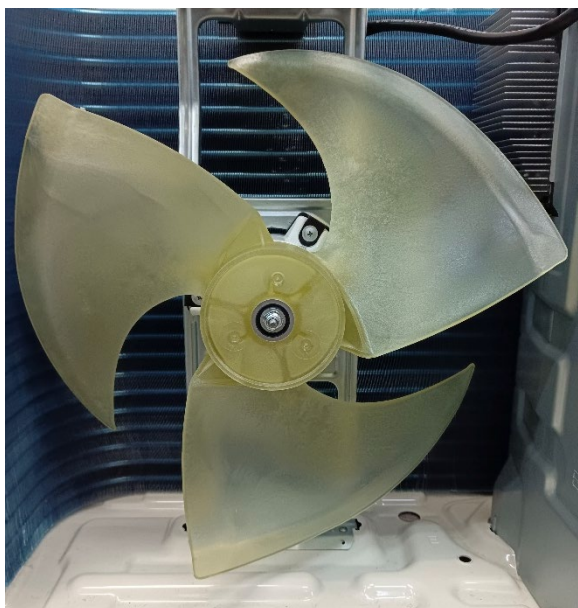


Compressor Label



Fan

Blades



Number of blades: 3

Splasher Ring

No Splasher Ring

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PNS ISO 5151:2014 / PNS ISO 16358 – 1:2014

PHOTO DOCUMENTATION

Fan Motor



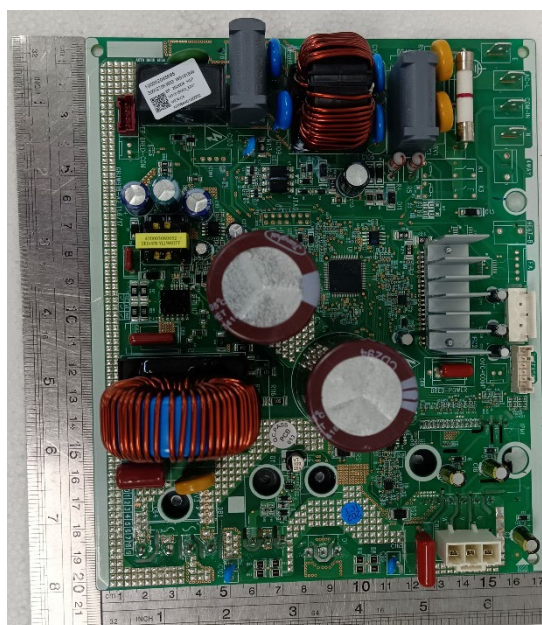
Fan Motor Label



Control



Inverter PCB Board



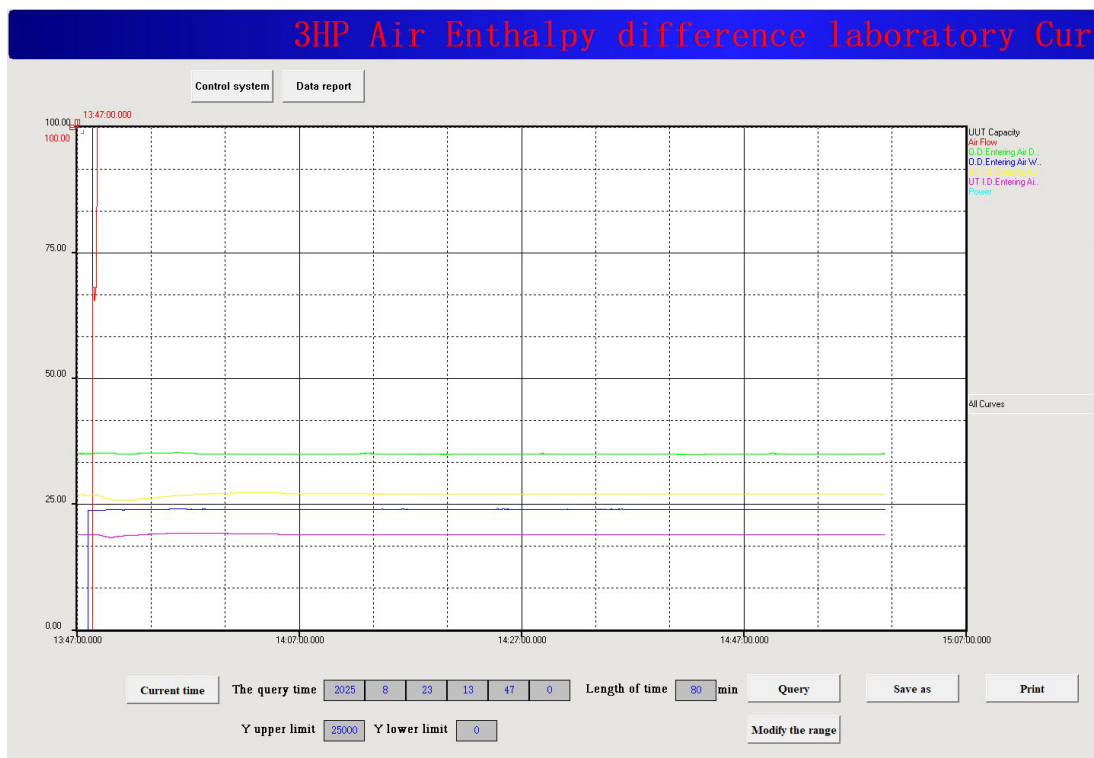
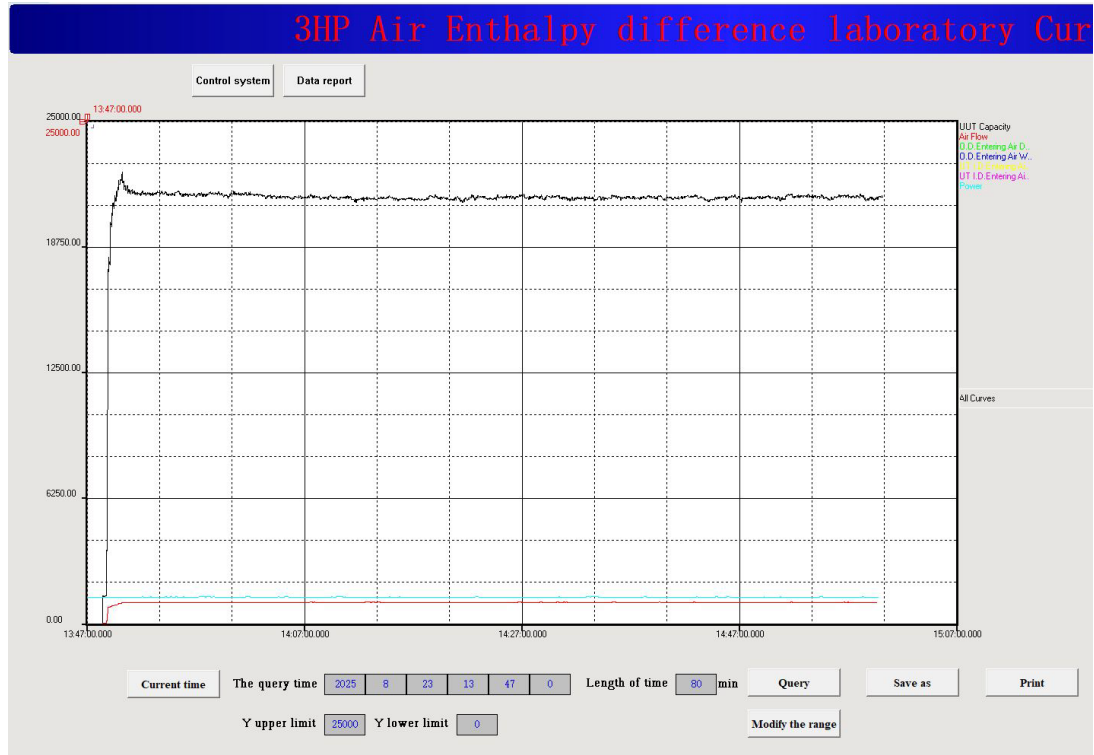
TEST REPORT

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DATA REPORT

Tested Nameplate parameters									
Nameplate project		Nameplate input		Nameplate project		Nameplate input			
Test Time		2025/08/23 15:00:50.7		Serial No.		-----			
Test No.		378431517		Application		Private test			
Model		K-IW20-GPA-13P1M32		Applicant		KOLIN			
Rated Capacity/W		5570		Rated Power/W		1410			
Rated EER/COP		3.95		Rated Airflow		-----			
Date		2025/08/23		Standard		PNS ISO 5151 - PNS ISO 16358			
Observers		AHH MMLM		Test Location		DSTI			
Objective		Performance Test		Compressor Model		-----			
Inner/Outer fan model		-----		Power supply		230V			
Ref type		R32		Nozzle		70+100			
Condition		Full Load							
Test conditions									
Items		Unit	Value		Items		Unit	Value	
Indoor D.B. Temp.		℃	27.00		Indoor W.B. Temp.		℃	19.00	
Outdoor D.B. Temp.		℃	35.00		Outdoor W.B. Temp.		℃	24.00	
Experimental data									
Items	Unit	No1	No2	No3	No4	No5	No6	No7	Average
Air Flow	m3/h	1093.54	1093.17	1092.41	1091.84	1092.74	1091.08	1094.48	1092.75
Standard airflow	m3/h	1104.60	1104.28	1103.32	1102.77	1103.68	1102.14	1105.47	1102.18
Latent Capacity	W	4918.34	4920.28	4904.91	4910.42	4914.47	4896.12	4918.23	4911.83
Sensible Capacity	W	16329.82	16372.61	16256.93	16340.98	16369.49	16263.67	16340.59	16324.87
Power	W	1357.20	1360.10	1360.10	1357.10	1358.10	1355.00	1352.20	1357.11
EER/COP(kJ/h.W)	kJ/h.W	15.66	15.64	15.56	15.66	15.68	15.62	15.71	15.65
EER/COP	W/W	4.35	4.35	4.32	4.35	4.36	4.34	4.36	4.35
Entering Air Enthalpy	KJ/KG	53.59	53.65	53.63	53.59	53.66	53.56	53.56	53.61
Leaving Air Enthalpy	KJ/KG	37.58	37.61	37.66	37.56	37.61	37.58	37.56	37.60
Enthalpy Dif.	KJ/KG	16.01	16.04	15.96	16.03	16.05	15.98	16.00	16.01
UUT Capacity	W	5902.27	5914.69	5878.29	5903.17	5912.21	5877.72	5905.23	5899.08
UUT Capacity(kJ/h)	kJ/h	21248.16	21292.88	21161.84	21251.40	21283.97	21159.79	21258.83	21236.70
Test data									
Items	Unit	No1	No2	No3	No4	No5	No6	No7	Average
O. D. Entering Air D.B.T	℃	34.95	34.98	35.07	35.04	35.00	34.95	34.96	34.99
O. D. Entering Air W.B.T	℃	23.97	24.01	24.04	24.02	24.01	23.97	23.99	24.00
O. D. RH	%	35.97	36.09	35.91	36.24	35.92	35.84	35.95	35.99
I. D. Entering Air D.B.T	℃	27.02	27.03	27.03	27.01	27.02	26.99	27.01	27.02
I. D. Entering Air W.B.T.	℃	19.00	19.02	19.01	19.00	19.02	18.99	18.99	19.00
I. D. Leaving Air D.B.T	℃	14.15	14.15	14.18	14.14	14.16	14.15	14.15	14.15
I. D. Leaving Air W.B.T.	℃	13.33	13.34	13.36	13.32	13.34	13.33	13.32	13.33
S. P.	Pa	-0.35	-0.20	-0.50	-0.50	-0.05	-0.20	-0.05	-0.26
NZL D. P.	Pa	417.80	417.54	418.35	416.47	417.15	415.95	418.48	417.39
D. P. T.	℃	15.92	15.93	15.94	15.93	15.94	15.94	15.92	15.93
Ref low-pressure	MPa	1.10	1.10	1.46	1.46	0.37	0.73	1.10	1.05
Ref high-pressure	MPa	12.36	13.46	12.73	13.09	12.36	12.36	12.36	12.67
Atmospheric Press.	KPa	100.56	100.57	100.56	100.56	100.56	100.56	100.56	100.56
UUT Voltage	V	230.20	230.20	230.20	230.20	230.30	230.20	230.30	230.23
UUT Current	A	6.28	6.28	6.29	6.28	6.29	6.28	6.25	6.28
Input Power	W	1357.20	1360.10	1360.10	1357.10	1358.10	1355.00	1352.20	1357.11
UUT Power factor	%	63.00	63.00	63.00	63.00	62.90	62.90	63.10	62.99
UUT Frequency	Hz	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00

DATA REPORT



TEST REPORT

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DATA REPORT

Tested Nameplate parameters									
Nameplate project		Nameplate input			Nameplate project		Nameplate input		
Test Time		2025/08/23 16:35:14.1			Serial No.		-----		
Test No.		378431517			Application		Private test		
Model		K-IW20-GPA-13P1M32			Applicant		KOLIN		
Rated Capacity/W		5570			Rated Power/W		1410		
Rated EER/COP		3.95			Rated Airflow		-----		
Date		2025/08/23			Standard		PNS ISO 5151 - PNS ISO 16358		
Observers		AHH MMLM			Test Location		DSTI		
Objective		Performance Test			Compressor Model		-----		
Inner/Outer fan model		-----			Power supply		230V		
Ref type		R32			Nozzle		70+100		
Condition		Half Load							
Test conditions									
Items		Unit	Value		Items		Unit	Value	
Indoor D.B. Temp.		℃	27.00		Indoor W.B. Temp.		℃	19.00	
Outdoor D.B. Temp.		℃	35.00		Outdoor W.B. Temp.		℃	24.00	
Experimental data									
Items	Unit	No1	No2	No3	No4	No5	No6	No7	Average
Air Flow	m3/h	1152.02	1151.03	1152.08	1150.37	1152.08	1153.90	1150.16	1151.66
Standard airflow	m3/h	1145.39	1144.32	1145.33	1143.66	1145.33	1147.22	1143.54	1145.92
Latent Capacity	W	2963.26	2948.96	2947.73	2939.35	2947.52	2960.31	2934.80	2948.85
Sensible Capacity	W	8185.76	8110.88	8260.30	8161.99	8210.43	8217.47	8165.56	8187.48
Power	W	531.50	535.70	529.70	530.60	527.90	530.10	531.10	530.94
EER/COP(kJ/h.W)	kJ/h.W	20.92	20.80	21.16	20.92	21.28	20.98	20.90	20.99
EER/COP	W/W	5.81	5.78	5.88	5.81	5.91	5.83	5.81	5.83
Entering Air Enthalpy	kJ/KG	53.59	53.60	53.70	53.63	53.63	53.66	53.63	53.63
Leaving Air Enthalpy	kJ/KG	45.47	45.53	45.53	45.53	45.50	45.53	45.53	45.51
Enthalpy Dif.	kJ/KG	8.13	8.07	8.17	8.10	8.13	8.14	8.11	8.12
UUT Capacity	W	3096.95	3072.18	3113.34	3083.70	3099.43	3104.94	3083.43	3093.42
UUT Capacity(kJ/h)	kJ/h	11149.01	11059.84	11208.03	11101.34	11157.95	11177.78	11100.36	11136.33
Test data									
Items	Unit	No1	No2	No3	No4	No5	No6	No7	Average
O.D. Entering Air D.B.T	℃	35.01	35.00	35.01	34.99	34.98	35.03	35.01	35.00
O.D. Entering Air W.B.T	℃	24.01	23.97	23.98	24.02	24.02	23.99	24.05	24.01
O.D. RH	%	35.65	35.56	35.66	35.73	35.73	36.02	35.89	35.75
I.D. Entering Air D.B.T	℃	27.02	27.01	27.00	26.99	26.99	27.00	26.98	27.00
I.D. Entering Air W.B.T.	℃	19.01	19.00	19.03	19.01	19.00	19.03	19.01	19.01
I.D. Leaving Air D.B.T	℃	19.55	19.56	19.56	19.56	19.56	19.56	19.56	19.56
I.D. Leaving Air W.B.T.	℃	16.24	16.26	16.26	16.26	16.25	16.26	16.26	16.26
S.P.	Pa	-0.05	0.10	1.00	-0.05	-0.50	-0.35	0.25	0.06
NZL D.P.	Pa	456.19	455.38	455.93	457.78	456.19	457.65	454.73	456.27
D.P.T.	℃	20.50	20.52	20.52	20.52	20.52	20.51	20.49	20.51
Ref low-pressure	MPa	0.37	0	0.37	0.37	0	0.37	0.73	0.31
Ref high-pressure	MPa	10.80	11.17	10.80	10.80	11.54	10.80	11.17	11.01
Atmospheric Press.	KPa	100.55	100.55	100.55	100.55	100.56	100.55	100.55	100.55
UUT Voltage	V	230.10	230.10	230.10	230.10	230.10	230.10	230.10	230.10
UUT Current	A	3.81	3.86	3.82	3.82	3.81	3.81	3.79	3.82
Input Power	W	531.50	535.70	529.70	530.60	527.90	530.10	531.10	530.94
UUT Power factor	%	32.10	32.10	32.30	32.10	32.10	32.10	32.10	32.13
UUT Frequency	Hz	60.00	60.00	60.00	60.00	60.00	60.00	60.00	60.00

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