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TEST REPORT

NAME OF SAMPLE: Air Conditioner

APPLICANT: TCL Air Conditioner (Zhongshan) Co., Ltd.

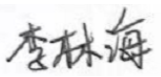
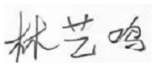
CLASSIFICATION OF TEST: Commission Test

Testing Center of TCL Air Conditioner (Zhongshan) Co., Ltd.

59 Nantou Road West, Nantou, Zhongshan, Guangdong, China

TEST REPORT

The rating and performance tests for Air-conditioner

Applicant Name .....:	TCL Air Conditioner (Zhongshan) Co., Ltd.		
Address .....:	59 Nantou Road West, Nantou, Zhongshan, Guangdong, China		
Manufacturer .....:	TCL Air Conditioner (Zhongshan) Co., Ltd.		
Address .....:	59 Nantou Road West, Nantou, Zhongshan, Guangdong, China		
Factory .....:	Same as manufacturer		
Product name ..... Trademark ..... Model / type reference ..... Rating and characteristics.	Inverter Air conditioner TCL CW-TW24HI/V1 230V~ 60Hz		
Date of receipt of test item	2025-05-08	Date(s) of test	2025-05-08
Test specification/Standard	SASO 2663:2021 ISO 5151:2017 ISO 16358-1:2013/Cor 1 :2013/AMD1:2019		
To compile	李林海		
audit	林艺鸣		
The director of the approval	赖福远		
Date of issue.....	2025-05-08		

The rating and performance tests for

Air conditioner

Test case verdicts	**/**
Test case does not apply to the test object	N.A.
Test item does meet the requirement	Pass
Test item does not meet the requirement	Fail
Procedure deviation	N.A.
Non-standard test method	N.A.

General remarks

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

The test report is invalid without the official stamp of TCL.

The test report is invalid without the signatures of Author and Reviewer.

Test Method

T1:Within the first 3 minutes after the indoor unit is powered on, start up and run the cooling mode, set the temperature of 30℃, medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 24℃;

T1 Half capacity: Within the first 3 minutes after the indoor unit is powered on, start up and run the cooling mode, set the temperature of 30℃, medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 26℃;

T3:Within the first 3 minutes after the indoor unit is powered on, start up and run the cooling mode, set the temperature of 30℃, medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 28℃;

(Note: If you do not clearly hear the three short beeps of the buzzer, please power off and operate again)

Brief description of the tested sample(s)		
1	Ratings	
	Rated voltage/rated voltage range (V)	230
	Rated frequency (Hz)	60
	Rated input (W)	Cooling（T1 100%Load）: 2081;（T1 50%Load）: 912； Cooling（T3） :2514 Heating：3860
	Rated capacity (Btu/h)	Cooling（T1 100%Load）: 20600;（T1 50%Load）: 10300； Cooling（T3） : 17600 Heating ： 3300W
	Rated current (A)	9.4
2	Type of power supply	☒ Single phase ☐ Three phase
3	Construction of the unit	☐ Split type ☒ Single packaged type ☐ Multi-split type
4	Type of the unit considering if it has the air ducts	☐ Spot ☐ Single-duct ☐ Double ducts
5	The number of the indoor units if multi-split type	
6	Type of the indoor unit if split type	☐ Wall-mounted ☐ Free-standing ☐ Ceiling-mounted ☒ Other type
7	Type of outdoor unit if split type	☐ Free-standing ☒ Other type
9	Supplementary heating element	☐ Yes ☒ No
10	Operation function	☒Cooling mode and heating mode ☐Cooling only ☐Heating only
11	Type of the refrigerant	As attach page
12	Mass of refrigerant (kg)	As attach page
13	Compressor information	As attach page
14	Compressor stages type	☐ Fixed capacity unit ☐ Two-stage capacity unit ☐ Multi-stage capacity unit ☒ Variable capacity unit

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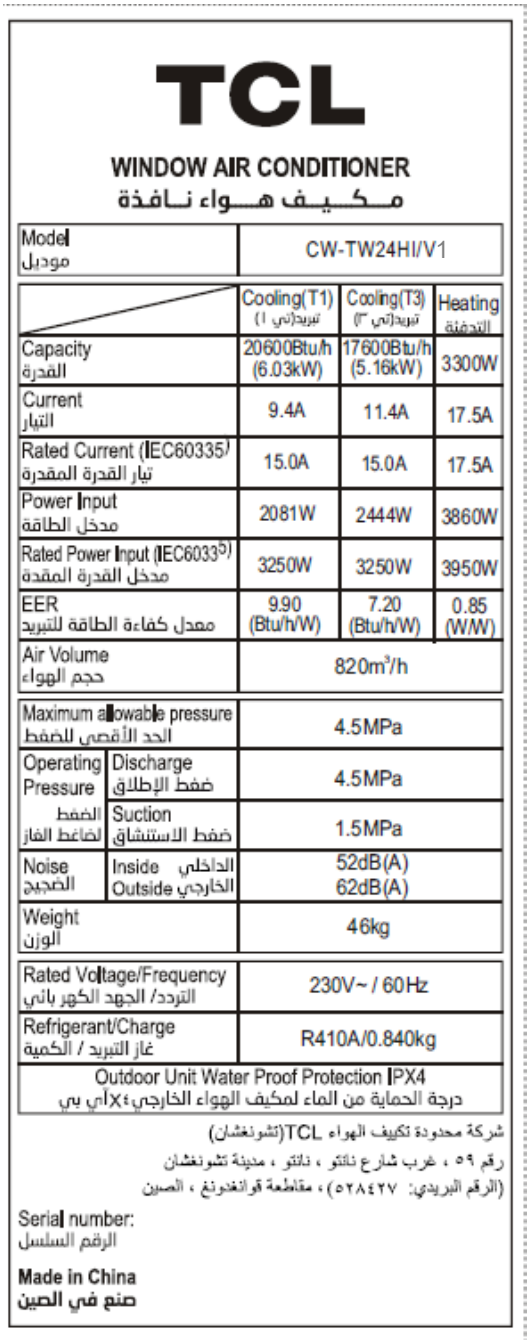
Photo of nameplate:



TCL

WINDOW AIR CONDITIONER

مـكـيـف هـواء نـافذة

Model موديل	CW-TW24HI/V1		
	Cooling(T1) تبريد(تي ١)	Cooling(T3) تبريد(تي ٣)	Heating التدفئة
Capacity القدرة	20600Btu/h (6.03kW)	17600Btu/h (5.16kW)	3300W
Current التيار	9.4A	11.4A	17.5A
Rated Current (IEC60335) تيار القدرة المقدرة	15.0A	15.0A	17.5A
Power Input مدخل الطاقة	2081W	2444W	3860W
Rated Power Input (IEC60335) مدخل القدرة المقدة	3250W	3250W	3950W
EER معدل كفاءة الطاقة للتبريد	9.90 (Btu/h/W)	7.20 (Btu/h/W)	0.85 (W/W)
Air Volume حجم الهواء	820m³/h		

Maximum allowable pressure الحد الأقصى للضغط		4.5MPa
Operating Pressure الضغط لضاغط الغاز	Discharge ضغط الإطلاق	4.5MPa
	Suction ضغط الاستنشاق	1.5MPa
Noise الضجيج	Inside الداخلي Outside الخارجي	52dB(A) 62dB(A)
Weight الوزن		46kg

Rated Voltage/Frequency التردد/ الجهد الكهربائي	230V~ / 60Hz
Refrigerant/Charge غاز التبريد / الكمية	R410A/0.840kg
Outdoor Unit Water Proof Protection IPX4 درجة الحماية من الماء لمكيف الهواء الخارجي IPX4	

شركة محدودة تكييف الهواء TCL(تشونغشان)

رقم ٥٩ ، غرب شارع نانتو ، نانتو ، مدينة تشونغشان

(الرقم البريدي: ٥٢٨٤٢٧) ، مقاطعة قوانغدونغ ، الصين

Serial number:
الرقم المسلسل

Made in China
صنع في الصين

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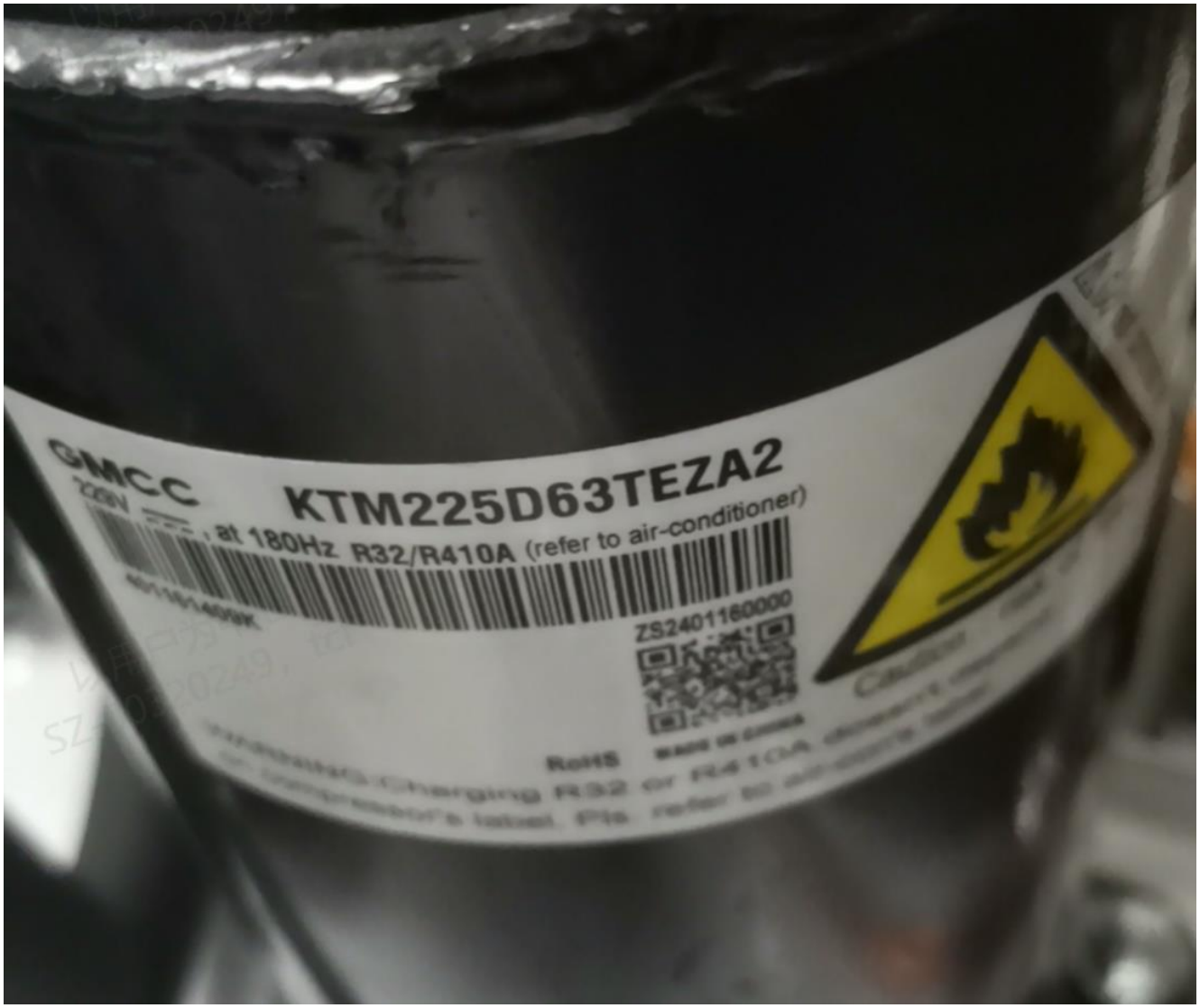
Photo of the tested sample:

TCL空调器（中山）有限公司
测试中心
TEST CENTER
TCL AIR CONDITIONER (ZHONGSHAN) CO.,LTD.

Photo of compressor:



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1- Sample Information

Brand	TCL			
Model No.	**System (if application)**	CW-TW24HI/V1		
	Indoor (split system only)	/		
	Outdoor (split system only)	/		
Serial number	**Indoor:**	Outdoor: G440W0200100G3400016		
Air-Conditioner Type	Window air conditioner			
Air Distribution	Two way (Up-down)			
Type of system	R410A	Mass of Refrigerant (kg)	0.840	
Heat transfer	Heating&Cooling			
Voltage(V)	230			
Phase	1ph			
Hz	60			
Compressor	**Type**	Variable capacity unit		
	Brand	GMCC		
	Model Name	KTM225D63TEZA2		
	Maker	GMCC ELECTROMECHANICAL (ZHEJIANG) CO., LTD		
	Country of Origin	China		
Fan motor 1	**Type**	DC motor		
	Brand	Welling		
	Model	ZKFP-30-8-309)		
	Maker	Guangdong Welling Motor Manufacturing Co., Ltd		
	Country of Origin	China		
Fan motor 2	**Type**	DC motor		
	Brand	Welling		
	Model	ZKFP-45-8-111		
	Maker	Guangdong Welling Motor Manufacturing		
	Country of Origin	China		
Evaporator	**Volume(mm)**	550mm x 302mm x 25.4 mm		
	Type	Hydrophilic & Louver Fin; Innergroover tube type		
Condenser	**Volume(mm)**	560mm x 303 mm x 36.4 mm		
	Type	Louver or Corrugated Fin; Innergroover tube type		
Refrigerant	**Type: R410A**	840g		
Dimensions	**Indoor(mm)**	\	\	\
	Outdoor(mm)	Width :920	Depth :380	Height :699

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2- Test report

2.1 Cooling capacity test (T1 100% Load)

Data to be recorded for Enthalpy cooling capacity tests

Test Duration(min)	90
Power supplied	230V~60HZ
Applied voltage (V)	230.1
Frequency (Hz)	60
Current (A)	9.66
Power Consumption (W)	2088
Power factor	94.8%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	27.01
Wet bulb temperature, indoor (℃)	19.00
Dry bulb temperature, outdoor (℃)	35.03
Wet bulb temperature, outdoor (℃)	24.01
Barometer (KPa)	100.75
Indoor cooling capacity (Btu/h)	20650
Sensible cooling capacity (Btu/h)	18143
Latent cooling capacity (dehumidifying capacity) (Btu/h)	2507
Air-static pressure difference across separating partition of calorimeter compartments (Pa)	251
Volume flow rate of air(m3/hr)	820
Cooling capacity (Btu/h)	20650
EER(Btu/h)/W	9.890

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2.2 Cooling capacity test (T1 50% Load)

Data to be recorded for Enthalpy cooling capacity tests

Test Duration(min)	90
Power supplied	230V~60HZ
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	4.26
Power Consumption (W)	921
Power factor	94.0%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	27.01
Wet bulb temperature, indoor (℃)	19.00
Dry bulb temperature, outdoor (℃)	35.03
Wet bulb temperature, outdoor (℃)	24.01
Barometer (KPa)	100.75
Indoor cooling capacity (Btu/h)	10360
Sensible cooling capacity (Btu/h)	9600
Latent cooling capacity (dehumidifying capacity) (Btu/h)	760
Air-static pressure difference across separating partition of calorimeter compartments (Pa)	251
Volume flow rate of air(m3/hr)	820
Cooling capacity (Btu/h)	10360
EER(Btu/h)/W	11.249

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2.3 Test record of cooling capacity test (T3)

Test Duration(min)	90
Power supplied	230V~60HZ
Applied voltage (V)	230.1
Frequency (Hz)	60
Current (A)	11.64
Power Consumption (W)	2518
Power factor	94.1%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	29.01
Wet bulb temperature, indoor (℃)	19.02
Dry bulb temperature, outdoor (℃)	46.00
Wet bulb temperature, outdoor (℃)	24.02
Barometer (KPa)	100.82
Indoor cooling capacity (Btu/h)	17680
Sensible cooling capacity (Btu/h)	16726
Latent cooling capacity (dehumidifying capacity)	954
Air-static pressure difference across separating partition of calorimeter compartments (Pa)	264
Volume flow rate of air(m3/hr)	821
Cooling capacity (Btu/h)	17680
EER(Btu/h)/W	7.021

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2.4 Test record of heating capacity test (H1)

Test Duration(min)	90
Power supplied	230V~1 Phase/ 60Hz
Applied voltage (V)	230
Frequency (Hz)	60
Current (A)	17.26
Power Consumption (W)	3850
Power factor	97.0%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	20.02
Wet bulb temperature, indoor (℃)	15.01
Dry bulb temperature, outdoor (℃)	7.01
Wet bulb temperature, outdoor (℃)	6.00
Barometer (Pa)	100.80
Indoor heating capacity (W)	3310
Sensible heating g capacity (W)	3310
Latent heating capacity (dehumidifying capacity) (W)	/
Static pressure(Pa)	308
Volume flow rate of air(m3/hr)	753
heating capacity W	3310
COP W / W	0.86

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2.5 Functional Performance – Cooling

Operability at Maximum cooling conditions at T3 conditions	☒ Tested ☐ Declared	Result:	☒ Pass ☐ Fail
Minimum cooling at T3 conditions	☒ Tested ☐ Declared		☒ Pass ☐ Fail
Freeze-up drip at T3 conditions (non-ducted AC)	☒ Tested ☐ Declared		☒ Pass ☐ Fail
Condensate control and enclosure sweat performance	☒ Tested ☐ Declared		☒ Pass ☐ Fail
Operability at 52 ℃	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	
Operability at minimum cooling conditions	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	
Freeze up air blockage	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	
Freeze-up drip	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	
Condensate control	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	
Enclosure sweat performances	☒ Tested ☐ Declared	☒ Yes ☐ No ☐ Non Relevant	

2.6 Capacity tests at below condition were considered in this report.

Mode	Indoor air temperature		Outdoor air temperature		Test voltage
	Dry bulb	**Wet bulb**	**Dry bulb**	**Wet bulb**	
Cooling mode (T1 Full load)	**27**	**19**	**35**	**24**	230V, 60Hz
Cooling mode (T1 Half load)	**27**	**19**	**35**	**24**	230V, 60Hz
Cooling mode (T3)	**29**	**19**	**46**	**24**	230V, 60Hz
Heating mode (H1)	**20**	**15**	**7**	**6**	230V, 60Hz

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3-Conclusion

Cooling capacity test (for condition T1 100% Load)					
Mode	Rated	Tested	Verifying	Required value	Verdict
Cooling capacity, Btu/h	20600	20650	0.24%	>=19570	Pass
Cooling power input, W	2081	2088	0.34%	<=2185	Pass
EER, Btu/W ·h	9.90	9.890	-0.09%	>=9.80	Pass
Cooling capacity test (for condition T1 50% Load)					
Cooling capacity, Btu/h	10300	10360	0.58%	>=9785	Pass
Cooling power input, W	912	921	0.99%	<=958	Pass
EER, Btu/W ·h	11.29	11.249	-0.40%	>=10.73	Pass
Cooling capacity test (for condition T3)					
Cooling capacity, Btu/h	17600	17680	0.45%	>=16720	Pass
Cooling power input, W	2444	2518	0.16%	<=2640	Pass
EER, Btu/W ·h	7.20	7.021	0.29%	>=7.00	Pass
Heating capacity					
Heating capacity, W	3300	3310	0.3%	>=3135	Pass
Heating power input,	3860	3850	-0.3%	<=4053	Pass
COP, WW	0.85	0.86	1.3%	>=0.81	Pass
Annual Energy Consumption(AEC) (kWh)		6771			
SEER		10.35			
SEER class		D			

* Verifying limit for test T1

Cooling capacity	≥ 0.95 × rated capacity
Cooling power input	≤ 1.05× rated
Heating capacity	≥ 0.95 × rated capacity
Heating power input	≤ 1.05× rated
EER	≥ 0.95 × rated
COP	≥ 0.95 × rated

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