



Please scan to verify the report



## TEST REPORT

### Energy Labeling and Minimum Energy Performance Requirements

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 applicant		
Product name .....	Air conditioner		
Trademark .....	TCL		
Model / type reference .....	Indoor unit : TAC-24HS/ TCF1, outdoor unit : TAC-24HU/ TCF1,		
Rating and characteristics. ....	230V~ 60Hz		
Date of receipt of test item	2025-05-08	Date(s) of test	2025-05-08
Test specification/Standard .....	SASO 2663/2021 SASO GSO ISO 5151: 2017 ISO 16358-1 :2013/Cor 1 :2013/AMD1 :2019		
To compile .....	谭民杰		
audit .....	王佳		
The director of the approval	张开结		
Date of issue .....	2025-05-17		

This report is for the exclusive use of **TCL's** Client and is provided pursuant to the agreement between **TCL** and its Client. **TCL** 's responsibility and liability are limited to the terms and conditions of the agreement. **TCL** assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the **TCL** name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by **TCL**. This test report relates only to the tested product, and shall not be reproduced except in full, without written approval of **TCL**.

This report by itself does not imply that the material, product, or service is or has ever been under an **TCL** certification program.

To check the authenticity of the test reports and certification. please pay attention to TCL digital signature with blue banner at the top of the test report.If TCL digital signature could not be displayed, please get access to the website <http://hao.tcl.com/report>, to verify that the report of authenticity.



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.
<b>General remarks</b>	
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.	





## Photo of nameplate:

<b>TCL</b>			
<b>SPLIT TYPE AIR CONDITIONER</b>			
<b>جهاز تكييف هواء حائط</b>			
<b>INDOOR UNIT</b>			
<b>مكيف الهواء الداخلي</b>			
Model موديل	TAC-24HS/TCF1		
	Cooling(T1) تبريد (تي ١)	Cooling(T3) تبريد (تي ٣)	Heating التدفئة
Capacity القدرة	21600Btu/h (6.33kW)	19200Btu/h (5.64kW)	5550W
Current التيار	7.8A	9.9A	6.8A
Rated Current (IEC60335) تيار القدرة المقدرة	13.5A	13.5A	9.1A
Power Input مدخل الطاقة	1742W	2207W	1542W
Rated Power Input (IEC60335) مدخل القدرة المقدرة	2900W	2900W	2200W
EER/COP معدل كفاءة الطاقة للتبريد/التدفئة	12.40(Btu/h/W)	8.70(Btu/h/W)	3.60(W/W)
Indoor Air Volume حجم تدفق الهواء	1550m³/h		
Maximum allowable pressure الحد الأقصى للضغط		4.5MPa	
Operating Pressure الضغط	Discharge ضغط الإطلاق		4.5MPa
الضغط اضعاغط الغاز	Suction ضغط الاستشراق		1.9MPa
Noise الضجيج	53dB(A)		
Weight الوزن	18kg		
Rated Voltage/Frequency التردد / الجهد الكهربائي	230V~ / 60Hz		
Serial number: الرقم التسلسلي Made in China صنع في الصين			
شركة محدودة تكييف الهواء TCL(تشونغشان) رقم ٥٩ ، غرب شارع ناكتو ، ناكتو ، مدينة تشونغشان (الرقم البريدي: ٥٢٨٤٢٧) ، مقاطعة قوانغدونغ ، الصين			

TCL			
SPLIT TYPE AIR CONDITIONER			
جهاز تكييف هواء حائط			
OUTDOOR UNIT			
مكيف الهواء الخارجي			
Model موديل	TAC-24HU/TCF1		
	Cooling(T1) تبريد (تي ١)	Cooling(T3) تبريد (تي ٣)	Heating التدفئة
Capacity القدرة	21600Btu/h (6.33kW)	19200Btu/h (5.64kW)	5550W
Current التيار	7.8A	9.9A	6.8A
Rated Current (IEC60335) تيار القدرة المقدرة	13.5A	13.5A	9.1A
Power Input مدخل الطاقة	1742W	2207W	1542W
Rated Power Input (IEC60335) مدخل القدرة المقدرة	2900W	2900W	2200W
EER/COP معدل كفاءة الطاقة للتبريد/التدفئة	12.40(Btu/h/W)	8.70(Btu/h/W)	3.60(W/W)
Maximum allowable pressure الحد الأقصى للضغط		4.5MPa	
Operating Pressure الضغط	Discharge ضغط التفريغ		4.5MPa
Noise الضجيج	Suction ضغط الاستنشاق		1.9MPa
Weight الوزن	44kg		
Rated Voltage/Frequency التردد / الجهد الكهربائي		230V~ / 60Hz	
Refrigerant/Charge غاز التبريد / الكمية		R410A/1.450kg	
Outdoor Unit WaterProof Protection IPX4 درجة الحماية من الماء لمكيف الهواء الخارجي X4			
Serial number: الرقم التسلسلي Made in China صنع في الصين			
شركة محدودة تكييف الهواء TCL (تشونغشان) رقم ٥٩ ، غرب شارع ناكتو ، ناكتو ، مدينة تشونغشان (الرقم البريدي: ٥٢٨٤٢٧) ، مقاطعة قوانغدونغ ، الصين			



Photo of the tested sample:



Photo of compressor:



**Summary**

Test method		Enthalpy test room
COOLING CAPACITY(T1)	Total cooling capacity in Btu/h	21655
	Air conditioner power consumption in W	1751
	Energy Efficiency Ratio(EER)	12.38
COOLING CAPACITY(T3)	Total cooling capacity in Btu/h	19280
	Air conditioner power consumption in W	2217
	Energy Efficiency Ratio(EER)	8.70
HEATING CAPACITY	Total heating capacity in W	5558
	Air conditioner power consumption in W	1544
	Energy Efficiency Ratio(COP)	3.6

**Test Result:**☒ **Pass**☐ **Fail****Note:** If failed, it shall be indicated which part it was fail in.



## 1- Sample Information

Brand	TCL				
Model No.	System (if application)		TAC-24HSU/TCF1		
	Indoor (split system only)		TAC-24HS/TCF1		
	Outdoor (split system only)		TAC-24HU/TCF1,		
Serial number	Indoor: G440N0600100G3260015		Outdoor: G440W0600100G3260015		
Air-Conditioner Type	Split air conditioner				
Air Distribution	Two way (Up-down)				
Type of system	R410A	Mass of Refrigerant (kg)	1.450		
Heat transfer	Cooling and heating				
Voltage(V)	230				
Phase	1ph				
Hz	60				
Compressor	Type		Fixed capacity unit		
	Brand		Highly		
	Model Name		ASL180DG-C7EU6		
	Maker		Shanghai Highly Electrical Appliances Co.,		
	Country of Origin		China		
Indoor Fan motor	Type		DC motor		
	Brand		BROAD-OCEAN		
	Model		210900290B		
	Maker		ZHONGSHAN BROAD-OCEAN MOTOR Co., LTD.		
	Country of Origin		China		
Outdoor Fan motor	Type		AC motor		
	Brand		BROAD-OCEAN		
	Model		210901758		
	Maker		ZHONGSHAN BROAD-OCEAN MOTOR Co., LTD.		
	Country of Origin		China		
Evaporator	Volume(mm)		895mm x 378 mm x 25.4 mm		
	Type		Hydrophilic & Louver Fin; Innergroover tube type		
Condenser	Volume(mm)		809mm x 663 mm x 23.2 mm		
	Type		Louver or Corrugated Fin; Innergroover tube type		
Refrigerant	Type: R410A		1450g		
Dimensions	Indoor(mm)		Width:1020	Depth :315	Height :220
	Outdoor(mm)		Width :920	Depth :380	Height :699



## 2- Test report

### 2.1 Cooling capacity test (T1)

Data to be recorded for Enthalpy cooling capacity tests

Test Duration(min)	90
Power supplied	230V~, 1Ph
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	7.85
Power Consumption (W)	1751
Power factor	97.0%
Fan speed settings	High speed
Dry bulb temperature, indoor (°C)	27.01
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (°C)	35.01
Wet bulb temperature, outdoor (°C)	24.01
Barometer (Pa)	101.06
Indoor cooling capacity (Btu/h)	21655
Sensible cooling capacity(Btu/h)	18141
Latent cooling capacity (dehumidifying capacity) (Btu/h)	3514
Static pressure(Pa)	263
Volume flow rate of air(m3/hr)	1553
Cooling capacity (Btu/h)	21655
EER(Btu/h)/W	12.37



## 2.2 Test record of cooling capacity test (T3)

Test Duration(min)	90
Power supplied	230V~, 1Ph
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	9.94
Power Consumption (W)	2217
Power factor	97%
Fan speed settings	High speed
Dry bulb temperature, indoor (°C)	29.01
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (°C)	46.02
Wet bulb temperature, outdoor (°C)	24.02
Barometer (Pa)	101.23
Indoor cooling capacity (Btu/h)	19280
Sensible cooling capacity(Btu/h)	17900
Latent cooling capacity (dehumidifying capacity) (Btu/h)	1380
Static pressure(Pa)	267
Volume flow rate of air(m3/hr)	1552
Cooling capacity (Btu/h)	19280
EER(Btu/h)/W	8.70



## 2.3 Test record of heating capacity test (H1)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230
Frequency (Hz)	60
Current (A)	6.97
Power Consumption (W)	1554
Power factor	97.0%
Fan speed settings	High speed
Dry bulb temperature, indoor (°C)	20.00
Wet bulb temperature, indoor (°C)	15.02
Dry bulb temperature, outdoor (°C)	7.02
Wet bulb temperature, outdoor (°C)	6.01
Barometer (Pa)	100.56
Indoor heating capacity (W)	5558
Sensible heating g capacity (W)	5558
Latent heating capacity (dehumidifying capacity) (W)	/
Static pressure(Pa)	246
Volume flow rate of air(m3/hr)	1551
heating capacity W	5558
COP W/W	3.60



## 2.4 Functional Performance – Cooling

Operability at Maximum cooling conditions at T3 conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	Result:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Minimum cooling at T3 conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Freeze-up drip at T3 conditions (non-ducted AC)	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Condensate control and enclosure sweat performance	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail
Operability at 52 °C	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	
Operability at minimum cooling conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	
Freeze up air blockage	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	
Freeze-up drip	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	
Condensate control	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	
Enclosure sweat performances	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Non Relevant	

## 2.5 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)	27	19	35	24	230V, 60Hz
Cooling mode (T3)	29	19	46	24	230V, 60Hz



## Conclusion

Cooling capacity test (for condition T1)						
Model	Rated	Tested	Verifying limit *	Required EER	Required EER/MEPS	Verdict
Cooling capacity, Btu/h	21600	21655	0.25%	$\geq 20520$		Pass
Cooling power input, W	1742	1751	0.52%	$\leq 1829.1$		Pass
EER, Btu/W ·h	12.400	12.367	-0.26%	$\geq 11.78$	11.80	Pass
Cooling capacity test (for condition T3)						
Cooling capacity, Btu/h	19200	19280	0.42%	$\geq 18240$		Pass
Cooling power input, W	2207	2217	0.45%	$\leq 2317.4$		Pass
EER, Btu/W ·h	8.700	8.696	-0.04%	$\geq 8.26$	8.30	Pass
Heating capacity test						
Heating capacity, W	5550	5558	0.14%	/	/	Pass
Heating power input, W	1542	1544	0.13%	/	/	Pass
COP, WW	3.600	3.600	0.01%	/	/	Pass
Annual Energy Consumption(AEC) (kWh)			7283			
SEER			10.50			
SEER class			D			

\* Verifying limit for test T1

Cooling capacity	$\geq 0.95 \times \text{rated capacity}$
Cooling power input	$\leq 1.05 \times \text{rated}$
Heating capacity	$\geq 0.95 \times \text{rated capacity}$
Heating power input	$\leq 1.05 \times \text{rated}$
EER	$\geq 0.95 \times \text{rated}$
COP	$\geq 0.95 \times \text{rated}$

