Please scan to verify the report

№：PMC20250204001

TEST REPORT

NAMEOF SAMPLE: Air Conditioner

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

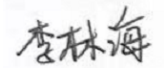
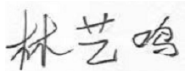
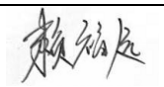
CLASSIFICATION OF TEST: Commission Test

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 ..... Trademark ..... Model / type reference ..... Rating and characteristics.	Air conditioner TCL TAC-24CHSAI/XA21T 220-240V~ ,50/60Hz		
Date of receipt of test item	2025-02-04	Date(s) of test	2025-02-04
Test specification/Standard	SASO 2663/2021 SASO GSO 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.....	2025-02-05		

The rating and performance tests for Air conditioner

Test case verdicts	***I***
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	N.A.
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 25℃;

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℃;

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℃;

Minimum 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 27℃;

Heat: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 change the heating mode and set 20℃;

(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)	220-240
	Rated frequency (Hz)	50/60
	Rated input (W)	Cooling（T1- Full load capacity） : 1750 Cooling （T1- Half load capacity） : 605 Cooling（T3） : 2294 Cooling （T1- Minimum load capacity） : 329 Heating : 1829
	Rated capacity (Btu/h)	Cooling（T1- Full load capacity） : 21000 Cooling （T1- Half load capacity） : 10000 Cooling（T3） : 20300 Cooling （T1- Minimum load capacity） : 5600 Heating : 6400W
	Rated current (A)	/
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 (A/C Configuration— Air Distribution)	☐ Spot ☐ Single-duct ☐ Double ducts ☒ Non Ducted
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

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

Photo of nameplate:

TCL

SPLIT AIR CONDITIONER
INDOOR UNIT
مكيف هواء سبليت
وحدة داخلية

Model موديل	TAC-24CHSAI/XA21T		
	Cooling(T1) تبريد(تي ١)	Cooling(T3) تبريد(تي ٣)	Heating التدفئة
Capacity القدرة	21000(5118~24566)Btu/h (6.15(1.50~7.20)kW)	20300(5118~24566)Btu/h (5.94(1.50~7.20)kW)	6400W (1500~7600)
Current التيار	10.8A (1.6~14.0)	10.4A (1.6~14.0)	8.3A (1.6~14.0)
Rated Current (IEC60335) تيار القدرة المقدرة	14.0A	14.0A	14.0A
Power Input مدخل الطاقة	1750W (200~3250)	2294W (200~3250)	1829W (200~2600)
Rated Power Input (IEC60335) مدخل القدرة المقدة	3250W	3250W	2600W
EER/COP معدل كفاءة الطاقة للتبريد/الحرارة	12.00 (Btu/h/W)	8.85 (Btu/h/W)	3.50 (W/W)
Indoor Air Volume حجم تدفق الهواء	1450m³/h		
Maximum allowable pressure الحد الأقصى للضغط	4.5MPa		
Operating Pressure Discharge ضغط الإطلاق	4.5MPa		
الضغط لضاغط الغاز Suction ضغط الاستنشاق	1.9MPa		
Noise الضجيج	52dB(A)		
Weight الوزن	16kg		
Rated Voltage/Frequency التردد/ الجهد الكهربائي	220-240V,50/60Hz		

Serial number:
الرقم السلسل

Made in China
صنع في الصين

TCL

SPLIT AIR CONDITIONER
OUTDOOR UNIT
مكيف هواء سبليت
وحدة خارجية

Model موديل	TAC-24CHSAI/XA21T		
	Cooling(T1) تبريد(تي ١)	Cooling(T3) تبريد(تي ٣)	Heating التدفئة
Capacity القدرة	21000(5118~24566)Btu/h (6.15(1.50~7.20)kW)	20300(5118~24566)Btu/h (5.94(1.50~7.20)kW)	6400W (1500~7600)
Current التيار	10.8A (1.6~14.0)	10.4A (1.6~14.0)	8.3A (1.6~14.0)
Rated Current (IEC60335) تيار القدرة المقدرة	14.0A	14.0A	14.0A
Power Input مدخل الطاقة	1750W (200~3250)	2294W (200~3250)	1829W (200~2600)
Rated Power Input (IEC60335) مدخل القدرة المقدة	3250W	3250W	2600W
EER/COP معدل كفاءة الطاقة للتبريد/الحرارة	12.00 (Btu/h/W)	8.85 (Btu/h/W)	3.50 (W/W)
Maximum allowable pressure الحد الأقصى للضغط	4.5MPa		
Operating Pressure Discharge ضغط الإطلاق	4.5MPa		
الضغط لضاغط الغاز Suction ضغط الاستنشاق	1.9MPa		
Noise الضجيج	62dB(A)		
Weight الوزن	38.5kg		
Rated Voltage/Frequency التردد/ الجهد الكهربائي	220-240V,50/60Hz		
Refrigerant/Charge غاز التبريد / الكمية	R410A/1.470kg		
Outdoor Unit Water Proof Protection IPX4 درجة الحماية من الماء لمكيف الهواء الخارجي IPX4			

Serial number:
الرقم السلسل

Made in China
صنع في الصين

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

Photo of the tested sample:

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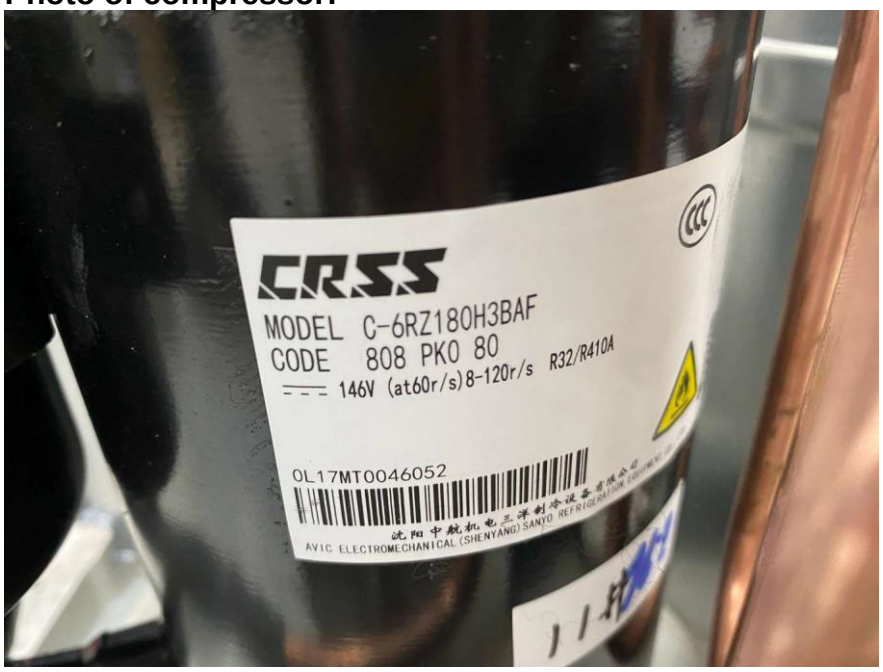
测试中心
TEST CENTER
TCL AIR CONDITIONER (ZHONGSHAN) CO.,LTD.

Photo of compressor:



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Summary

Test method		**Enthalpy test room**
COOLING CAPACITY(T1-Full load capacity)	Total cooling capacity in Btu/h	21492
	Air conditioner power consumption in W	1707
	Energy Efficiency Ratio(EER) in Btu/h/w	12.59
COOLING CAPACITY(T1-Half load capacity)	Total cooling capacity in W	10751
	Air conditioner power consumption in W	591
	Energy Efficiency Ratio(EER)	18.19
COOLING CAPACITY(T3)	Total cooling capacity in Btu/h	20885
	Air conditioner power consumption in W	2234
	Energy Efficiency Ratio(EER) in Btu/h/w	9.35
COOLING CAPACITY(T1-Minimum load capacity)	Total cooling capacity in Btu/h	5988
	Air conditioner power consumption in W	322
	Energy Efficiency Ratio(EER) in Btu/h/w	18.60
HEATING CAPACITY	Total cooling capacity in w	6710
	Air conditioner power consumption in W	1789
	Energy Efficiency Ratio(COP) in w/w	3.75

Test Result:

☒ **Pass** ☐ **Fail**

Note: If failed, it shall be indicated which part it was fail in.

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1- Sample Information

Brand	TCL				
Model No.	**System (if application)**	KT3FR-57GW/YXABp(E/6)(083275)			
	Indoor (split system only)	/			
	Outdoor (split system only)	/			
Serial number	Indoor: G440N020012002011001	Outdoor: G440W020012002011002			
Air-Conditioner Type	Split air conditioner				
Air Distribution	Four way				
Type of system	R410A	Mass of Refrigerant (kg)	1.47		
Heat transfer	Cooling only and heat pump type				
Voltage(V)	220-240				
Phase	1ph				
Hz	50/60				
Compressor	**Type**	Hermetic motor-compressor			
	Brand	Sanyo			
	Model Name	C-6RZ180H3BAF			
	Maker	AVIC ELECTROMECHANICAL(SHENYANG)SANYO REFRIGERATION EQUIPMENT CO.,LTD.			
	Country of Origin	China			
Indoor Fan motor	**Type**	DC motor			
	Brand	WELLING			
	Model	ZKFP-45-8-184L			
	Maker	GUANGDONG WELLING MOTOR MANUFACTURING CO.,LTD.			
	Country of Origin	China			
Outdoor Fan motor	**Type**	DC motor			
	Brand	Wolong			
	Model	WZD-A02085L-01TL			
	Maker	Wolong Electric (Ji nan) Motor Co.,Ltd.			
	Country of Origin	China			
Evaporator	**Volume(mm)**	896mm x 399mm x 25.4 mm			
	Type	Hydrophilic & Louver Fin; Innergroover tube type			
Condenser	**Volume(mm)**	839mm x 651mm x 36.4mm			
	Type	Louver or Corrugated Fin; Innergroover tube type			
Refrigerant	**Type: R410A**	1470g			
Dimensions	Indoor(mm)	Width:1191	Depth :360	Height :258	
	Outdoor(mm)	Width :920	Depth :380	Height :699	

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2- Test report

2.1 Cooling capacity test (T1-Full load capacity)

Data to be recorded for Enthalpy cooling capacity tests

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	229.9
Frequency (Hz)	60
Current (A)	10.44
Power Consumption (W)	1707
Power factor	71.1%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	26.99
Wet bulb temperature, indoor (℃)	19.00
Dry bulb temperature, outdoor (℃)	34.98
Wet bulb temperature, outdoor (℃)	24.00
Barometer (Pa)	102.42
Indoor cooling capacity (Btu/h)	21492
Sensible cooling capacity(Btu/h)	20960
Latent cooling capacity (dehumidifying capacity) (Btu/h)	532
Static pressure(Pa)	0.0
Volume flow rate of air(m3/hr)	1833.8
Cooling capacity (Btu/h)	21492
EER(Btu/h)/W	12.59

2.2 Cooling capacity test (T1-Half load capacity)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	229.5
Frequency (Hz)	60
Current (A)	3.94
Power Consumption (W)	591
Power factor	65.4%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	27.00
Wet bulb temperature, indoor (℃)	19.00
Dry bulb temperature, outdoor (℃)	34.99
Wet bulb temperature, outdoor (℃)	24.00
Barometer (Pa)	102.35
Indoor cooling capacity (W)	10751
Sensible cooling capacity (W)	10342
Latent cooling capacity (dehumidifying capacity) (W)	409
Static pressure(Pa)	0.0
Volume flow rate of air(m3/hr)	1630.0
Cooling capacity (Btu/h)	10751
EER(Btu/h)/W	18.19

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2.3 Test record of cooling capacity test (T3)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.3
Frequency (Hz)	60
Current (A)	10.02
Power Consumption (W)	2234
Power factor	96.8%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	29.00
Wet bulb temperature, indoor (℃)	19.01
Dry bulb temperature, outdoor (℃)	46.00
Wet bulb temperature, outdoor (℃)	24.21
Barometer (Pa)	102.03
Indoor cooling capacity (Btu/h)	20885
Sensible cooling capacity(Btu/h)	20254
Latent cooling capacity (dehumidifying capacity) (Btu/h)	631
Static pressure(Pa)	0.0
Volume flow rate of air(m3/hr)	1792.2
Cooling capacity (Btu/h)	20885
EER(Btu/h)/W	9.35

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2.4 Test record of cooling capacity test (T1- Minimum load capacity)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	229.8
Frequency (Hz)	60
Current (A)	2.38
Power Consumption (W)	322
Power factor	58.8%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	27.00
Wet bulb temperature, indoor (℃)	19.00
Dry bulb temperature, outdoor (℃)	34.98
Wet bulb temperature, outdoor (℃)	24.00
Barometer (Pa)	102.22
Indoor cooling capacity (Btu/h)	5988
Sensible cooling capacity(Btu/h)	5763
Latent cooling capacity (dehumidifying capacity) (Btu/h)	225
Static pressure(Pa)	0.0
Volume flow rate of air(m3/hr)	1103.6
Cooling capacity (Btu/h)	5988
EER(Btu/h)/W	18.60

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2.5 Test record of heating capacity test (H1)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	229.0
Frequency (Hz)	60
Current (A)	8.15
Power Consumption (W)	1789
Power factor	95.8%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	20.00
Wet bulb temperature, indoor (℃)	15.00
Dry bulb temperature, outdoor (℃)	7.02
Wet bulb temperature, outdoor (℃)	6.00
Barometer (Pa)	101.41
Indoor heating capacity (W)	6710
Sensible heating g capacity (W)	6710
Latent heating capacity (dehumidifying capacity) (W)	/
Static pressure(Pa)	0.0
Volume flow rate of air(m3/hr)	1768.3
heating capacity W	6710
heating capacity (Btu/h)	22895
COP (Btu/h)/W	3.75

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

2.5 Functional Performance –Cooling&Heating

Operability at Maximum cooling conditions at 52℃	☒ Tested ☐ Declared	Result:	☒ Pass ☐ Fail ☐ Non Relevant
Operability at Minimum cooling conditions	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ Non Relevant
Freeze up air blockage and freeze-up drip	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ Non Relevant
Condensate control and enclosure sweat performance	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ Non Relevant
Operability at Maximum heating conditions	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ Non Relevant
Operability at Minimum heating conditions	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ Non Relevant
Verification of automatic defrost	☒ Tested ☐ Declared		☒ Pass ☐ Fail ☐ 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 capacity)	**27**	**19**	**35**	**24**	**230V, 60Hz**
Cooling mode (T1-Half load capacity)	**27**	**19**	**35**	**24**	**230V, 60Hz**
Cooling mode (T3)	**29**	**19**	**46**	**24**	**230V, 60Hz**
Cooling mode (T1-Minimum load capacity)	**27**	**19**	**35**	**24**	**230V, 60Hz**
Temperature (H1)	**20**	**15**	**7**	**6**	**230V, 60Hz**

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

Conclusion

Cooling capacity test (for condition T1- Full load capacity)					
Mode	**Rated**	**Tested**	**Verifying**	**Required EER**	Verdict
Cooling capacity, Btu/h	**21000**	**21492**	**2.34%**	**>=19950**	Pass
Cooling power input, W	**1750**	**1707**	**-2.46%**	**<=1838**	Pass
EER, Btu/W ·h	**12.00**	**12.59**	**4.92%**	**>=11.80**	Pass
Cooling capacity test (for condition T1- Half load capacity)					
Cooling capacity, Btu/h	**10000**	**10751**	**7.51%**	**>=9500**	Pass
Cooling power input, W	**605**	**591**	**-2.31%**	**<=635**	Pass
EER, Btu/W ·h	**16.53**	**18.19**	**10.04%**	**>=15.70**	Pass
Cooling capacity test (for condition T3)					
Cooling capacity, Btu/h	**20300**	**20885**	**2.88%**	**>=19285**	Pass
Cooling power input, W	**2294**	**2234**	**-2.62%**	**<=2409**	Pass
EER, Btu/W ·h	**8.85**	**9.35**	**5.65%**	**>=8. 30**	Pass
Cooling capacity test (for condition T1- Minimum load capacity)					
Cooling capacity, Btu/h	**5600**	**5988**	**6.93%**	**>=5320**	Pass
Cooling power input, W	**329**	**322**	**-2.13%**	**<=345**	Pass
EER, Btu/W ·h	**17.02**	**18.60**	**9.28%**	**>=16.17**	Pass
Heating capacity					
Heating capacity, W	**6400**	**6710**	**4.84%**	**>=6080**	Pass
Heating power input,	**1829**	**1789**	**-2.19%**	**<=1920**	Pass
COP, WW	**3.50**	**3.75**	**7.14%**	**>=3.33**	Pass
CSEC (Kwh/Y):		5376			
Energy class: (base on rated EER at T1)		D			
SEER class		B			
SEER		15.00			

a) Tested power at full load operation at (T1 and T3) …….. ⩽ 1.05 x rated power at full load operation at (T1 and T3).
b) Tested power at half load operation at (T1) …….. ⩽ 1.05 x rated power at half load operation at (T1).
c) Tested power at minimum load operation at (T1) …….. ⩽ 1.05 x rated power at minimum load operation at (T1).
d) Tested cooling capacity at full load operation at (T1 and T3) …….. ⩾ 0.95 x rated cooling capacity at full load operation at (T1 and T3).
e) Tested cooling capacity at half load operation at (T1) …….. ⩾ 0.95 x rated cooling capacity at half load operation at (T1).
f) Tested cooling capacity at minimum load operation at (T1) …….. ⩾ 0.95 x rated cooling capacity at minimum load operation at (T1).
g) Tested EER at full load operation at (T1 and T3) ……⩾ MEPS and ⩾ 0.95 x rated EER at full load operation (T1 and T3).
h) Tested power at (H1) …… ⩽ 1.05 x rated power at (H1).
i) Tested heating capacity at (H1) …… ⩾ 0.95 x rated heating capacity at (H1).
j) Tested COP ……⩾ 0.95 x rated COP.
k) Rated COP (Electrical Resistance) ……⩽ 1.0 (W/W).
l) Tested voltage …….. (refer to the standard mentioned in Clause 2).
m) Tested Frequency ……..…….. 60 Hz ±2%.

Nergy Rating Classification

Table 6 – Seasonal Energy Efficiency Ratio (SEER) Classification

Bar color	Energy class		SEER limits (Btu/W.h)
Dark green	أ	A	SEER ≥ 18.0
Green	ب	B	18.0> SEER ≥ 15.0
Light green	ج	C	15.0> SEER ≥ 12.5
Yellow	د	D	12.5> SEER ≥ 10.0
Orange	هـ	E	10.0> SEER ≥ 9.0
Red	و	F	9.0> SEER ≥ 8.0
Dark Red	ز	G	8.0> SEER

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