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(中山)

测试中心

№: PMC20221011003

TEST REPORT

SAMPLE:	All Conditioner
APPLICANT:	TCL Air Conditioner (Zhongshan) Co., Ltd.
CLASSIFICATION TEST:	OF Commission Test

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

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

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. 59 Nantou Road West, Nantou, Zhongshan, Guangdong, China Address: Factory: Same as applicant Product name Air conditioner Trademark **TCL** TAC-24CS/XA23 Model / type reference 230V~ 60Hz Rating and characteristics. Date(s) of test 2024-09-02 Date of receipt of test item 2024-09-02 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

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赖福远

2024-09-03

The director of the approval

Date of issue.....

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测试中心 TEST CENTER

ONDITIONER (ZHONGS)

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.

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Ratings Rated voltage/rated voltage range (V) 230 Rated frequency (Hz) 60 Rated input (W) Cooling (T1) : 1833 Cooling (T3) : 2230 Heating / Rated capacity (Btu/h) Cooling (T1) : 22000 Cooling (T3) : 19400 Heating / Rated current (A) N/A	Brief	Brief description of the tested sample(s)				
Rated frequency (Hz) Rated input (W) Cooling (T1): 1833 Cooling (T3): 2230 Heating / Rated capacity (Btu/h) Cooling (T1): 22000 Cooling (T3): 19400 Heating / Rated current (A) N/A Type of power supply Single phase Three phase Three phase Single packaged type Multi-split type Single packaged type Multi-split type Single-duct Double ducts Non Ducted Type of the indoor unit if split type Type of the indoor unit if split type Type of the indoor unit if split type Type of outdoor unit if split type Supplementary heating element Type of the refrigerant As attach page Type of the refrigerant (kg) As attach page Type-stage type Multi-split uppe Single-duct Double ducts Non Ducted Type of outdoor unit if split type Free-standing Celling-mounted Other type Type Supplementary heating element Type of outdoor unit if split uppe Single-duct Double ducts Non Cooling mounted Other type Type Supplementary heating element As attach page Cooling only Heating only Heating only As attach page Single-duct Double ducts Non Cooling mode and heating mode Cooling only Heating only Heating only As attach page Single-duct Double ducts Non Cooling mode and heating mode Cooling only Heating only Heating only As attach page Single-duct Double ducts Non Dother type Single-duct Double ducts Non Ducted	1	Ratings				
Rated input (W) Rated capacity (Btu/h) Rated capacity (Btu/h) Rated capacity (Btu/h) Rated capacity (Btu/h) Rated current (A) 2 Type of power supply Single phase Three phase Three phase Split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single-duct Double ducts Non Ducted Double ducts Non Ducted Type of the indoor unit if split type Multi-split type Swall-mounted Ceiling-mounted Ceiling-mounted Other type Free-standing Ceiling-mounted Other type Free-standing Ceiling-mounted Other type Free-standing Other type Average Average Supplementary heating element Yes No Operation function Cooling mode and heating mode Cooling only Heating only Heating only Average Average Type of the refrigerant Average Average Average Compressor stages type Free-standing Compressor stages type Free-sta		Rated voltage/rated voltage range (V)	230			
Heating / Rated capacity (Btu/h)		Rated frequency (Hz)	60			
Rated capacity (Btu/h) Rated current (A) Rated current (A) 7ype of power supply Single phase Three phase Three phase Split type Single packaged type Multi-split type Single-duct Double ducts Non Ducted Type of the indoor units if multi-split type Type of the indoor unit if split type Type of outdoor unit if split type As attach page Mass of refrigerant As attach page As attach page Compressor stages type Fixed capacity unit Multi-stage capacity unit Variable capacity unit		Rated input (W)	Cooling (T1) : 1833 Cooling (T3) : 2230			
Rated current (A) Rated current (A) 7 Type of power supply Type of power supply Single phase Three phase Split type Single packaged type Multi-split type Supple duct Obusted Type of the indoor units if multi-split type Type of the indoor unit if split type Type of outdoor unit if split type Single packaged type Multi-split type Multi-split type Type of the refrigerant As attach page As attach page As attach page Single packaged type Multi-split type Multi-split type Single packaged type Single packag			Heating /			
Rated current (A) 7 Type of power supply Construction of the unit Construction of the unit Construction of the unit Type of the unit considering if it has the air ducts Split type Multi-split type Type of the unit considering if it has the air ducts Spot Multi-split type Type of the indoor units if multi-split type Type of the indoor unit if split type Type of the indoor unit if split type Type of the indoor unit if split type Type of outdoor unit if split type Type of outdoor unit if split type Supplementary heating element Double ducts Non Ducted Free-standing Ceiling-mounted Other type Type of outdoor unit if split type Free-standing Other type Supplementary heating element Pyes No Operation function Cooling mode and heating mode Cooling only Heating only Heating only Type of the refrigerant As attach page As attach page As attach page Compressor information As attach page Split type Milti-split type Single-packaged type Milti-stage capacity unit Two-stage capacity unit Two-stage capacity unit Variable capacity		Rated capacity (Btu/h)	Cooling (T1) : 22000 Cooling (T3) : 19400			
Type of power supply			Heating /			
Three phase Three phase Split type Single packaged type Multi-split type Multi-split type Single packaged type Multi-split type Multi-split type Single packaged type Multi-split type Single packaged type Multi-split type Single-duct Double ducts Non Ducted Single-duct Double ducts Single-duct Double ducts Non Ducted Single-duct Double ducts Non Ducted Single-duct Double ducts Non Ducted Single-duct Double ducts Single-duct Double ducts Non Ducted Single-duct Double ducts Non Ducted Single-duct Single-duct Double ducts Non Ducted Single-duct Single-duct Double ducts Non Ducted Single-duct Si		Rated current (A)	N/A			
Construction of the unit	2	Type of power supply	Single phase ■ Sing			
Single packaged type Multi-split type Multi-split type			•			
Multi-split type	3	Construction of the unit				
Type of the unit considering if it has the air ducts (A/C Configuration—Air Distribution)						
(A/C Configuration—Air Distribution) □ Single-duct □ Double ducts □ Non Ducted The number of the indoor units if multi-split type Type of the indoor unit if split type □ Free-standing □ Ceiling-mounted □ Other type Type of outdoor unit if split type □ Supplementary heating element □ Yes □ No Operation function □ Cooling mode and heating mode □ Cooling only □ Heating only Type of the refrigerant □ As attach page □ Compressor information □ Compressor stages type □ Fixed capacity unit □ Two-stage capacity unit □ Multi-stage capacity unit □ Wariable capacity unit □ Variable capacity unit □ Variable capacity unit □ Variable capacity unit □ Variable capacity unit						
Double ducts Non Ducted	4		•			
Non Ducted No		(A/C Configuration— Air Distribution)	_ •			
The number of the indoor units if multi-split type						
Type of the indoor unit if split type	_					
Free-standing Ceiling-mounted Other type Type of outdoor unit if split type Free-standing Other type Supplementary heating element Yes No Operation function Cooling mode and heating mode Cooling only Heating only Heating only As attach page Mass of refrigerant As attach page Compressor information As attach page Compressor stages type Fixed capacity unit Two-stage capacity unit Wariable capacity unit Variable capacity unit Variable capacity unit Wariable capacity unit Wariable capacity unit Variable capacity unit Wariable capacity Wariable capacity unit Wariable capacity						
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Other type Other type Free-standing Other type Other type Other type Other type Other type Yes No No Operation function Cooling mode and heating mode Cooling only Heating only Heating only As attach page As						
Type of outdoor unit if split type Supplementary heating element Yes No			l <u> </u>			
Other type	_	Time of autology with Marilleting				
Supplementary heating element	′	Type of outdoor unit if split type	<u> </u>			
No Cooling mode and heating mode Cooling only Heating only Heating only 11	•	Cumplementary beating element				
10	9	Supplementary neating element				
Cooling only	10	Operation function				
Heating only	10	Operation function				
Type of the refrigerant						
Mass of refrigerant (kg) As attach page	11	Type of the refrigerant				
13 Compressor information As attach page 14 Compressor stages type □ Two-stage capacity unit □ Multi-stage capacity unit □ Variable capacity unit □ Variable capacity unit						
Two-stage capacity unit □ Multi-stage capacity unit □ Variable capacity unit □ Variable capacity unit □ Variable capacity unit						
□Two-stage capacity unit □Multi-stage capacity unit □Variable capacity unit □Variable capacity unit			. •			
□ Multi-stage capacity unit □ Variable capacity unit □ (中山)		Compressor stages type	· · ·			
□Variable capacity unit						
(中山) 海源						
(G, VIII)			□ variable capacity unit			
(G, VIII)						
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2 测试中心 2			海陽 (中山) 海原			
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TEST CENTER SI			MOTOUS COSTANOS			

Photo of nameplate:

TCL

SPLIT AIR CONDITIONER INDOOR UNIT

مكيـف هــواء سبليـت وحــدة داخليـة

Model مودیل	TAC-24CS/XA23	
	Cooling(T1) (آبرید(تی ا	
Capacity القدرة	22000Btu/h (6.45kW)	
Current التيار	8.1A	
Rated Current (IEC60335) تيار القدرة المقدرة	14.0A	
Power Input محخل الطاقة	1833W	
Rated Power Input (IEC60335) مدخل القدرة المقدة	2700W	
EER معدل كفاءة الطاقة للتبريد	12.00(Btu/h/W)	
Indoor Air Volume حجم تدفق الهواء	1500m³/h	
Maximum allowable pressure الحد الأقصى للضفط	4.5MPa	
Operating Discharge Pressure ضغط الإطلاق	4.5MPa	
Suction الخفط ضفط الاستنشاق لضاغط الفاز	1.9MPa	
Noise الضجيح	52dB(A)	
Weight الوزن	18kg	
Rated Voltage/Frequency التردد/ الجهد الكهر بائي	230V~ / 60Hz	

Serial number: الرقم السلسل

Made in China صنع في الحين

TCL

SPLIT AIR CONDITIONER OUTDOOR UNIT

مكـيـف هــواء سبليـت وحــدة خارجيــة

Model مودیل		TAC-24CS/XA23		
		Cooling(T1) (ارید(انی ۱	Cooling(T3) (اترید(تای ۲۶	
Capacity القدرة		22000Btu/h (6.45kW)	19400Btu/h (5.70kW)	
Current التيار		8.1A	10.0A	
Rated Curr درة المقدرة	rent (IEC60335) تيار القد	14.0A	14.0A	
Power Inpo دخل الطاقة		1833W	2230W	
Rated Powe غدرة المقدة	r Input (IEC60335) مدخل الق	2700W	2700W	
EER معدل كفاءة الطاقة للتبريد		12.00 (Btu/h/W)	8.70 (Btu/h/W)	
Maximum allowable pressure الحد الأقصى للضفط		4.5MPa		
	Discharge ضفط الإطلاق	4.5MPa		
الضفط لضاغط الفاز	Suction ضغط الاستنشاق	1.9MPa		
Noise الضجيح		58dB(A)		
Weight الوزن		43kg		
Rated Voltage/Frequency التردد/ الجهد الكهربائي		230V~ / 60Hz		
Refrigerant/Charge غاز التبريد / الكمية		R410A/1.150kg		
Outdoor Unit Water Proof Protection IPX4 درجة الحماية من الماء لمكيف الهواء الخارجي£Xأبي بي				

Serial number: الرقم السلسل

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	Enthalpy test room
Total cooling capacity in Btu/h	22086
Air conditioner power consumption in W	1745
Energy Efficiency Ratio(EER) in Btu/h/w	12.66
Total cooling capacity in Btu/h	1
Air conditioner power consumption in W	/
Energy Efficiency Ratio(EER) in Btu/h/w	/
Total cooling capacity in Btu/h	18971
Air conditioner power consumption in W	2085
Energy Efficiency Ratio(EER) in Btu/h/w	9.10
Total cooling capacity in w	/
Air conditioner power consumption in W	/
Energy Efficiency Ratio(COP) in w/w	/
S	□ Fail
	Air conditioner power consumption in W Energy Efficiency Ratio(EER) in Btu/h/w Total cooling capacity in Btu/h Air conditioner power consumption in W Energy Efficiency Ratio(EER) in Btu/h/w Total cooling capacity in Btu/h Air conditioner power consumption in W Energy Efficiency Ratio(EER) in Btu/h/w Total cooling capacity in w Air conditioner power consumption in W



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1- Sample Information

1- Sample Information Brand	TCL			
	System (if application)	KT3F-57GW/YXA(E/6)(008386)		
Model No.	Indoor (split system only	<u> </u>		
	Outdoor (split system only)			
Serial number	Indoor:	Outdoor:		
	G440N0200100I9200001	G440W0200100I9200001		
Air-Conditioner Type	Split air conditioner			
Air Distribution	Two way (Up-down)			
Type of system		s of Refrigerant (kg) 1.150		
Heat transfer	Cooling only			
Voltage(V)	230			
Phase	1ph			
Hz	60			
	Туре	Hermetic motor-compressor		
	Brand	Highly		
Compressor	Model Name	ASL180DG-C7EU6		
	Maker Shanghai Highly Electrical Applian Ltd.			
	Country of Origin China			
	Туре	DC motor		
	Brand	Welling		
Indoor Fan motor	Model	ZKFP-45-8-111		
	Maker	Guangdong Welling Motor Manufacturing Co., Ltd.		
	Country of Origin	China		
	Туре	AC motor		
	Brand	BROAD-OCEAN		
Outdoor Fan motor	Model	Y6S688C008L		
	Maker	ZHONGSHAN BROAD-OCEAN MOTOR Co., LTD.		
	Country of Origin	China		
Evaporator	Volume(mm)	896mm x 378 mm x 38. 1 mm		
	Туре	Hydrophilic & Louver Fin; Innergroover tube type		
Condenser	Volume(mm)	790mm x 663 mm x 23.2 mm		
	Туре	Louver or Corrugated Fin; Innergroover tube type		
Dimensions	Indoor(mm)	Width :1191		
Dimensions	Outdoor(mm)	Width :920		



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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

Data to be recorded for Entirally cooling capacity test	
Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	7.74
Power Consumption (W)	1745
Power factor	98.0%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	27.00
Wet bulb temperature, indoor ($^{\circ}\!\mathbb{C}$)	19.02
Dry bulb temperature, outdoor (℃)	35.01
Wet bulb temperature, outdoor (℃)	24.00
Barometer (Pa)	100.28
Indoor cooling capacity (Btu/h)	22086
Sensible cooling capacity(Btu/h)	17869
Latent cooling capacity (dehumidifying capacity) (Btu/h)	4217
Static pressure(Pa)	243
Volume flow rate of air(m3/hr)	1505
Cooling capacity (Btu/h)	22086
EER(Btu/h)/W	12.66
Cooling capacity (Btu/h)	22086



2.2 Cooling capacity test (T1-Half load capacity)

	T
Test Duration(min)	/
Power supplied	/
Applied voltage (V)	/
Frequency (Hz)	/
Current (A)	/
Power Consumption (W)	/
Power factor	/
Fan speed settings	/
Dry bulb temperature, indoor (°C)	/
Wet bulb temperature, indoor ($^{\circ}$ C)	/
Dry bulb temperature, outdoor (℃)	/
Wet bulb temperature, outdoor (℃)	/
Barometer (Pa)	/
Indoor cooling capacity (W)	/
Sensible cooling capacity (W)	/
Latent cooling capacity (dehumidifying capacity) (W)	/
Static pressure(Pa)	/
Volume flow rate of air(m3/hr)	/
Cooling capacity (W)	/
Cooling capacity (Btu/h)	/
EER(Btu/h)/W	/



2.3 Test record of cooling capacity test (T3)

2.3 lest record of cooling capacity test (13)	
Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	9.25
Power Consumption (W)	2085
Power factor	98%
Fan speed settings	High speed
Dry bulb temperature, indoor (℃)	29.02
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (℃)	46.01
Wet bulb temperature, outdoor (℃)	24.02
Barometer (Pa)	100.46
Indoor cooling capacity (Btu/h)	18971
Sensible cooling capacity(Btu/h)	17263
Latent cooling capacity (dehumidifying capacity) (Btu/h)	1707
Static pressure(Pa)	255
Volume flow rate of air(m3/hr)	1502
Cooling capacity (Btu/h)	18971
EER(Btu/h)/W	9.10



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2.4 Test record of heating capacity test (H1)

Test Duration(min)	/
Power supplied	/
Applied voltage (V)	/
Frequency (Hz)	/
Current (A)	/
Power Consumption (W)	/
Power factor	/
Fan speed settings	/
Dry bulb temperature, indoor (°C)	/
Wet bulb temperature, indoor (℃)	/
Dry bulb temperature, outdoor (℃)	/
Wet bulb temperature, outdoor (℃)	/
Barometer (Pa)	/
Indoor heating capacity (W)	/
Sensible heating g capacity (W)	/
Latent heating capacity (dehumidifying capacity) (W)	/
Static pressure(Pa)	/
Volume flow rate of air(m3/hr)	/
heating capacity W	/
heating capacity (Btu/h)	/
COP (Btu/h)/W	/



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Operability at Maximum cooling conditions at 52°C	☑ 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

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

Mode	Indoor air temperatu		Outdoor a		Test voltage
	Dry bulb	Wet bulb	Dry bulb	Wet bulb	8
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
Temperature (H1)	20	15	7	6	230V, 60Hz



Conclusion

Cooling	capacity test	t (for conditi	on T1- Full k	oad capacity)	
Mode	Rated	Tested	Verifyi ng	Required EER	Verdict
Cooling capacity, Btu/h	22000	22086	0.39%	>=20900	Pass
Cooling power input, W	1833	1745	-4.80%	<=1924	Pass
EER, Btu/W ·h	12.00	12.66	5.50%	>=11.80	Pass
Cooling	capacity test	t (for conditi	on T1- Half le	oad capacity)	
Cooling capacity, Btu/h	1	1	1	1	1
Cooling power input, W	1	1	1	1	1
EER, Btu/W ⋅h	1	1	1	1	1
	Cooling o	apacity test	(for conditio	n T3)	
Cooling capacity, Btu/h	19400	18971	-2.21%	>=18430	Pass
Cooling power input, W	2230	2085	-6.50%	<=2341	Pass
EER, Btu/W ·h	8.70	9.10	4.598%	>=8. 30	Pass
		Heating capa	acity		
Heating capacity, W	1	1	1	/	Pass
Heating power input,	1	1	1	/	Pass
COP, WW	1	1	1	/	Pass
CSEC (Kwh/Y):				7538	
Energy class: (base or at T1)	n rated EER			D	
SEER class				D	
SEER				10.25	

Cooling capacity(T1 Full load capacity) ≥ 0.95 × rated capacity

Cooling power input(T1 Full load capacity) ≤ 1.05× rated

Cooling capacity(Half load capacity) $\geq 0.95 \times \text{rated capacity}$ Cooling capacity(T3) $\geq 0.95 \times \text{rated capacity}$

Cooling power input(T3) $\leq 1.05 \times \text{ rated}$

Heating capacity ≥ 0.95 × rated capacity

Heating power input≤ 1.05× ratedEER(T1 Full load capacity)≥ 0.95 × ratedEER(T3)≥ 0.95 × ratedCOP≥ 0.95 × rated



Nergy Rating Classification

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Table 6 – Seasonal Energy Efficiency Ratio (SEER) Classification				
Bar color	Energy class		SEER limits (Btu/W.h)	
Dark green	1	А	SEER ≥ 18.0	
Green	ب	В	18.0> SEER ≥ 15.0	
ght green	ح	С	15.0> SEER ≥ 12.5	
ellow	7	D	12.5> SEER ≥ 10.0	
Prange	ھ	E	10.0> SEER ≥ 9.0	
ed	و	F	9.0> SEER ≥ 8.0	
ark Red	ز	G	8.0> SEER	

