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No: CAC20250200001

## TEST REPORT

NAME OF SAMPLE: Air Conditioner

APPLICANT: GD TCL Intelligent Heating & Ventilating Equipment 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..... :	GD TCL Intelligent Heating & Ventilating Equipment Co., Ltd.		
Address .....	NO.7 Yuanlin Road, Nantou Town, Zhongshan City, Guangdong P.R. China		
Manufacturer .....	GD TCL Intelligent Heating & Ventilating Equipment Co., Ltd.		
Address .....	NO.7 Yuanlin Road, Nantou Town, Zhongshan City, Guangdong P.R. China		
Factory .....	Same as applicant		
Product name.....	Air conditioner		
Trademark.....	TCL		
Model / type reference.....	TCC-24CHRH/DVT-(C5)		
Rating and characteristics.....	220-240 V~ 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		

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### 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	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.

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#### 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' °C , medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 31 °C ;

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 °C , medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 28 °C .

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 °C , medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 30 °C ;

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' °C , medium speed wind, press the ECO or Sleep button 7 times continuously within 8 seconds, and the buzzer beeps 3 times, then set 29 °C ;


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' °C , 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 16 °C .

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



[illegible]

## Photo of nameplate:

<b>TCL</b> <b>CASSETTE TYPE</b> <b>AIR CONDITIONER</b>		 A2L
— Indoor Unit		
Model	TCC-24CHRH/DVTI-(C5)	
Cooling Capacity	24000Btu/h	
Heating Capacity	8000W	
Rated Input	100W	
Air Volume	1500m³/h	
Rated Voltage	220-240V ~	
Rated Frequency	50/60Hz	
Refrigerant	R32	
Weight	23kg	
GD TCL INTELLIGENT HEATING & VENTILATING EQUIPMENT CO.,LTD.No.7 Yuanlin Road,Nantou ,Zhongshan, Guangdong, PR China		

<b>TCL</b>		 A2L
<b>SPLIT TYPE AIR CONDITIONER</b>		
— Outdoor Unit		
<b>Model</b>	<b>TCC-24HH/DVTO-(C5)</b>	
<b>Rated Volt</b>	220-240V ~	
<b>Rated Frequency</b>	50/60Hz	
<b>Rated Power Input(IEC60335)</b>	3500W	
<b>Rated Current(IEC60335)</b>	15.5A	
<b>Maximum allowable pressure</b>		4.5MPa
<b>Operating Pressure</b>	<b>Discharge</b>	4.5MPa
	<b>Suction</b>	1.9MPa
<b>Weight</b>		46kg
<b>Water Proof Protection</b>		<b>IPX4</b>
<b>Refrigerant/Charge</b>		R32/1.7kg
GD TCL INTELLIGENT HEATING & VENTILATING EQUIPMENT CO.,LTD.No.7 Yuanlin Road,Nantou ,Zhongshan, Guangdong, PR China		



**Photo of the tested sample:**



Photo of compressor:



**Summary**

Test method		Enthalpy test room
COOLING CAPACITY(T1-Full load capacity)	Total cooling capacity in Btu/h	24498
	Air conditioner power consumption in W	1933
	Energy Efficiency Ratio(EER) in Btu/h/w	12.66
COOLING CAPACITY(T1-Half load capacity)	Total cooling capacity in Btu/h	12170
	Air conditioner power consumption in W	694
	Energy Efficiency Ratio(EER) in Btu/h/w	17.5
COOLING CAPACITY(T3)	Total cooling capacity in Btu/h	22550
	Air conditioner power consumption in W	2366
	Energy Efficiency Ratio(EER) in Btu/h/w	9.53
HEATING CAPACITY	Total cooling capacity in w	8337
	Air conditioner power consumption in W	2195
	Energy Efficiency Ratio(COP) in w/w	3.79

**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)		TCC-24CHRH/DVT-(C5)	
	Indoor (split system only)		TCC-24CHRH/DVTI-(C5)	
	Outdoor (split system only)		TCC-24HH/DVTO-(C5)	
Serial number	Indoor: A00098		Outdoor: A00105	
Air-Conditioner Type	Split air conditioner			
Air Distribution	Four way			
Type of system	R32	Mass of Refrigerant (kg)		1.7
Heat transfer	Cooling mode and heating mode			
Voltage(V)	230			
Phase	1ph			
Hz	60			
Compressor	Type	Rotary		
	Brand	SANYO		
	Model Name	C-6RZ210H3BAF		
	Maker	AVIC ELECTROMECHANICAL(SHENYANG)SANYO REFRIGERATION EQUIPMENT Co.,Ltd		
	Country of Origin	China		
Indoor Fan motor	Type	DC motor		
	Brand	Kaiband		
	Model	ZWR60-E51		
	Maker	ZHUHAI KAIBANG MOTOR MANUFACTURING CO..LTD		
	Country of Origin	China		
Outdoor Fan motor	Type	DC motor		
	Brand	Broad-ocean		
	Model	ZW511B500074L		
	Maker	ZHONGSHAN BROAD-OCEAN MOTOR CO..LTD		
	Country of Origin	China		
Evaporator	Volume(mm)	2110mm x195mm x 23.2mm		
	Type	Hydrophilic		
Condenser	Volume(mm)	994mm x 756 mm x 36.4mm		
	Type	Hydrophilic		
Refrigerant	Type: R32	1700g		
Dimensions	Indoor(mm)	Width:840	Depth :840	Height :245
	Outdoor(mm)	Width :910	Depth :378	Height :804



## 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)	230.0
Frequency (Hz)	60
Current (A)	11.92
Power Consumption (W)	1933
Power factor	97.6%
Fan speed settings	super speed
Dry bulb temperature, indoor (°C)	27.00
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (°C)	35.00
Wet bulb temperature, outdoor (°C)	24.00
Barometer (Pa)	101040
Indoor cooling capacity (Btu/h)	24498
Sensible cooling capacity(Btu/h)	22150
Latent cooling capacity (dehumidifying capacity) (Btu/h)	2348
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	1719
Cooling capacity (Btu/h)	24498
EER(Btu/h)/W	12.66



## 2.2 Cooling capacity test (T1-Half load capacity)

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	4.493
Power Consumption (W)	694
Power factor	98.1%
Fan speed settings	super speed
Dry bulb temperature, indoor (°C)	27.00
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (°C)	35.00
Wet bulb temperature, outdoor (°C)	24.00
Barometer (Pa)	101310
Indoor cooling capacity (W)	3567
Sensible cooling capacity (W)	3484
Latent cooling capacity (dehumidifying capacity) (W)	84
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	1593
Cooling capacity (W)	3567
Cooling capacity (Btu/h)	12170
EER(Btu/h)/W	17.5



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

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	14.6
Power Consumption (W)	2366
Power factor	97.6%
Fan speed settings	super speed
Dry bulb temperature, indoor (°C)	29.00
Wet bulb temperature, indoor (°C)	19.00
Dry bulb temperature, outdoor (°C)	46.00
Wet bulb temperature, outdoor (°C)	24.00
Barometer (Pa)	101750
Indoor cooling capacity (Btu/h)	22550
Sensible cooling capacity(Btu/h)	21911
Latent cooling capacity (dehumidifying capacity) (Btu/h)	639
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	1700
Cooling capacity (Btu/h)	22550
EER(Btu/h)/W	9.53



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

Test Duration(min)	90
Power supplied	220-240V
Applied voltage (V)	230.0
Frequency (Hz)	60
Current (A)	10.06
Power Consumption (W)	2195
Power factor	95.8%
Fan speed settings	super speed
Dry bulb temperature, indoor (°C)	20.00
Wet bulb temperature, indoor (°C)	15.00
Dry bulb temperature, outdoor (°C)	7.00
Wet bulb temperature, outdoor (°C)	6.00
Barometer (Pa)	100860
Indoor heating capacity (W)	8337
Sensible heating g capacity (W)	8337
Latent heating capacity (dehumidifying capacity) (W)	0
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	1865
heating capacity W	8278
heating capacity (Btu/h)	28445
COP (Btu/h)/W	12.95



## 2.5 Functional Performance – Cooling&amp;Heating

Operability at Maximum cooling conditions at 52°C	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared	Result:	<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Non Relevant
Operability at Minimum cooling conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/> Non Relevant
Freeze up air blockage and freeze-up drip	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Non Relevant
Condensate control and enclosure sweat performance	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> Non Relevant
Operability at Maximum heating conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/> Non Relevant
Operability at Minimum heating conditions	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input type="checkbox"/> Pass <input type="checkbox"/> Fail <input checked="" type="checkbox"/> Non Relevant
Verification of automatic defrost	<input checked="" type="checkbox"/> Tested <input type="checkbox"/> Declared		<input checked="" type="checkbox"/> Pass <input type="checkbox"/> Fail <input type="checkbox"/> 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
Temperature (H1)	20	15	7	6	230V, 60Hz



## Conclusion

Cooling capacity test (for condition T1- Full load capacity)					
Mode	Rated	Tested	Verifying	Required EER	Verdict
Cooling capacity, Btu/h	24000	24498	2.1%	$\geq 22800$	Pass
Cooling power input, W	1930	1933	0.2%	$\leq 2026$	Pass
EER, Btu/W · h	12.4	12.66	2.1%	$\geq 11.80$	Pass
Cooling capacity test (for condition T1- Half load capacity)					
Cooling capacity, Btu/h	12000	12170	1.4%	$\geq 11400$	Pass
Cooling power input, W	700	694	-0.9%	$\leq 735$	Pass
EER, Btu/W · h	17.14	17.53	2.2%	$\geq 16.79$	Pass
Cooling capacity test (for condition T3)					
Cooling capacity, Btu/h	22000	22550	2.5%	$\geq 20900$	Pass
Cooling power input, W	2390	2366	-1.0%	$\leq 2509$	Pass
EER, Btu/W · h	9.20	9.53	3.6%	$\geq 8.30$	Pass
Heating capacity					
Heating capacity, W	8000	8337	4.2%	$\geq 7600$	Pass
Heating power input,	2170	2195	1.2%	$\leq 2278$	Pass
COP, WW	3.7	3.79	2.4%	$\geq 3.51$	Pass
CSEC (Kwh/Y):	5782				
<b>Energy class:</b> (base on rated EER at T1)	B				
SEER class	B				
SEER	15.1				

Cooling capacity(T1 Full load capacity)	$\geq 0.95 \times \text{rated capacity}$
Cooling power input(T1 Full load capacity)	$\leq 1.05 \times \text{rated}$
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	$\geq 0.95 \times \text{rated capacity}$
Heating power input	$\leq 1.05 \times \text{rated}$
EER(T1 Full load capacity)	$\geq 0.95 \times \text{rated}$
EER(T3)	$\geq 0.95 \times \text{rated}$
COP	$\geq 0.95 \times \text{rated}$



## 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

