

No: CAC20250200006

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-48CHRH/DVT-(C5)		
Rating and characteristics.....	220-240 V~ 60Hz		
Date of receipt of test item	2025-02-11	Date(s) of test	2025-02-11
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.....	2025-02-11		

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




[illegible]

Photo of nameplate:

TCL
CASSETTE TYPE
AIR CONDITIONER  **A2L**
— Indoor Unit

Model	TCC-48CHRH/DVTI-(C5)
Cooling Capacity	42000BTU/h
Heating Capacity	14000W
Rated Input	100W
Air Volume	2250m³/h
Rated Voltage	220-240V ~
Rated Frequency	60Hz
Refrigerant	R32
Weight	30kg

GD TCL INTELLIGENT HEATING & VENTILATING
EQUIPMENT CO.,LTD.No.7 Yuanlin Road,Nantou
,Zhongshan, Guangdong, PR China

TCL
SPLIT TYPE AIR
CONDITIONER  **A2L**
— Outdoor Unit

Model	TCC-48HH/DVTO-(C5)
Rated Volt	220-240V ~
Rated Frequency	60Hz
Rated Power Input(IEC60335)	5500W
Rated Current(IEC60335)	25.0A
Maximum allowable pressure	4.5MPa
Operating Pressure	Discharge 4.5MPa
	Suction 1.9MPa
Weight	91kg
Water Proof Protection	IPX4
Refrigerant/Charge	R32/4.0kg

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	43899
	Air conditioner power consumption in W	3450
	Energy Efficiency Ratio(EER) in Btu/h/w	12.72
COOLING CAPACITY(T1-Half load capacity)	Total cooling capacity in Btu/h	21229
	Air conditioner power consumption in W	1251
	Energy Efficiency Ratio(EER) in Btu/h/w	16.96
COOLING CAPACITY(T3)	Total cooling capacity in Btu/h	37012
	Air conditioner power consumption in W	4050
	Energy Efficiency Ratio(EER) in Btu/h/w	9.14
HEATING CAPACITY	Total cooling capacity in w	14508
	Air conditioner power consumption in W	4086
	Energy Efficiency Ratio(COP) in w/w	3.55

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-48CHRH/DVT-(C5)	
	Indoor (split system only)		TCC-48CHRH/DVTI-(C5)	
	Outdoor (split system only)		TCC-48HH/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)		4.0
Heat transfer	Cooling mode and heating mode			
Voltage(V)	230			
Phase	1ph			
Hz	60			
Compressor	Type	Rotary		
	Brand	HIGHLY		
	Model Name	GTH420SKPC8DQ		
	Maker	SHANGHAI HIGHLY ELECTRICAL APPLIANCES CO.,LTD		
	Country of Origin	China		
Indoor Fan motor	Type	DC motor		
	Brand	Li-feng		
	Model	RD100HD1		
	Maker	Jiangmen LT Motor Co.,Ltd.		
	Country of Origin	China		
Outdoor Fan motor	Type	DC motor		
	Brand	Wolong		
	Model	WZD-A02090L-01TL		
	Maker	Wolong Electric (Ji nan) Motor Co.,Ltd		
	Country of Origin	China		
Evaporator	Volume(mm)	2110mm x 252 mm x 38.1mm		
	Type	Hydrophilic		
Condenser	Volume(mm)	1302mm x 896 mm x 54.6mm		
	Type	Hydrophilic		
Refrigerant	Type: R32	4000g		
Dimensions	Indoor(mm)	Width:840	Depth :840	Height :290
	Outdoor(mm)	Width :950	Depth :340	Height :1330



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)	15.98
Power Consumption (W)	3450
Power factor	94%
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)	43899
Sensible cooling capacity(Btu/h)	35874
Latent cooling capacity (dehumidifying capacity) (Btu/h)	8025
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	2189
Cooling capacity (Btu/h)	43899
EER(Btu/h)/W	12.72



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)	8.33
Power Consumption (W)	1251
Power factor	65%
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)	6222
Sensible cooling capacity (W)	6108
Latent cooling capacity (dehumidifying capacity) (W)	114
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	1649
Cooling capacity (W)	6222
Cooling capacity (Btu/h)	21229
EER(Btu/h)/W	16.96



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)	18.4
Power Consumption (W)	4050
Power factor	95%
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)	37012
Sensible cooling capacity(Btu/h)	35958
Latent cooling capacity (dehumidifying capacity) (Btu/h)	1054
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	2286
Cooling capacity (Btu/h)	37012
EER(Btu/h)/W	9.14



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)	18.5
Power Consumption (W)	4086
Power factor	96%
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)	14508
Sensible heating g capacity (W)	14508
Latent heating capacity (dehumidifying capacity) (W)	0
Static pressure(Pa)	0
Volume flow rate of air(m3/hr)	2302
heating capacity W	14508
heating capacity (Btu/h)	49501
COP (Btu/h)/W	12.11



2.5 Functional Performance – Cooling&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	42000	43899	+4.5%	≥ 39900	Pass
Cooling power input, W	3387	3450	-3.07%	≤ 3556	Pass
EER, Btu/W · h	12.4	12.72	+2.58%	≥ 11.78	Pass
Cooling capacity test (for condition T1- Half load capacity)					
Cooling capacity, Btu/h	21000	21229	+1.09%	≥ 19950	Pass
Cooling power input, W	/	/	/	/	/
EER, Btu/W · h	/	/	/	/	/
Cooling capacity test (for condition T3)					
Cooling capacity, Btu/h	36000	37012	+2.81%	≥ 34200	Pass
Cooling power input, W	3997	4050	+1.33%	≤ 4197	Pass
EER, Btu/W · h	8.8	9.14	+3.86%	≥ 8.36	Pass
Heating capacity					
Heating capacity, W	14000	14508	+3.6%	≥ 13300	Pass
Heating power input,	4000	4086	+2.15	≤ 4200	Pass
COP, WW	3.5	3.55	+1.43	≥ 3.34	Pass
CSEC (Kwh/Y):	9145				
Energy class: (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

