

Plot No. 16, Udyog Kendra, Ecotech III, Greater Noida- 201306, Uttar Pradesh

Test Laboratory Discipline: Electrical Testing**Test Laboratory Group:** Domestic Electrical Appliances**Test Report Cooling Capacity Test for Split Type (Inverter) Air Conditioner****1. General Information**

Laboratory Name	Testing Laboratory, Ezentech India Pvt. Ltd.		
Address	Plot No. 16, Udyog Kendra, Ecotech III, Greater Noida- 201306, Uttar Pradesh.		
Date of Unit Receipt	03.01.2023		
Test Report No.	202211150005295		
ULR	TC95962200000095F	Date of Testing	05.01.2023
UID	ES1311E018	Date of Issued	16.01.2023
Tested By	Ashu Singh	Approved By	Hira Lal

2. Details of the Sample Tested

Customer Name / Address	Comtech Enterprises T-29/78, 2 nd Floor Baljeet Nagar New Delhi-110008.		
Brand Name	INDCOOL		
Model	IDCACSG18K5	Year Of Manufacture	2023
Indoor Model No.	IDCACSG18K5I	Outdoor Model No.	IDCACSG18K5O
Indoor Serial No.	IDCACSG18K5I0000001	Outdoor Serial No.	IDCACSG18K5O0000001
Refrigerant Type	R32	Refrigerant charged (gm)	730 gm
Test Standard	The test standards adhered to in this test was: IS 1391 (Part 2): 2018 ; Standard Incorporating Amendment4, June 2021		

Standard Cooling at Full Capacity (W)	5100	Standard Cooling at 50%of Full Capacity (W)	2550
Rated Power Consumption (in W) at Standard Cooling at Full Capacity	1180	Rated Power Consumption (in W) at Standard Cooling at 50%of Full Capacity (W)	428
Rated Frequency (in Hz) at Standard Cooling at Full Capacity	58Hz	Rated Frequency (in Hz) at Standard Cooling at 50% of Full Capacity	23Hz
Rated Power Supply (V, Hz, Ø)	230V, 1 Phase, 50Hz	Nominal Current (A)	5.40
Rated CSEC (kWh)	716.40	Rated CSTL (kWh)	3947.86
Rated ISEER	5.51	Star Rating	5
Copper tube size	½" & ¼"	Copper tube in meter	3

Tested By


(Lab Engineer)

**Approved By**


(Technical Manager)

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3. Measuring Equipment and Instruments details

Sr. No.	Instrument / Equipment Name	Make	Accuracy Class	Range	Cal. Valid Date
1.	Psychrometric Calorimeter Method	Testing Laboratory, Ezentech India Pvt. Ltd.	± 1.11% for Capacity ± 0.5% for Power	2500 W to 12000 W	NABL Accreditation valid until 13.06.2023

4. Test Condition**a) Temperature settings**

Psychrometric Air Temperatures, °C Adjacent to inlet of Test Unit	Rated	Result at Full Capacity	Result at 50% of Full Capacity
Indoor, Dry Bulb (°C)	27.0±0.3	27.00	27.00
Indoor, Wet Bulb (°C)	19.0±0.2	19.00	19.00
Outdoor, Dry Bulb (°C)	35.0±0.3	35.00	35.00
Outdoor, Wet Bulb (°C)	Not Specified	NA	NA

b) Electrical Conditions

Test Voltage, Volt	230.00±1%	230.18	230.28
Frequency, Hz	50.00±1%	50.00	50.00
Current (A)	5.40/4.00	5.27	3.96
Power Factor	Not less than 0.90	0.99	0.47

c) Frequency settings

Parameters	Standard Cooling at Full Capacity (Rated)	Standard Cooling at 50% of Full Capacity (Rated)
Frequency setting (in Hz)	58Hz	23Hz

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d) Testing Frequency Setting Method

Full Load Capacity

1. To enable the test mode, switch on the Unit and set it to "Cooling" Mode.
2. Set temp. as "16 °C" and fan speed to "High".
3. Press "Display" key from Remote 8 times continuously within 10 second.
4. As the test mode gets enable, twice buzzer sound will come with whole LED light panel lights on and start blinking on indoor display.

Half Load Capacity

1. To enable the test mode, switch on the Unit and set it to "Cooling" Mode.
2. Set temp. as "17 °C" and fan speed to "High".
3. Press "Display" key from Remote 8 times continuously within 10 second.
4. As the test mode gets enable, twice buzzer sound will come with whole LED light panel lights on and start blinking on indoor display.

5. Test Results

a) Measured input values (at 35°C)

Sensible Standard cooling at full Capacity (W)	4415	Sensible cooling at 50% Capacity (W)	2568.3
Latent Cooling Capacity at Full Capacity (W)	758.2	Latent Cooling Capacity at 50% of Full Capacity (W)	4.70
Standard Cooling Capacity at Full Capacity (W)	5173.2	Standard Cooling Capacity at 50% of Full Capacity (W)	2573
Power consumption in (W)at standard Cooling at full capacity	1198.7	Power consumption in (W)at standard Cooling at 50%of Full Capacity	431.3

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ULR : TC959622000000095F

b) Calculated input values (at 29°C)

Standard cooling at full Capacity (W)	5572	Standard cooling at 50%of Full Capacity (W)	2771
Power consumption in (W)at standard Cooling at full capacity	1096	Power consumption in (W)at standard Cooling at 50%of Full capacity	394

c) Air Flow

Air Flow at Full Capacity(m3/min)	17.85
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d) Calculated & Rated Values

Parameters	Calculated	Rated
CSTL (kWh)	4004.53	3947.86
CSEC (kWh)	726.46	716.4
ISEER	5.51	5.51
Star Rating	5	5

The test covered under the mandatory BEE Star Labeling Program at 24°C as per the **S.O. 2527(E)** and **S.O. 2528(E)** dated 8th August-2017.

- **Default temperature setting of the room air conditioner at 24 °C: YES**

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Test Report No.: 202211150005295

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Product and Rating Label:

Product Pictorial:



Indoor Unit



Outdoor Unit

Product Rating Label:

18K IDU Name Plate Data	
Model Name	IDCACSG18K5
Serial No.	IDCACSG18K5I0000001
Power Supply	230V, 1 Phase, 50Hz
Rated Frequency	58/23
Cooling Capacity (100%)	5100
Cooling Capacity (50%)	2550
Power Supply (100%)	1180
Power Supply (50%)	428
Current	5.4
ISEER	5.51
Air Flow Volume	17.85

18K ODU Name Plate Data	
Model Name	IDCACSG18K5
Serial No.	IDCACSG18K5O0000001
Power Supply	230V, 1 Phase, 50Hz
Cooling Capacity (100%)	5100
Cooling Capacity (50%)	2550
Power Supply (100%)	1180
Power Supply (50%)	428
Current	5.4
ISEER	5.51
Refrigerant Type	R32
Refrigerant Charge	730gm

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-----End of Test Report-----

Tested By



(Lab Engineer)



Approved By



(Technical Manager)

Plot No. 16, Udyog Kendra, Ecotech III, Greater Noida- 201306, Uttar Pradesh

Test Laboratory Discipline: Electrical Testing

Test Laboratory Group: Domestic Electrical Appliances

Test Report: The Maximum Operating Test for Split Type (Variable Speed) Air Conditioner**1. General Information**

Laboratory Name	Testing Laboratory, Ezentech India Pvt. Ltd.		
Address	Plot No. 16, Udyog Kendra, Ecotech III, Greater Noida- 201306, Uttar Pradesh.		
Date of Unit Receipt	03.01.2023		
Test Report No.	202211150005297		
ULR	TC95962200000097F	Date of Testing	05.01.2023
UID	ES1311E018	Date of Issued	16.01.2023
Tested By	Ashu Singh	Approved By	Hira Lal

2. Details of the Sample Tested

Customer Name / Address	Comtech Enterprises T-29/78, 2 nd Floor Baljeet Nagar New Delhi-110008.		
Brand Name	INDCOOL		
Model	IDCACSG18K5	Year Of Manufacture	2023
Indoor Model No.	IDCACSG18K5I	Outdoor Model No.	IDCACSG18K5O
Indoor Serial No.	IDCACSG18K5I0000001	Outdoor Serial No.	IDCACSG18K5O0000001
Refrigerant Type	R32	Refrigerant charged (gm)	730 gm
Test Standard	The test standards adhered to in this test was: IS 1391 (Part 2): 2018 ; Standard Incorporating Amendment4, June 2021		

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Rated Power Supply (V, Hz, Ø)	230V, 1 Phase, 50Hz	Nominal Current (A)	5.40
Rated CSEC (kWh)	716.40	Rated CSTL (kWh)	3947.86
Rated ISEER	5.51	Star Rating	5
Copper tube size	½" & ¼"	Copper tube in meter	3

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(Technical Manager)

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Parameters	Specifications				
Test Unit Voltage(V)	Standard Specified $\pm 1\%$	207		253	
Voltage Frequency(Hz)	50 $\pm 1\%$	50	50	50	50
Duration		1Hr	1Hr	1Hr	1Hr

Indoor Dry Bulb($^{\circ}\text{C}$)	35 $\pm 0.5^{\circ}\text{C}$	35.01	35.00	34.99	35.00
Indoor Wet Bulb($^{\circ}\text{C}$)	24 $\pm 0.5^{\circ}\text{C}$	24.00	23.98	24.00	24.00
Outdoor Dry Bulb($^{\circ}\text{C}$)	46 $\pm 0.5^{\circ}\text{C}$	46.05	46.04	45.98	45.98
Outdoor Wet Bulb($^{\circ}\text{C}$)	27 $\pm 0.5^{\circ}\text{C}$	26.98	27.00	27.02	27.04

Observations:

- Machine run for the above mentioned condition for one hour at **207 Volt**. After one hour power was cut off for 3 minutes and then restored. Voltage rise during the switching off the machine was less than 3%. Machine started without any abnormal sound and run continuously for 1 hour after restart without any tripping.
- Machine run for the above mentioned condition for one hour at **253 Volt**. After one hour power was cut off for 3 minutes and then restored. Voltage rise during the switching off the machine was less than 3%. Machine started without any abnormal sound and run continuously for 1 hour after restart without any tripping.

Conclusions:

- Test sample was tested to the Maximum Operating Test and it is passed as per Test Standard **IS 1391(Part 2):2018 Standard incorporating Amendment 4, June-2021**.

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(Technical Manager)

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Product Pictorial:



Indoor Side



Outdoor Side

Product Rating Label:

18K IDU Name Plate Data	
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Serial No.	IDCACSG18K5I0000001
Power Supply	230V, 1 Phase, 50Hz
Rated Frequency	58/23
Cooling Capacity (100%)	5100
Cooling Capacity (50%)	2550
Power Supply (100%)	1180
Power Supply (50%)	428
Current	5.4
ISEER	5.51
Air Flow Volume	17.85

18K ODU Name Plate Data	
Model Name	IDCACSG18K5
Serial No.	IDCACSG18K5O0000001
Power Supply	230V, 1 Phase, 50Hz
Cooling Capacity (100%)	5100
Cooling Capacity (50%)	2550
Power Supply (100%)	1180
Power Supply (50%)	428
Current	5.4
ISEER	5.51
Refrigerant Type	R32
Refrigerant Charge	730gm

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