

Schedule - 32 Table & Wall-Mounted Fan

1. SCOPE:

This scheme specifies the essential characteristics for capacitor type AC and BLDC motor driven, table and wall mounted fans, oscillating and non-oscillating, and their associated regulators intended for use on single phase, 50 Hz, AC, rated voltage not exceeding 250 volts suitable for domestic and similar use covered under the scope of IS 555:1979 (with all amendments) being manufactured, commercially purchased, sold or imported in India.

Following sweep sizes would be eligible for grant of star rating under this program 200 mm, 250 mm, 300 mm and 400 mm.

This schedule covers the test for safety and performance requirements for table and wall mounted fans as specified in IS 555:1979 with all amendments.

2. Referred Standards

This schedule shall be read in conjunction with the following standards with all amendments, for the purpose of star labelling.

Reference Standard	Title of the Standard
IS 555:1979 with all amendments	Specification for electric table type fans and regulators
IS 302-1:2008 with all amendments	Safety of household and similar electrical appliances, Part 1 General requirements

3. TERMINOLOGY

For the purpose of this schedule following definitions in additions to those given in IS 555 and IS 302-1 shall apply.

- a) Table type Fan means a propeller-bladed fan having two or more blades, directly driven by an electric motor, and intended for use with free inlet and outlet. It may be a table fan or a bracket-mounted fan for wall or ceiling mounting.

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- b) Service value means, the air delivery in cubic meters per minute divided by electrical power input to the fan in watts at the voltage and frequency specified for the test.
- c) Air delivery means the quantity of air delivered in a given time under specified conditions.
- d) Rated power input is the power input assigned to the fan by the manufacturer and marked on it and it is expressed in Watts.
- e) Label means any written, printed, marked, stamped or graphic matter affixed to, or appearing upon, table fan.
- f) Label period means the validity period of the service value under the star rating plan specified in the Schedule.
- g) Models or family of models means the model or range of models of one particular brand, to which a single set of test reports is applicable and where each of the models has the same physical characteristics, blade sweep size, service value, energy efficiency level and performance characteristics.
- h) Permittee means a person or agency to whom permission has been granted to affix label.
- i) Star rating or star level means the grade of energy efficiency displayed on the label of the table/wall-mounted fan based on service value under the star rating plan specified in the Schedule.
- j) Trader or seller in relation to any labelled table fan means a person who sells or distributes any such table/wall-mounted fan and includes the shopkeeper, trader, manufacturer and permittee who has been given permission to affix label on such table/wall-mounted fan.
- k) Blade Sweep means the diameter of the circle traced out by the extreme tips of the fan blades.

NOTE: Words and expressions used herein and not defined but defined in Act shall have meanings respectively assigned to them in the Act.

1. Schedule of Tests

4.1 Method of Tests

The testing method and procedure shall be as per IS 555:1979 with all amendments, as applicable.

4.2 Parameters to be tested

Parameters for initial verification and challenge testing listed under clause 10.1 of IS 555:1979 with all amendments shall be as follows:

- (i) Air delivery (Clause 10.3)
- (ii) Temperature rise (Clause 10.4);
- (iii) Leakage current (Clause 10.5);
- (iv) High voltage (Clause 10.6);
- (v) Insulation resistance (Clause 10.7);
- (vi) Power Input and power factor (Clause 10.9);
- (vii) Earthing Connection (Clause 10.10);
- (viii) Protection against electric shock (Clause 10.11);
- (ix) Moisture resistance (Clause 10.12);
- (x) Cord grip (Clause 10.14) and
- (xi) Creepage distances and clearances (Clause 10.16)

4.3 Conditions of compliance for performance and service value

Meet all the performance requirements of power input, air delivery and service value as specified in Table 3 of IS 555:1979 with all amendments. The values of air delivery shall be rounded off two three significant figures, power input and service value to two significant figures. The rounding off of numerical values shall be in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'.

5. Star Rating Plan

The table and wall mounted fans shall meet the requirement of service value as per the Table 1 given below.

The table & wall mounted fan shall be rated from star one to star five based on their Service value and which complies with the Service value requirements as laid down in Table-1.

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Table-1 : for Table & Wall-Mounted Fans
(Valid from Date of Launch to 31st December 2024)

Star rating band	Service Value (m ³ /min/W)
1 Star *	$0.50 \leq \text{Service Value} < 0.65$
2 Star **	$0.65 \leq \text{Service Value} < 0.85$
3 Star ***	$0.85 \leq \text{Service Value} < 1.10$
4 Star ****	$1.10 \leq \text{Service Value} < 1.43$
5 Star *****	$1.43 \leq \text{Service Value}$

There is no negative tolerance for the Star Rating Bands. All tested products must meet the minimum threshold for each Star Rating Band. The scope for manufacturing tolerance and other variations shall be accounted by the manufacturer or permittee while determining the Star Rating of a particular model.

6. Test Report

The result of the tests carried out in laboratory accredited by National Accreditation Board for Testing and Calibration Laboratories (NABL) or International Laboratory Accreditation Cooperation (ILAC) or Asia Pacific Accreditation Cooperation (APAC) or equivalent bodies for ensuring consistency in quality of the equipment as well as the scope of the relevant Indian standards shall be reported in the prescribed format mentioned in the Annexure-I appended to this Schedule.

7. Label Design and Manner of Display

7.1 Placement

All table and wall mounted fans shall display the label at the point of sale. The label shall be affixed on the motor enclosure. The label shall also be displayed on the packaging. For the fans not on display, the label may be affixed to the exterior of the packing and the label may be attached to the unit when put on sale.

7.2 Material and Shape

The label shall be a non-perishable material and shall be of durable cardboard, or be self-adhesive and shall be cut to one of the outlines.

7.3 Sample Label

Typical sample of the printed star label and the colour, shape and design to be affixed on each fan shall be as shown in Annex II.

For every table and wall mounted fans, the following particulars shall be displayed on its label as follows.

- a) Star level;
- b) Service Value (m³/min/W);
- c) Label period;
- d) Type of Fan (Table/Wall-Mounted);
- e) Name of manufacturer or importer or brand;
- f) Model number and year of manufacturing or import;
- g) Motor type (induction/BLDC);
- h) Air Delivery (m³/min);
- i) Power Input (Watts);
- j) Sweep size (mm)
- k) Electricity savings/year(kWh)
- l) CO₂ Emission Reduction (KgCO₂)
- m) Logo of the Bureau of Energy Efficiency
- n) Referred test standard
- o) Unique series code

8. Labelling Fee

- a) Company registration fees shall be Rs.1,00,000 (One Lakh Only) which is refundable.
- b) Application fee payable on application for assignment of the authority to affix label is INR 2000/- (Rupees Two thousand only)
- c) Renewal fee payable on application for renewal of authority to affix labels is INR 1000/- (Rupees One thousand only).
- d) Labelling fee for affixation of label on each table/wall mounted fan is INR 1/- (Rupee one only)

9. Check Testing

Check testing procedure as described in the operations manual of BEE's S&L program shall apply.

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Annexure-I

Form for reporting the test results

(Separate test report format shall be used for each type/models)

Test report No. _____

Date: _____

1. Product/Equipment Detail

1.1 General

Equipment
Type of fan (Table/Wall-Mounted)
Brand
Model Name and Number
Name of the manufacturer/Importer
Rated Service value(m ³ /min/W)
Month and Year of manufacturing
Air Delivery(m ³ /min)
Input Power (Watts)
Sweep size (mm)
Power factor
Name and address of the Manufacturer

Performance Requirements

S.No	Test parameters and relevant units	Measured Values	Rated/Declared Values (after applying tolerances, if any as per standards)	Relevant Test Standard
1	Power Input (Watts)			Indian Standard 555:1979 with all amendments
2	Air Delivery (cum/min)			
3	Service value (cum/min/ Watts)			
4	Power factor			
5	peed			

Safety Requirements

S.No.	Test parameters	Test Standards
1	Temperature rise (Clause 10.4);	IS 555:1979 with all amendments
2	Cord grip (Clause 10.14);	
3	Leakage current (Clause 10.5);	
4	High voltage (Clause 10.6);	
5	Earthing continuity/earthing connection (Clause 10.10);	
6	Insulation test (Clause 10.7)	
7	Creepage distances and clearances (Clause 10.16)	

Annexure-II

- (1) **Material & Dimension of Label:** The label shall be self-adhesive and shall be designed as set out in sample label.
- (2) **Color scheme of label:** The label shall be printed as per the following specification in the following colors on a white background:
 - a. Red: Pantone warm red
 - b. Yellow: Pantone 116
 - c. Black: Pantone Black
 - d. Green: Pantone 340

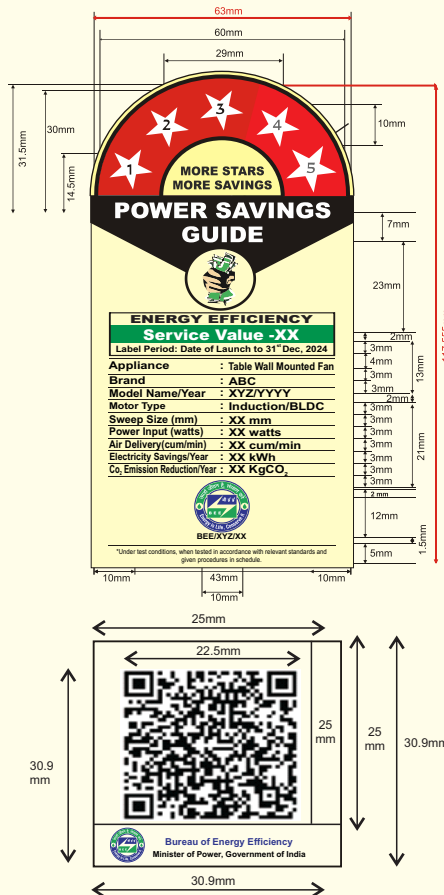
Note: The color tone at the background of Service Value Display (Green) will be similar as followed for the Bureau of Energy Efficiency Logo.

The following colour scheme for Bureau's logo, namely:-

- a. BLUE – Hue(H)-2390 Saturation(S):64% Brightness(B):59%
- b. Luminance or lightness(L) : 28, chromatic components -a:24 b:54
- c. Red(R): 54 Green(G): 55 Blue(B):151
- d. Cyan(C): 97% Magenta(M):95% Yellow(Y):6% Black(K):1%

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- e. Web colour code - #363797
- f. GREEN – Hue(H)-1500 Saturation(S):10% Brightness(B):67%
- g. Luminance or lightness(L) : 61, chromatic components -a:-53 b:32
- h. Red(R):0 Green(G):170 Blue(B):87
- i. Cyan(C):81% Magenta(M):10% Yellow(Y):90% Black(K):1%
- j. Web colour code - #00AA56;



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(3) Sample label: An example of a printed energy label along with QR Code for a Table & Wall-mounted fan is shown in following label.

POWER SAVINGS GUIDE

ENERGY EFFICIENCY
Service Value -XX

Label Period: Date of Launch to 31st Dec, 2024

Appliance	: Table Wall Mounted Fan
Brand	: ABC
Model Name/Year	: XYZ/YYYY
Motor Type	: Induction/BLDC
Sweep Size (mm)	: XX mm
Power Input (watts)	: XX watts
Air Delivery(cum/min)	: XX cum/min
Electricity Savings/Year	: XX kWh
Co₂ Emission Reduction/Year	: XX KgCO ₂

BEE/XYZ/XX

*Under test conditions, when tested in accordance with relevant standards and given procedures in schedule.

QR Code

Bureau of Energy Efficiency
Minister of Power, Government of India

Annotations:

- Black Outline (Outer) .5pt
- Black Outline (Inner) 1.5pt
- Yellow Y:40
- Star Outline Black K:30
- 7.5pt text Black (Arial Black)
- Black 15pt text white
- Yellow Y:20
- Black text 6pt (Arial Black)
- Green 11pt White text (Arial Black)
- Black text 6pt (Arial Black)
- Black text 6pt (Arial Bold)
- Blue C:97, M:95, Y:6, K:1
- Green C:81, M:10, Y:90, K:1
- Black text 4pt (Arial)
- Black 5pt text (Arial Narrow)
- Outline 1pt
- Black text 6pt (Arial Bold)
- Outline .5pt
- Green ← C-81, M 10, Y 90, K 1
- Blue ← C97, M 95, Y 6, K 1

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(4) Label on Motor

