

Standards and Labelling Program for Pedestal Fan

Schedule - 33 Pedestal Fan

1. SCOPE:

This scheme specifies the essential characteristics for capacitor type AC and BLDC driven motor pedestal fans, oscillating or 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 uses covered under the scope of IS 1169:1967 (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 300 mm, 400 mm, 500 mm and 600 mm.

This schedule covers the test for safety and performance requirements for Pedestal fans as specified in IS 1169:1967 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 1169:1967 with all amendments	Specification for electric pedestal 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 1169 and IS 302-1 shall apply

- a) Pedestal type fan is a propeller type fan having two or more blades directly driven by an electric motor mounted on a pedestal of fixed or variable height and intended for use with free inlet and outlet of air.

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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, pedestal 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 pedestal fan based on service value under the star rating plan specified in the Schedule.
- j) Trader or seller in relation to any labelled pedestal fan means a person who sells or distributes any such pedestal fan and includes the shopkeeper, trader, manufacturer, and permittee who has been given permission to affix label on such pedestal 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.

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1. Schedule of Tests

4.1 Method of Tests

The testing method and procedure shall be as per IS 1169:1967 with all amendments, as applicable.

4.2 Parameters to be tested

Parameters for initial verification and challenge testing listed under clause 16 of IS 1169:1967 with all amendments shall be as follows:

- (i) Air delivery (Clause 16.2);
- (ii) Temperature rise (Clause 16.3);
- (iii) Cord grip (Clause 16.5);
- (iv) Power factor (clause 16.7);
- (v) Leakage current (Clause 16.8);
- (vi) High voltage (Clause 16.9);
- (vii) Earthing continuity/earthing connection (Clause 16.10);
- (viii) Power Input (Clause 16.11);
- (ix) Fan speed (Clause 16.12);
- (x) Insulation resistance test (Clause 16.14)

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 1169:1967 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 numerical values shall be in accordance with IS 2: 1960 'Rules for rounding off numerical values (revised)'.

5. Star Rating Plan

The Pedestal fan shall meet the requirement of service value as per the Table 1 given below.

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The Pedestal 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.

Table-1 for Pedestal fans
(Valid from Date of Launch to 31st December 2024)

Star rating band	Service Value (m ³ /min/W)
1 Star *	$0.75 \leq \text{Service Value} < 0.90$
2 Star **	$0.90 \leq \text{Service Value} < 1.08$
3 Star ***	$1.08 \leq \text{Service Value} < 1.30$
4 Star ****	$1.30 \leq \text{Service Value} < 1.56$
5 Star *****	$1.56 \leq \text{Service Value}$

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 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 pedestal 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

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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.

7.4 Particulars to be displayed on Label

On every Pedestal fan, the following particulars shall be displayed on its label as follows.

- a) Star level;
- b) Service Value ($\text{m}^3/\text{min}/\text{W}$);
- c) Label period;
- d) Type of Fan (Pedestal);
- 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 (m^3/min);
- i) Power Input (Watts);
- j) Sweep size (mm)
- k) Electricity savings/year (kWh)
- l) CO_2 Emission Reduction (KgCO_2)
- m) Logo of the Bureau of Energy Efficiency
- n) Referred test standard
- o) Unique series code

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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 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 (Pedestal)
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 1169:1967 with all amendments
2	Air Delivery (m ³ /min)			
3	Service value (cu m/min/ Watts)			
4	Power factor			
5	Speed			

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Safety Requirements

S.No.	Test parameters	Test Standards
1	Temperature rise (Clause 16.3);	1169:1967 with all amendments
2	Cord grip (Clause 16.5);	
3	Leakage current (Clause 16.8);	
4	High voltage (Clause 16.9);	
5	Earthing continuity/earthing connection (Clause 16.10);	
6	Insulation test (Clause 16.14)	

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

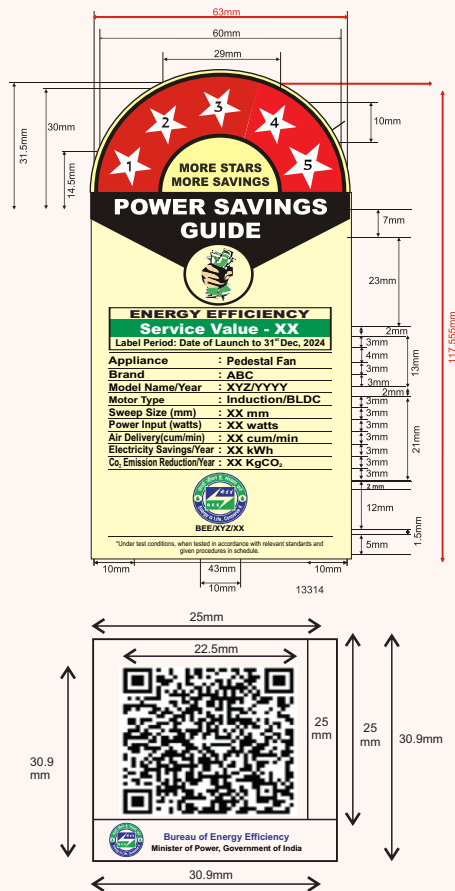
Note: The color tone at the background of Service Value Display (Green) will be similar as followed for the Bureau of Energy Efficiency Logo.

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%
- e. Web colour code - #363797
- f. GREEN – Hue(H)-1500 Saturation(S):10% Brightness(B):67%

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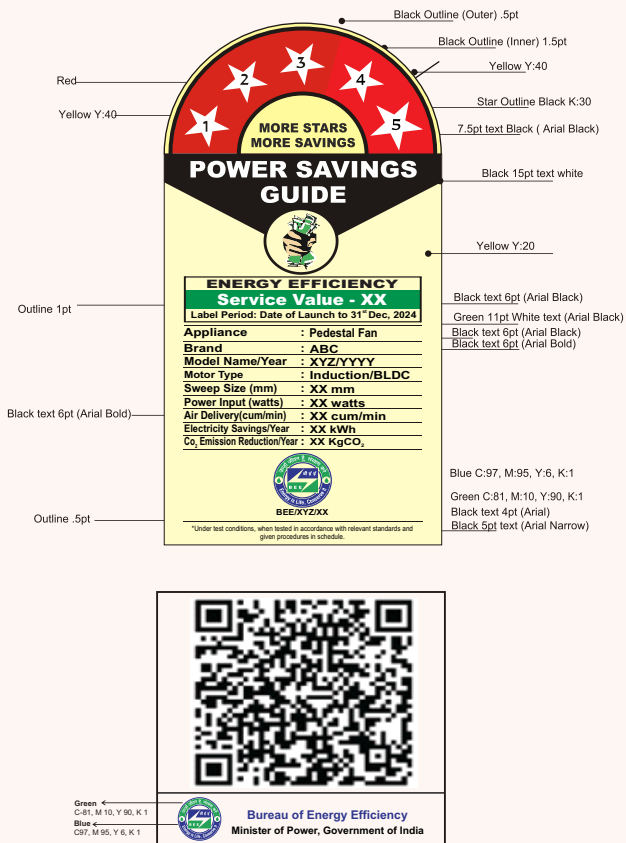
- g. Luminance or lightness(L) :61, chromatic components -a:-53 b:32
- h. Red(R):0 Green(G):170 Blue(B):87
- l. Cyan(C):81% Magenta(M):10% Yellow(Y):90% Black(K):1%



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j. Web colour code - #00AA56;

(3) Sample label: An example of a printed energy label along with QR Code for a pedestal fan is shown in following label.



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(4) Label on Motor

