



उत्पाद मैनुअल
आई एस 3315: 2024 के अनुसार
डाइरेक्ट वाष्पशील वायु शीतलक के लिए

दस्तावेज संख्या - पी एम/आई एस 3315 /3/ April 2026

भारतीय मानक ब्यूरो की स्कीम-1 (अनुरूपता मूल्यांकन) विनियम, 2018 के तहत यह उत्पाद मैनुअल प्रमाणीकरण के प्रचालन में रीति और पारिश्रिता की सुसंगतता सुनिश्चित करने के लिए सभी क्षेत्रीय/शाखा कार्यालयों और लाइसेंसी द्वारा संदर्भ सामग्री के रूप में उपयोग किया जाएगा। बीआईएस प्रमाणीकरण लाइसेंस/ प्रमाणपत्र प्राप्त करने के इच्छुक भावी आवेदकों द्वारा भी इस दस्तावेज का उपयोग किया जा सकता है।

PRODUCT MANUAL FOR
DIRECT EVAPORATIVE AIR COOLER
ACCORDING to IS 3315:2024

Document No.- PM/IS 3315/3/April 2026

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure coherence of practice and transparency in operation of certification under Scheme-I of Bureau of Indian Standards (Conformity Assessment) Regulations, 2018 for various products. The document may also be used by prospective applicants desirous of obtaining BIS certification licence/certificate.

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1.	Product	:	IS 3315: 2024
	Title	:	Direct Evaporative Air Cooler
	No. of Amendments	:	One
2.	Sampling Guidelines:		
a)	Raw material	:	Supply cord- IS 694 or IS 9968-1; Switches- IS 3854 or as per Cl. 5.7 Motor- Fan Motor as per IS 996 or Capacitor type induction motor and BLDC motor as per Cl. 5.4.3, Electronic Controller- as per Cl. 5.8 Pump set- IS 11951
b)	Grouping guidelines	:	Please refer ANNEX – <u>A</u>
c)	Sample Size	:	01 No.
3.	List of Test Equipment	:	Please refer ANNEX – B
4.	Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	Possible tests in a day	:	All tests
6.	Scope of the Licence	:	Please refer ANNEX- D

ANNEX A
Grouping Guidelines

1. For the purpose of certification, Each cooler has to be identified with a unique model name or number with following technical parameters considered for classifications of “Evaporative Air Coolers (Desert Coolers)” into different varieties as per IS 3315: 2024:

Sl. No.	Technical parameters	Classification based on the technical parameters
a)	Material of enclosure	• Metallic • Non-metallic
b)	Air flow type	• Blower type • Fan type
c)	Air delivery (air flow), m ³ /h	
d)	Power input, in W	Power input, in W
e)	Cooling efficiency of the unit	
f)	Energy Efficiency Ratio (EER)	

2.. A variety may be defined as group of models having the same value of these technical parameters as above.

3. Each variety shall be tested for all the requirements for the purpose of GoL/CSoL. **All model numbers, along with their technical parameters as above, intended to be covered in the scope of licence, shall be declared by the manufacturer.** Models varying in any other aspect including aesthetic/color changes, without any change in any of the technical parameter as above, need not be tested separately. However, all such changes shall be informed to BIS by the manufacturer along with their model names/numbers. BIS shall endorse the details of models also as an Annexure in the licence document.

4. During operation of the licence if any new model is intended to be covered within the existing scope of licence (due to changes in technical parameters other than those mentioned above), the parameters as per para 3 above for all such new model numbers will be declared by licensee to BIS for records. The declaration shall be submitted by the manufacturer as per APPENDIX I through Manakonline (communication window) and the information shall be noted by BIS and these additional models will be endorsed in the licence document by revising the Annexure to the licence document containing the list of models. After submission of the declaration to BIS Branch Office through Manakonline, the licensee may use the standard mark on such new models without waiting for BIS to endorse the models in the licence. **(Licensee shall be able to produce documentary proof of having submitted this information to BIS).**

However, in case any discrepancy is observed post-facto due to which it is viewed that the models are not to be endorsed in the scope (e.g. if the added models do not fall within granted scope), Head of BIS Branch Office concerned, may, after giving the licensee an opportunity to explain, direct the licensee to cease marking on such models, or in case the appliances are already marked and dispatched, issue directions for product recall.

5. During the operation of the Licence, BO shall ensure that all the models of coolers covered in the Licence are tested in rotation, to the extent possible.

APPENDIX –I

FORMAT FOR DECLARATION FOR ADDING NEW MODELS WITHIN SCOPE OF LICENCE BY LICENSEE

Date:

Branch Office
Bureau of Indian Standards

Sir/Madam

Subject: DECLARATION FOR ADDING NEW MODELS WITHIN SCOPE OF LICENCE

With reference to my existing licence for “Direct Evaporative Air Coolers” (Licence No CM/L-.....), I request BIS to add the following new models in the scope of my licence

List of new models intended to be covered in existing scope of licence

Model	Model 1	Model 2	Model 3
Technical parameter			
Material of enclosure			
Air flow type			
Air delivery (air flow)			
Power input			
Cooling efficiency of the unit			
Energy Efficiency Ratio (EER)			

I declare that the above models, as indicated above, fall within the existing scope of my licence.

I declare that the above information is true and correct to the best of my knowledge and undertake that in case my declaration is found defective or incorrect BIS may take action as deemed appropriate as per the BIS Act, Rules and Regulations which we shall comply with including recall of such products from the market.

Signature with date of Firm’s authorized signatory

Name and designation

ANNEX B**List of Test Equipment***Indicative list of major test equipment required to test as per the Indian Standard*

Sl. No.	Tests used in with Clause Reference	Test Equipment
1.	Dimensions	Vernier caliper or micrometer
2.	Capacity of sump tank, Cl. 5.3	Calibrated beaker
3.	Sound Test, Cl. 8.2	Test set up with Decibel meter <i>OR</i> Anechoic chamber
4.	Drop test, Cl. 8.7	Test set up as per Cl. 8.7 of IS 3315
<i>Routine tests , Cl. 12.2</i>		
5.	Protection Against electric shock, Cl. 8 of IS 302-1	Test probe B, 13 and 41 of IS 1401, Voltmeter, milli-ammeter, force gauges, 2000 ohm non-inductive resistor,
6.	Leakage current and electric strength at operating temperature, Cl. 13 of IS 302-1	IR Meter, Micro ammeter, HV Tester, Stopwatch
7.	Provision for earthing test, Cl. 27 of IS 302-1	High voltage tester, Micro ampere meter
<i>Type tests, 12.3</i>		
8.	Cooling efficiency test, Cl. 8.4	Pressure gauges, DBT and WBT thermometers, Hygrometer, Air Flow and temperature measuring apparatus as per Cl. 10 and Fig.1 of IS 3315
9.	Air delivery test, Cl. 8.3	
10.	Energy Efficiency Ratio, Cl. 8.6	
11.	Power consumption, Cl. 8.5	Voltmeter, Ammeter, Wattmeter, Timer

The above list is indicative only and may not be treated as exhaustive.

ANNEX C
Scheme of Inspection and Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that during operation of BIS licence, manufacturers will implement a Quality Assurance Plan (QAP) i.e. a plan of regular testing and in-process controls, designed to ensure that the product bearing the Standard Mark conforms to all requirements of the Indian Standard.

1.2 The manufacturers shall define a Quality Assurance Plan (QAP) defining the control unit (i.e. lot/batch etc.), the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and declare the arrangement for testing i.e. whether in-house or subcontracting/sharing for each applicable test and submit the same to BIS Branch Office for information. The manufacturer shall comply with the QAP and maintain test records in accordance with para 2.1.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of Control Unit is the quantity of the Air Cooler of same model name/number manufactured from same consignment of raw material under identical condition of production in one shift of production.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in **Table 1**. Manufacturers have the discretion of declaring their own levels of control or accept the levels of control given in this document.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted for the whole production.

2. ENSURING COMPLIANCE THROUGH TESTING-Manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard for which they may have in-house test facilities. However, there is no obligation to maintain in-house laboratory. Licensee may use alternative arrangements for tests of the production as per the declared QAP. Various alternatives are available for operation of BIS certification as given below and the relevant guidelines for availing such relaxations by the manufacturers, as amended from time to time, are to be referred:

- i) Shared testing resources like common facility,
- ii) Cluster based testing facility,
- iii) Sub-contracting to outside laboratories which may either be:
 - a) BIS recognised/empanelled laboratories, or
 - b) Any accredited laboratory as per ISO/IEC 17025

2.1 TEST RECORDS-The manufacturers shall maintain test records for the tests carried out (either in-house or at a sub-contracted or at shared test facility) to establish conformity of the product to the Standard for operation of licence. For the tests being subcontracted or conducted at a shared test facility, test results issued by the laboratories or test facilities, shall be made available for inspection by BIS.

3. LABELLING, PACKING AND MARKING – Labelling, Packing and Marking shall be done as per IS 3315:2026. The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on each Cooler, provided the product conforms to all applicable requirements of Indian Standard.

3.1 Additional Marking Requirements: Additionally, the following shall also be marked on product or package:

- a) “For BIS certification details please visit www.bis.gov.in”

4. REJECTION - The production which conforms to the Indian Standard and covered under the scope of this licence shall be marked with the Standard Mark. Disposal of non-conforming product shall be done in such a way so as to ensure that there is no violation of provisions of BIS Act, 2016.

TABLE 1 (Recommended levels of control- For guidance only)

(1)				(2)		
Test Details				Levels of Control		
Cl.	Requirement	Test Method		No. of Sample	Frequency	Remarks
		Clause	Reference			
5	Manufacture and Construction			Each consignment	No further testing is required in case material is received along with test certificate or is ISI Marked.	
5	Material					
5.1	Material of enclosure	5.1.1, 5.1.2	IS 3315			One
5.2	Filter pads	5.2	IS 3315			One
5.4, 8.8	Blower/Fan	5.4, 8.8	IS 3315	One	Each consignment	No further testing is required if received along with test certificate or is ISI Marked.
5.4.3	Fan Motor or Capacitor type induction motor or BLDC motor, as applicable	5.4.3	IS 3315 IS 996	One	Each consignment	No further testing is required if received along with test certificate or is ISI Marked.
5.5	Pump set	5.5	IS 3315 IS 11951	One	Each consignment	No further testing is required if received along with test certificate or is ISI Marked.

5.7	Switches	5.7	IS 3315 IS 3854	One	Each consignment	No further testing is required if received along with test certificate or is ISI Marked.
5.6	Supply cord	5.6	IS 3315 IS 694 IS 9968-1	One	Each Consignment	No further testing is required if received along with test certificate or is ISI Marked
5.8	Electronic Controller, if used	5.8	IS 3315			
8	Performance test					
8.2	Sound test	8.2	IS 3315	One	Once in a month	Each model produced in a month shall be covered
8.7	Drop test	8.7	IS 3315	One	Once in a month	
12.2	Production routine tests					
12.2.1	General Running test	8.2.1	IS 3315	Each Cooler		
12.2.2	Protection against electric shock	8.2.2 8	IS 3315 IS 302-1	Each Cooler		
12.2.3	High Voltage test	8.2.3	IS 3315	Each Cooler		
12.2.4	Leakage current	12.2.4 13	IS 3315 IS 302-1	Each Cooler		
12.2.5	Provision for earthing	8.2.6 27	IS 3315 IS 302-1	Each Cooler		

12.2.6	Finish	8.2.7	IS 3315	Each Cooler		
12.3	Type tests					
	Verification of Marking	12.3(a) 7	IS 3315 IS 302-1	One	Once in a month	Testing shall be done in such a way that sample of all model numbers produced in a month is tested at least once in a month.
	Cooling efficiency test	12.3 (c) 8.4	IS 3315	One		
	Air delivery test	12.3 (b), 8.3	IS 3315	One		
	Power Consumption test	12.3 (d), 8.5	IS 3315	One		
	Energy Efficiency ratio	12.3 (e), 8.6	IS 3315	One		

ANNEX D**Scope of Licence**

“Licence is granted to use Standard Mark as per IS 3315:2024 with the following scope:	
Name of the product	Direct Evaporative Air Coolers
Material of enclosure	Metallic/ Non-metallic
Airflow type	Blower type/fan type
Air delivery (air flow), m ³ /h	
Power input	
Cooling efficiency	
Energy Efficiency Ratio (EER)	

Annexure to Scope of licence-List of models covered in scope of licence

Model	Model 1	Model 2	Model 3
Technical parameter			
Material of enclosure			
Airflow type			
Air delivery (air flow), m ³ /h			
Power input			
Cooling efficiency			
Energy Efficiency Ratio (EER)			