



उत्पाद मैनुअल

आई एस 302 (भाग 2/ अनुभाग 3) : 2024/ आई ई सी 60335-2-3 : 2022 के अनुसार
घरेलु एवं समान विद्युतीय साधित्र - सुरक्षा भाग 2 विशेष अपेक्षाएं अनुभाग 3 विद्युत् इस्ती
(दूसरा पुनरीक्षण) के लिए

दस्तावेज संख्या – पीएम/302 (भाग 2/ अनुभाग 3) / आई ई सी 60335-2-3 /2/ अक्टूबर 2024
विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना-
। के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का
उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया
जाएगा। दस्तावेज का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा
भी किया जा सकता है।

PRODUCT MANUAL FOR HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES SAFETY PART 2 PARTICULAR REQUIREMENTS SECTION 3 ELECTRIC IRONS (SECOND REVISION)

ACCORDING TO IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335 – 2 – 3 : 2022

Document No - PM/IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3 /2/October 2024

*This Product Manual shall be used as reference material by all Regional/Branch
Offices & licensees to ensure uniformity 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.*

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उत्पाद मैनुअल

घरेलु एवं समान विद्युतीय साधित्र - सुरक्षा भाग 2 विशेष अपेक्षाएं

अनुभाग 3 विद्युत् इस्ती (दूसरा पुनरीक्षण)

आई एस 302 (भाग 2/ अनुभाग 3) : 2024/ आई ई सी 60335-2-3 : 2022 के अनुसार

PRODUCT MANUAL

HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES SAFETY PART 2 PARTICULAR REQUIREMENTS SECTION 3 ELECTRIC IRONS (SECOND REVISION) ACCORDING TO IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335 – 2 – 3 : 2022

विभिन्न उत्पादों के लिए भारतीय मानक ब्यूरो (अनुरूपता मूल्यांकन) विनियम, 2018 की योजना- I के तहत प्रमाणन के संचालन में एकरूपता और पारदर्शिता के लिए इस उत्पाद मैनुअल का उपयोग सभी क्षेत्रीय / शाखा कार्यालयों और लाइसेंसधारियों द्वारा संदर्भ सामग्री के रूप में किया जाएगा। दस्तावेज़ का उपयोग बीआईएस प्रमाणन प्राप्त करने के इच्छुक संभावित आवेदकों द्वारा भी किया जा सकता है।

This Product Manual shall be used as reference material by all Regional/Branch Offices & licensees to ensure uniformity 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.

1.	मानक संख्या IS No.	:	IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335-2-3 : 2022
	शीर्षक Title	:	Household and Similar Electrical Appliances Safety Part 2 Particular Requirements Section 3 Electric Irons (Second Revision)
	संशोधनों की संख्या No. of amendments	:	NIL
2.	नमूना दिशानिर्देश Sampling Guidelines:		
a)	कच्चा माल Raw material	:	—
b)	समूहीकरण दिशानिर्देश	:	Please refer ANNEX – A

	Grouping Guidelines		
c)	नमूने का परिमाण Sample Quantity	:	4 number
3.	परीक्षण उपकरणों की सूची List of Test Equipment	:	Please refer ANNEX – B
4.	निरीक्षण और परीक्षण की स्कीम Scheme of Inspection and Testing	:	Please refer ANNEX – C
5.	एक दिन में संभावित परीक्षण Possible tests in a day:	:	Please refer ANNEX-D
6.	लाइसेंस का दायरा /Scope of the Licence	:	
	Licence is granted to use Standard Mark as per IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335-2-3 : 2022 with the following scope:		
	Name of the Product	Electric Irons (Safety)	
	Model No.		
	Type	Dry Iron (With cord/ Cordless)/ Vented Steam Iron (With cord/ Cordless)/ Pressurized Steam Iron (With cord/ Cordless)/ Instantaneous Steam Iron (With cord/ Cordless)/ Spray Iron (With cord/ Cordless)	
	Battery operated device	With/without separable batteries and/ or detachable batteries/ With/without rechargeable metal-ion batteries/	
	Remote operated device	With/ without remote	
	Rating	___ W, ___V, ___Hz	
	Nature of supply	Single phase a.c. / d.c.	
	Class of Appliance	Class I/II/III	
	Grade	Pollution Degree ____, Material Group ____	
	Type of coating of sole plate	Electroplated coating/ PTFE Coating/ other coating (to be declared by the manufacturer)	
	Capacity of Water Tank* * in case of steam irons and spray irons	___ L	

ANNEX – A

समूहीकरण दिशानिर्देश **Grouping Guidelines**

- 1) Manufacturer shall declare the parameters indicated in the scope of licence for each model of the Electric Irons produced by them.
- 2) For GoL/CSoL, each model of Electric Irons shall be tested. Change in aesthetics, i.e colour, visual design etc may not be treated as different model.
- 3) The Firm shall declare the varieties of Electric Irons they intend to cover in the Licence. The Scope of Licence may be restricted based on the Manufacturing capability and Testing facilities of the Manufacturer.
- 4) During the operation of the Licence, BO shall ensure that all the Varieties covered in the Licence are tested in rotation to the extent possible.

ANNEX – B**परीक्षण उपकरणों की सूची****List Of Test Equipment****(INDICATIVE LIST, FOR GUIDANCE ONLY)*****Major test equipment required to test as per the Indian Standard***

Sl. No.	Test equipment list	Test used in with clause reference
1.	Voltmeter, Finger Test Apparatus	Cl. 8 (Protection against Electric Shock)
2.	Voltmeter, Ammeter, Wattmeter	Cl. 10 (Power input and current)
3.	Test Corner consisting of dull-black painted plywood, Temperature Controller	Cl. 11 (Temperature Rise)
4.	IR Meter, Micro ammeter, HV Tester, Stopwatch	Cl. 13 (Leakage current and electric strength at operating temperature)
5.	Humidity Test Chamber	Cl. 15 (Moisture Resistance)
6.	Metal foil, HV Test Supply	Cl. 16 (Insulation resistance and electric strength)
7.	Test Corner, Felt Strips, Copper/brass disks	Cl. 19 (Abnormal Operation)
8.	Inclined Test Apparatus	Cl. 20 (Stability and mechanical hazards)
9.	Spring Hammer, Finger Test Apparatus	Cl. 21 (Mechanical strength)
10.	Micrometer, VAW meter, Pressure Test Apparatus	Cl. 22 (Construction)
11.	Flexing Test Apparatus	Cl. 23 (Internal wiring)
12.	Cord Grip Test Apparatus, Measuring Tape, Micro ohmmeter	Cl. 25 (Supply connection and external flexible cables and cords)
13.	Torque Screwdriver	Cl. 26 (Terminals for external conductors)
14.	Earth Contact Resistance Testing Panel (ECR Measurement), Voltmeter, Ammeter	Cl. 27 (Provisions for earthing)
15.	Torque Wrench	Cl. 28 (Screws and connections)
16.	Filler Gauge, Vernier Caliper, Micrometer	Cl. 29 (Creepage distance and clearances)
17.	Glow Wire Test Apparatus, Oven, Ball Pressure Apparatus, Heating Oven with temperature controller	Cl. 30 (Resistance to Heat, Fire and Tracking)
18.	Humidity Chamber with temperature and humidity controller, measuring cylinder, Ammonium chloride, Carbon Tetrachloride	Cl. 31 (Resistance to rusting)

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

ANNEX – C

निरीक्षण और परीक्षण की स्कीम

Scheme Of Inspection And Testing

1. QUALITY ASSURANCE PLAN

1.1 It is expected that manufacturers (licensees/applicants) will implement a Quality Assurance Plan 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 defining the control unit (i.e. lot/batch etc.) and the levels of control (i.e. the frequency and number of samples for conducting the different tests as per the Indian Standard) and submit the same to BIS Branch Office for information. The manufacturer shall comply with the same and maintain test records in accordance with para 2.4.

1.3 RECOMMENDED LEVELS OF CONTROL/CONTROL UNIT:

1.3.1 For the guidance of manufacturers, the recommended definition of control unit is: **All ELECTRIC IRONS of same model number manufactured in a day, shall constitute a control unit.** The manufacturer has the choice to define their own control unit/batch/lot and submit the same to the BIS.

1.3.2 For the guidance of manufacturers in preparing the Quality Assurance Plan, recommended levels of control are given in Table 1.

1.3.3 The manufacturer shall ensure inspection and testing as per the Quality Assurance Plan submitted by them on the whole production of the factory which is covered by this plan. Alternatively, the manufacturer has the option of adherence to the quality plan as per levels of control recommended in column 3 of Table 1.

1.4 However, all manufacturers shall ensure compliance of their products to all the requirements of the Indian Standard.

2. ENSURING COMPLIANCE THROUGH TESTING- It is expected that manufacturers (licensees/applicants) will establish a suitably equipped and staffed in house laboratory (In house testing facility) for testing at least those parameters of the Indian Standard which require routine testing for ensuring quality of the product. This includes in-process controls as may be defined and put in place by the manufacturer and testing parameters/requirements which can only be performed in the factory.

2.1 For the guidance of manufacturers, Table 1 giving the recommended levels of control is given below. Column 2 of Table 1 indicates routine tests where test equipment is required in house as “R” or other tests which can be subcontracted as “S”. Subcontracting is permitted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.2 For MSME manufacturers, the requirement of maintaining a laboratory/in-house testing facility for routine tests (indicated as “R” in Column 2 of Table 1) is also optional.

2.2.1 MSME manufacturers may utilize common cluster-based facilities as per guidelines for the utilization of cluster-based test facilities by MSMEs or the provisions of Sharing of testing facilities

or get testing done from BIS recognized/empaneled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025.

2.3 Large Scale manufacturers shall maintain an in-house laboratory equipped at least with test facilities for routine tests (indicated as “R” in Column 2 of Table 1), where different tests given in the specification shall be carried out in accordance with the method given in the specification. They shall also implement a calibration plan for the in-house test equipment.

2.3.1 Alternatively, in lieu of an in-house laboratory, large scale manufacturers can also utilize the provisions of Sharing of testing facilities as per the Guidelines for Grant of Licence available on BIS website www.bis.gov.in. (Under Conformity Assessment>Product Certification Process). Even for subcontracted tests, provisions for sharing of testing facilities can be utilized.

2.4 TEST RECORDS- The manufacturers maintaining an in-house laboratory or utilizing common cluster-based facilities or shared test facilities shall maintain test records for the tests carried out to establish conformity. For the tests being subcontracted to BIS recognized/empanelled laboratory or any other laboratory having valid NABL accreditation as per IS/ISO/IEC 17025, test reports issued by the laboratories shall be available for inspection by BIS.

3. MARKING - The Standard Mark as given in the Schedule of the licence shall be incorporated legibly and indelibly on **each ELECRIC IRONS and also on its packaging** provided always that the material so marked conforms to each requirement of the specification. In addition, marking shall be done as per the **IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335-2-3 : 2022**.

4. Additional requirements:

- a) The product shall also be marked with the following additional requirement on packaging:
“For BIS certification details please visit www.bis.gov.in”
- b) Instructions shall be provided with each **ELECRIC IRONS** as per requirements prescribed at Cl. 7.12 of the **IS 302 (Part 2/ Sec 3) : 2024/ IEC 60335-2-3 : 2022**.

5. REJECTION - All 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
(ONLY FOR GUIDANCE PURPOSE)

(1)				(2)	(3)		
Test Details				Test equipment requirement R: required (or) S: Sub-contracting permitted	Levels of Control		
Cl. No. as per IS 302 (Part 2/ Sec 3)	Requirement	Test Methods			No. of Sample	Frequency	Remarks
		Clause	Reference				
24	Component	24	IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3, IS 302 (Part 1)/ IEC 60335-1	S	Each consignment	No further testing required, if supplied with test certificate or BIS Standard Mark.	
7	Marking	7		R	Firm should exercise adequate control so that whole production should meet the requirements. Records shall be maintained		
	Earth Continuity Test	A-1	IS 302 (Part 1)/ IEC 60335-1	R	Each Electric Irons		
	Electric Strength Test	A-2		R	Each Electric Irons		
	Functional test	A-3		R	Each Electric Irons		
8	Protection Against Live Parts	8	IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3, IS 302 (Part 1)/ IEC 60335-1	R	Each Electric Irons		
27	Provision for Earthing	27	IS 302 (Part 1)/ IEC 60335-1	R	Each Electric Irons		
10	Power Input and current	10		R	Each Electric Irons		
13	Leakage current and electric strength at operating temperature	13	IS 302 (Part 1)/ IEC 60335-1	R	One	Each Control Unit	
16	Leakage current and electric strength	16		R	One	Each Control Unit	
11	Heating	11	IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3, IS 302 (Part 1)/ IEC 60335-1	R	One	Once in a week for each model number manufactured during the period	

14	Transient Overvoltage	14	IS 302 (Part 1)/ IEC 60335-1	S	One	Once every three months for each model number manufactured during the period
28	Screws and Connections	28		S	One	
31	Resistance to Rusting	31		S	One	
15	Moisture Resistance	15	IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3, IS 302 (Part 1)/ IEC 60335-1	S	One	
17	Overload protection of transformers and associated circuits	17				
20	Stability and Mechanical Hazards	20		S	One	
12	Charging of metal-ion batteries	12	IS 302 (Part 1)/ IEC 60335-1	S	One	Once every six months for each model number manufactured during the period
23	Internal Wiring	23		S	One	
26	Terminals for External Conductors	26		S	One	
29	Clearances, Creepage Distances and Solid insulators	29		S	One	
31	Resistance to Rusting	31		S	One	
32	Radiation, toxicity and similar hazards	32		S	One	
19	Abnormal Operation	19	IS 302 (Part 2/ Sec 3)/ IEC 60335-2-3, IS 302 (Part 1)/ IEC 60335-1	S	One	
21	Mechanical Strength	21		S	One	
22	Construction	22		S	One	
24	Components	24		S	One	
25	Supply Connection and External Flexible Cords	25		S	One	
30	Resistance to heat, Fire and Tracking	30		S	One	

ANNEX – D

एक दिन में संभावित परीक्षण

Possible Tests in a day

1. Earth Continuity test (A-1 of IS 302 (Part 1));
2. Electric strength test (A-2 of IS 302 (Part 1));
3. Functional Test (A-3 of IS 302 (Part 1));
4. Marking (Cl. 7);
5. Protection Against Live Parts (Cl. 8);
6. Power Input and current (Cl. 10);
7. Leakage current and electric strength at operating temperature (Cl. 13);
8. Provision for Earthing (C. 27)