# भारतीय मानक ब्यूरो

# (केंद्रीय मुहर विभाग - III)

हमारा सन्दर्भ : कें. मु. वि. - III / 16 : आई एस 2993

20 जनवरी 2025

विषय : संशोधित आईएस 2993: 1998 और आईएस 1709: 1984 से आईएस 2993 (भाग 1) : 2024 और आईएस 2993 (भाग 2) : 2024 के कार्यान्वयन के लिए दिशानिर्देश

यह उपरोक्त विषय के सन्दर्भ में है |

सक्षम अधिकारी द्वारा अनुमोदित दिशानिर्देश अनुपालन हेतु संलग्न है |

सभी क्षेत्रीय / शाखा कार्यालयों से अनुरोध है के दिशानिर्देशों का तत्काल प्रभाव से अनुपालन सुनिश्चित करें।

(पीयूष प्रकाश)

वैज्ञानिक - डी (सी एम डी-111)

प्रमुख (सी एम डी-

सभी क्षेत्रीय / शाखा कार्यालय

प्रति ल प : आई टी एस वभाग - बी आई एस इंट्रानेट पर डालने हेत्

# BUREAU OF INDIAN STADNARDS (CENTRAL MARKS DEPARTMENT- III)

Our Ref: CMD III/16: IS 2993 20 Jan 2025

Subject: Guidelines for implementation of revised IS 2993 : 1998 and IS 1709 : 1984 to IS 2993 (Part 1) : 2024 and IS 2993 (Part 2) : 2024

This has reference to the subject mentioned above.

The Competent Authority has approved the enclosed Guidelines for implementation.

All ROs/BOs are requested to ensure the implementation of the above Guidelines with-immediate effect.

Peeyush Prakash Sc.-D(CMD-III)

Head (CMD-III)

All ROs/BOs

Copy to ITSD: for uploading on BIS intranet.

#### **CENTRAL MARKS DEPARTMENT - III**

Our Ref: CMD-III:/ 16: IS 2993 20 Jan 2025

Subject: Guidelines for implementation of revised IS 2993 : 1998 and IS 1709 : 1984 to IS 2993 (Part 1) : 2024 and IS 2993 (Part 2) : 2024

- 1. The existing IS 2993: 1998/ IEC 252: 1993 'A.C. motor capacitors (Second Revision)' and IS 1709: 1984 'Specification for capacitors or electric fan motors (First Revision)' have been revised and published as IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 'a.c. Motor Capacitors Part 1 General Performance, Testing and Rating Safety Requirements Guidance for Installation and Operation (Third Revision)' and IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 'a.c. Motor Capacitors Part 2 Motor Start Capacitors (Third Revision)'. The last date of concurrent running of the Indian Standards is 18th July 2025.
- 2. The significant changes in the revision of the Indian Standard is listed at Annex- A for the purpose of general guidance.
- 3. Further, Amendment No. 1 has been published in both the Indian Standards. The last date of the implementation of Amendment No. 1 is 11<sup>th</sup> May 2025. As per the Amendment No. 1 to IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013

  "The scope of IS 2993 (Part 1): 2024 and IS 2993 (Part 2): 2024 comprehensively covers the scope of IS 1709: 1984 for self-healing and non-self-healing type fixed capacitors used in single phase a.c. electric fan motors. With the publication of these standards, IS 1709: 1984 would be withdrawn".
- 4. All the BOs shall inform the applicants and licensees of IS 2993: 1998/ IEC 252: 1993 and IS 1709: 1984) in their jurisdiction about implementation of the revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 within a week of issuance of these guidelines.
- 5. Any difficulty in implementation of the revision of Indian Standards shall be brought to the notice of CMD-III within 30 days of issuance of these guidelines. BOs shall ensure that no Licences are under operation without implementation of the revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 after the end of concurrent running period. The status of implementation of the revision of the Standard shall be confirmed by Head (BO) to CMD-III within two weeks of the last date of concurrent running period.
- 6. In view of the revision of Indian Standard, following changes have been made in the existing Product Manual and revised as 'PM/IS 2993 (Part 1)/IEC 60252-1/1/January 2025' and PM/IS 2993 (Part 2)/IEC 60252-2/IEC 60252-2/1/ January 2025':
  - a. Change in scope of the licence;
  - b. Change in grouping guidelines;
  - c. No. of Amendment has been updated;
  - d. SIT has been revised as per latest format;

- e. Updating of tests in levels of control of Scheme of Inspection and Testing (SIT).
- 7. The guidelines for implementation of the revised Indian Standard is given below.
- 8. For changeover from existing licensees as per IS 2993: 1998/ IEC 252: 1993 to revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013:
  - a. All existing licensees as per IS 2993: 1998/ IEC 252: 1993 shall review the products under their existing scope of licence against the requirements prescribed in IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013. Licensees shall submit the following:
    - A declaration of their existing varieties that fall under the scope of IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013;
    - ii. Declaration of varieties in line with parameters prescribed in Product Manual(s) of the respective revised Indian Standards (i.e. IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013);
    - iii. Declaration with respect to additional manufacturing machinery/ testing equipment required for implementation of revised Indian Standards (i.e. IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013);
    - iv. Declaration with respect to conformity of product as per latest Indian Standards through In-house test report/ test report from BIS recognized laboratories for the requirements specified in revised Indian Standards (i.e. IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013). Testing to be carried out as per the grouping guidelines prescribed in Product Manual 'PM/IS 2993 (Part 1)/IEC 60252-1/1/ January 2025' and/ or 'PM/IS 2993 (Part 2)/IEC 60252-2/1/ January 2025'
    - v. Copy of modified marking as per the requirements prescribed in the latest Indian Standards (i.e. IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013).
  - b. Based on the receipt of declaration and accompanying documents from the licensee, BOs have to grant licence/ allow changeover as per the latest IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 for the varieties covered in existing scope of licence as per IS 2993: 1998 / IEC 252:1993.
  - c. Based on the requests received from licensees, BOs shall examine each request on a case-by-case basis. Depending on the existing scope of the licence(s), BOs may allow the changeover of one or both licences of the existing licensee to the latest versions of IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013

- d. For the varieties which are not covered in existing scope of licence as per IS 2993: 1998 / IEC 252:1993, manufacturer has to apply for inclusion as per the guidelines for Change in Scope of Licence.
- e. Verification of implementation of the revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 shall be done through a surveillance inspection within one month from the date submission of compliance by the licensee.
- f. BO shall issue letter for grant of licence/ endorsement to the licensee along with updated Scope of licence after the licensee has established that the existing variety in the scope of licence conforms to the latest requirements.
- g. If the Licensee fails to complete all actions by the end of concurrent running period, it shall be dealt with as per the prevailing guidelines.
- 9. For changeover from existing licensees as per IS 1709 : 1984 to revised IS 2993 (Part 1) : 2024/ IEC 60252-1 : 2010 + AMD 1 : 2013 and/or IS 2993 (Part 2) : 2024/ IEC 60252-2 : 2010 + AMD 1 : 2013 :
  - a. For changeover from existing licensees as per IS 1709: 1984 to revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013, the provision as given above at SI. 8 shall apply.

## 10. For New Applicants:

- a. Existing applications where sample has been submitted in the laboratory/test report has been issued by the Laboratory as per IS 2993: 1998 and/or IS 1709: 1984 may be processed as per existing Standard(s). However, if the applicant is desirous of considering the application as per the latest IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013, a declaration may be obtained from the applicant to that effect and the Application may be processed accordingly. An undertaking shall also be obtained from such Applicants that if the sample fails as per latest IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013, Licence will not be granted as per existing IS 2993: 1998 and/or IS 1709: 1984;
- b. Applications which are recorded henceforth may be processed as per existing or revised Indian Standard(s). Processing of Application as per existing IS 2993: 1998 and/ or IS 1709: 1984 shall be permitted only upto the end of concurrent running and for such cases, Applicant shall give a declaration that they will implement the revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 and/or IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1:

2013 by end of concurrent running;

c. After the end of concurrent running period, no Licence shall be granted as per existing IS 2993: 1998 and/ or IS 1709: 1984.

## 11. For Inclusions:

- a. For change in scope of licence, the relevant provisions as given above for Applicants shall apply;
- b. However, processing of such applications for change in scope of licence as per existing IS 2993: 1998 and/ or IS 1709: 1984 shall be permitted only upto the date of implementation of the revised Standard by the licensee or up to the end of concurrent running period, whichever is earlier.
- 12. The above guidelines come into force with immediate effect.

Peeyush Prakash Sc.-D(CMD-III)

Head (CMD III)

**DDG** (Certification)

Circulated to all BOs

## <u>Annex – A</u>

**1.** Major changes in revised IS 2993 (Part 1): 2024/ IEC 60252-1: 2010 + AMD 1: 2013 with respect to existing IS 2993: 1998/ IEC 252: 1993 is as below:

SI.No.	Clause No.	Modification	Action required for changeover
a.	Cl. 3.6	The definition of "segmented capacitors" has been added	No action required
b.	Cl. 3.9	The definition of "classes of operation" has been clarified, with the addition of the concept of "probable life" with reference to statistics	No action required
C.	Cl. 3.22	Classes of safety protection has been redefined	New variety added, no changes for existing variety. However, declaration has to be submitted by licensee.
d.	Cl. 6.1	The following wording "Operation above the rated voltage will reduce the life expectancy of the capacitor" has been introduced	No action required
e.	Cl. 8	Some clarifications have been added to Marking requirements, mainly for small capacitors	Marking requires to be updated
f.	Cl. 5.16	Destruction test has been redefined	Testing required for S1, S2, and S3 class of capacitors, wherever applicable
g.	Cl. 5.17	New type test 'Resistance to heat, fire and tracking' has been added	Testing required, wherever applicable

**2.** Major changes in revised IS 2993 (Part 2): 2024/ IEC 60252-2: 2010 + AMD 1: 2013 with respect to existing IS 2993: 1998/ IEC 252: 1993 is as below:

Sl.No.	Clause	Modification	Action required for changeover
	No.		
a.	Cl. 3.6	The definition of "segmented capacitors" has been added	No action required
b.	Cl. 3.29	Classes of safety protection has been redefined	New variety added, no changes for existing variety. However, declaration has to be submitted by licensee.
C.	Cl. 5.1.16	Destruction test has been redefined; Clearer definition of the purpose of d.c. conditioning in destruction test.	Testing required for S1, S2, and S3 class of capacitors, wherever applicable
d.	Cl. 5.1.17	New type test 'Resistance to heat, fire	Testing required, wherever

		and tracking' has been added	applicable
e.	Cl. 6	Electrolytic motor start capacitor has	As the variety were not covered
		been included	earlier in IS 2993 : 1998, complete
			testing to be carried out for
			establishing compliance to the
			Indian Standard.