

**भारतीय मानक ब्यूरो**  
**(केंद्रीय मुहर विभाग III)**

हमारा संदर्भ : सी एम डी- III/16 : आई एस 1180 (Pt 1) : 2014

19 04 2021

विषय : आई एस 1180 (Pt 1) : 2014 के अनुपालन हेतु गाइडलाइन ।

सभी शाखा कार्यालय से आग्रह है कि गाइडलाइन का अनुपालन तत्काल प्रभाव से सुनिश्चित करें।

औरोस्मिता कबिराज  
वैज्ञानिक सी (सी एम डी-III)

प्रमुख (सी एम डी-III)  
सभी क्षेत्रीय/शाखा कार्यालय

**BUREAU OF INDIAN STANDARDS**  
**(Central Marks Department-III)**

Our Ref: CMD-III/16 : IS 1180 (Pt 1) : 2014

19 04 2021

**Subject: Guidelines for implementation of Amendment 4 to IS 1180 (Pt 1) : 2014, "Outdoor/Indoor Type Oil Immersed Distribution Transformers upto and including 2 500 kVA, 33 kV - Mineral Oil Immersed".**

This has reference to the subject mentioned above.

BOs may kindly ensure implementation of the guidelines with immediate effect.

**Aurosmita Kabiraj**  
**Sc-C (CMD-III)**

**Head (CMD-III)**  
**Circulated to: All ROs/BOs**

## CENTRAL MARKS DEPARTMENT III

Our Ref: CMD III/16: IS 1180 (Pt 1)

19 April 2021

**Subject: Guidelines for implementation of Amendment No. 4 to IS 1180 (Pt 1): 2014 - Outdoor/Indoor Type Oil Immersed Distribution Transformers upto and including 2 500 kVA, 33 kV - Mineral Oil Immersed**

1. Amendment No. 4 to IS 1180 (Pt 1): 2014 has been published. The last date for implementation of the amendment is 30 March 2022.
2. All BOs shall inform the Applicants and Licensees under their jurisdiction about implementation of the above amendment **within a week of issuance of these guidelines**.
3. The significant changes in the amendment are listed below for the purpose of general guidance. BOs shall ensure that the product conforms to all the requirements, as applicable, as per the amendment.
  - i. The standard now specifies five energy efficiency levels: Levels 1, 2, 3, 4 and 5 corresponding to 1 star, 2 star, 3 star, 4 star and 5 star respectively, as prescribed by BEE.
  - ii. Specified maximum losses for existing Energy Levels have been reduced and are now corresponding to the losses allowed for immediate higher level earlier (For eg, permitted maximum total loss now for Energy level 1 as per IS 1180-1 + 4 Amendments = maximum total loss for Energy level 2 as per IS 1180-1 + 3 Amendments.)
  - iii. It informs about publication of Part 3 to IS 1180 on Natural ester/ synthetic organic ester immersed transformers.
  - iv. For 3 phase transformers upto and including 200 kVA, additional Standard kVA ratings have been introduced (Table 1)
  - v. Alternate vector groups are permitted for primary and secondary winding connections.
  - vi. 3.3 kV and 6.6 kV nominal system voltages introduced for single phase transformers.
  - vii. High voltage bushings to conform to IS/IEC 60137 (Cl 10.1.1)
  - viii. Conformity of metal and porcelain parts of 52kV bushings to IS 3347 (Pt 8/ Sec 2) and IS 3347 (Pt 8/ Sec 1) respectively (Cl 10.1.3).
  - ix. Cl 15.2 – Limiting values of deflection specified, permanent deflection made not applicable for round tanks. Pressure and vacuum requirements introduced for single phase transformers upto 100 kVA.
  - x. Arcing horns made optional in certain cases (Cl 20.1(r))
  - xi. Cl 21.5 – Pressure test (type test)- vacuum is not applicable for corrugations.
  - xii. For single phase transformers, pressure tests for corrugated tanks have been modified.
4. Consequent upon issuance of the amendment, existing Product manual has been revised as Doc: PM/ IS 1180 (Pt 1)/ 3/ April 2021.
5. The guidelines for implementation of the amendment is given below:

### **A. LICENSEES:**

- (i) All Licensees shall implement the amendment by 30 March 2022. BOs shall ensure that no Licences are under operation as per IS 1180 (Pt 1): 2014 without the amendment after 30

March 2022. **The status of implementation of the amendment shall be confirmed by Head (BO) to CMD-III within two weeks of the last date of concurrent running.**

- (ii) Licensees shall submit evidence of conformity to the additional/modified requirements through In-house/Independent Test Reports or Test Certificates, as applicable. Licences with Energy Level 1 transformers would call for retesting at TPTL as present Energy Level 1 transformers would not meet the requirements of the new Amendment. Verification of implementation of the amendment, wherever required, may be done during the next visit **which may normally be completed within six months of the last date of concurrent running.**
- (iii) If the Licensee fails to complete all actions by 30 March 2022 it shall be dealt with as per the prevailing guidelines.

**B. APPLICATIONS FOR GRANT OF LICENCE:**

- (i) Existing Applications where Sample has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed without consideration of the amendment. However, if the Applicant is desirous of considering the amendment, 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 while considering the provisions of the amendment, Licence will not be granted as per the old version.
- (ii) Applications which are recorded henceforth may be processed with or without consideration of the amendment. Processing of Applications without consideration of the amendment shall be permitted only upto 30 March 2022 and for such cases Applicant shall give a declaration that they will implement the amendment by 30 March 2022.
- (iii) Beyond 30 March 2022 no Licence shall be granted without consideration of the amendment.

**C. CHANGE IN SCOPE OF LICENCE:**

- (i) For change in scope of licence, the relevant provisions as given above for Applicants shall apply.
  - (ii) However, processing of such applications for change in scope of licence without consideration of the amendment shall be permitted only upto the date of implementation of the amendment by the licensee or upto 30 March 2022 whichever is earlier.
6. The above guidelines come into force with immediate effect.

**Aurosmita Kabiraj**  
**Sc C**

Head (CMD III)  
**DDG (Certification)**