

### केन्द्रीय मुहर विभाग-3

**संदर्भ :** के मू वी- 3/16: IS/IEC 60947 (Part 5 / Sec 1)

17 जनवरी 2025

**विषय :** IS/IEC 60947 (Part 5 / Sec 1): 2016 के अनुपालन हेतु दिशानिर्देश

यह उपरोक्त विषय के संदर्भ में है।

सक्षम अधिकारी द्वारा अनुमोदित दिशानिर्देश अनुपालन हेतु संलग्न है।

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

राहुल विश्वकर्मा  
वैज्ञानिक - डी

**प्रमुख (के मू वी-3)**

**सभी क्षेत्रीय / शाखा कार्यालयों**

### CENTRAL MARKS DEPARTMENT – III

**Our Ref:** CMD III/16: IS/IEC 60947 (Part 5 / Sec 1)

17 Jan 2025

**Subject:** Guidelines for implementation of revised standard IS/IEC 60947 (Part 5/ Sec 1): 2016

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.

Rahul Vishwakarma  
Scientist D

**Head (CMD-III)**

**All ROs/BOs**

## CENTRAL MARKS DEPARTMENT – III

**Our Ref:** CMD III/16: IS/IEC 60947 (Part 5 / Sec 1)

17 Jan 2025

**Subject:** Guidelines for implementation of Revision of IS/IEC 60947 (Part 5 / Sec 1): 2016 - Low-Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements Section 1 Electromechanical Control Circuit Devices

1. IS/IEC 60947 (Part 5 / Sec 1): 2009 – Low-Voltage Switchgear and Controlgear Part 5 Control Circuit Devices and Switching Elements Section 1 Electromechanical Control Circuit Devices has been revised to IS/IEC 60947 (Part 5 /Sec 1): 2016 and the last date of concurrent running of the Standard with and without Revision 02 August 2025.
2. All BOs shall inform the Applicants and Licensees under their jurisdiction about implementation of the revised Standard within **a week of issuance of these guidelines**.
3. The revision of the standard has been undertaken to align this standard with the latest international practices. The significant change brought through this Revision:

Sl. No.	Clause No.		Changes	Requirement for compliance
1.	Cl. 1.2	Update of references	References to latest IS / IEC standard	No compliance is required
2.	Cl. 7.1  Cl. 7.1.2.1  Cl. 7.3	Update and restructuration of subclauses  Addition of material requirements and test  Update of EMC requirements	The entire Cl. 7 has been restructured and new requirements have been added. A few major modifications are listed below: <ul style="list-style-type: none"><li>• General Material requirements have been modified (Glow wire testing (Cl. 7.1.2.2) and Test based on flammability category (Cl. 7.1.2.3) added)</li><li>• Clearances and creepage distances (Cl. 7.4) updated</li><li>• Terminals (Cl. 7.1.8) have been added</li><li>• Requirements of Electromagnetic compatibility (EMC) (Cl. 7.3) test have been made elaborative.</li></ul>	Manufacturer shall submit the declaration alongwith the test report from BIS recognised lab in order to submit the compliance of the product

3.	Cl. 8.2	<p>Clarification of requirements and update of <b>8.2</b>;</p> <p>Addition of requirements for screwless-type clamping units</p>	<p>The entire Cl. 8.2 has been restructured and new requirements (for eg. Glow wire test (Cl. 8.2.1.1.1), Flammability, hot wire ignition and arc ignition tests (Cl. 8.2.1.1.2), Mechanical and electrical properties of terminals including mechanical strength (Cl. 8.2.4.2), flexion test (Cl. 8.2.4.3), Pull-out test (Cl. 8.2.4.4), Test for insertability of unprepared round copper conductors having the maximum cross-section (Cl. 8.2.4.5),</p> <p>Electrical performance of screwless-type clamping units (Cl. 8.2.4.7), Ageing test for screwless-type clamping units (Cl. 8.2.4.8), have been specified</p>											
4.	Table 4 Table 5	Tables 4 and Table 5 has been updated	<p>Requirements of Semiconductor switching device has been specified in Table 4</p> <p>Requirements of DC-13 has been deleted from Table 5</p>	<p>Manufacturer shall submit the declaration of Semiconductor switching device and its compliance to the requirement</p>										
5.	Table 6 Table 7 Table 8 Table 9	<p>Table 6 - Test conditions for glow-wire test</p> <p>Table 7 - Acceptance criteria</p> <p>Table 8 - Immunity tests</p> <p>Table 9 - Test values for electrical performance and ageing test of screwless-type</p>	<p>New Tables have been added as per the modifications made in the respective clauses</p> <table border="1" data-bbox="764 1556 1135 1864"> <thead> <tr> <th>Table No.</th> <th>Cl. No. referred</th> </tr> </thead> <tbody> <tr> <td>Table 6</td> <td>Cl. 8.2.1.1.1</td> </tr> <tr> <td>Table 7</td> <td>Cl. 7.3.2.3</td> </tr> <tr> <td>Table 8</td> <td>Cl. 7.3</td> </tr> <tr> <td>Table 9</td> <td>Cl. 8.2.4.7 Cl. 8.2.4.8</td> </tr> </tbody> </table>	Table No.	Cl. No. referred	Table 6	Cl. 8.2.1.1.1	Table 7	Cl. 7.3.2.3	Table 8	Cl. 7.3	Table 9	Cl. 8.2.4.7 Cl. 8.2.4.8	<p>Manufacturer shall submit the declaration alongwith the test report from BIS recognised lab in order to submit the compliance of the product</p>
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		clamping units		
6.	Fig. 10	Fig. 10 - Voltage drop measurement at contact point of the clamping unit or terminal	New fig has been added for carrying out the testing	No compliance required
7.	Annex N	Procedure to determine reliability data for electromechanical devices in control circuits used in functional safety applications	New Annex has been added	Manufacturer shall submit the conformity of the product from BIS recognized lab.

4. The Product Manual: **PM/IS/ IEC 60947-5-1 /1/ Dec 2024** has been circulated and is made available on BIS Website.
5. The guidelines for implementation of the Revised Indian Standard is given below:

#### **A. Licensees**

1. All Licensee shall implement the requirements of the Revised Standards by 02 August 2025. Any difficulty in implementation shall be brought to the notice of CMD III within one month of issuance of these guidelines. BO shall ensure that no Licences are under operation as per old standard after 02 August 2025. The status of implementation of the revised Indian Standard shall be confirmed by Head (BO) to CMD-III within one month of the last date of concurrent running.
2. Licensee shall submit the declaration and test report issued from BIS approved Lab alongwith technical file in order to establish conformity against the modified requirements.
3. Verification of implementation of the Revised Standard IS/IEC 60947 (Part 5 / Sec 1): 2016 shall be done through the verification of Technical file, which shall be completed within one months from the last date of implementation.
4. If the Licensee fails to complete the actions by 02 August 2025, it shall be dealt with as per the prevailing guidelines

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

1. Existing Applications where Sample(s) has been submitted in the Laboratory/Test Report has been issued by the Laboratory may be processed without consideration of the revision. However, if the Applicant desires to get the licence with the Revised Standard, 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 Revised Standard, Licence will not be granted as per the old version.
2. Applications which are recorded henceforth may be processed with or without Revision. Processing of Applications without Revision shall be permitted only upto 02 August 2025 and for such cases Applicant shall give a declaration that they will implement the Revised Indian Standard by 02 August 2025.

3. After 02 August 2025, no Licence shall be granted without consideration of the Revision.
4. The above guidelines come into force with immediate effect.

Rahul Vishwakarma  
Scientist D

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