

**BUREAU OF INDIAN STANDARDS**

**DRAFT FOR COMMENTS ONLY**

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**मसौदा भारतीय मानक**  
**विद्युत चुंबकीय संगतता (ई एम सी) –**  
**भाग 5: संस्थापन और शमन दिशानिर्देश–**  
**अनुभाग 2: भू-सम्पर्कन एवं केबलिंग**

***Draft Indian Standard***

***Electromagnetic Compatibility (EMC) –***  
***Part 5: Installation and Mitigation Guidelines –***  
***Section 2: Earthing and Cabling***

***ICS 33.100.01***

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LITD 09 Electromagnetic Compatibility  
Sectional Committee

**Last Date for Comments:** 26 April 2024.

**NATIONAL FOREWORD**

(Formal clauses will be added later)

This Draft Indian Standard (Part 5/Section 2) which is identical with IEC 61000-5-2:1997 'Electromagnetic compatibility (EMC) - Part 5: Installation and mitigation guidelines - Section 2: Earthing and cabling' issued by the International Electrotechnical Commission (IEC) *will be* adopted by the Bureau of Indian Standards on the recommendation of the Electromagnetic Compatibility Sectional Committee (LITD 09) and approval of the Electronics and Information Technology Division Council.

This standard (Part 5) is one of the parts of a series of standards on ‘Installation and Mitigation Guidelines’. The other parts in this series are:

Part 5-1: Installation and mitigation guidelines - General considerations.

Part 5-6: Installation and mitigation guidelines - Section 6: Mitigation of external EM influences.

The text of IEC Standard *will be* approved as suitable for publication as an Indian Standard without deviations. Certain conventions are however not identical to those used in Indian Standards. Attention is particularly drawn to the following:

- a) Wherever the words ‘International Standard’ appears referring to this standard, they should be read as ‘Indian Standard’.
- b) Comma (,) has been used as a decimal marker while in Indian Standards, the current practice is to use a point (.) as the decimal marker.

In this adopted standard, reference appears to certain International Standards for which Indian Standards also exist. The corresponding Indian Standards, which are to be substituted in their respective places, are listed below along with their degree of equivalence for the editions indicated. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

<b>International standards</b>	<b>Corresponding Indian standards</b>	<b>Degree of Equivalence</b>
IEC 60050(161):1990, International Electrotechnical Vocabulary (IEV) – Chapter 161: Electromagnetic compatibility	IS 1885 (Part 85) : 2003 Electrotechnical vocabulary: Part 85 electromagnetic compatibility	Identical
IEC 61000-5-1:1996, Electromagnetic compatibility (EMC) – Part 5: Installation and mitigation guidelines – Section 1: General considerations – Basic EMC publication	IS/IEC TR 61000-5-1:2023 Electromagnetic compatibility (EMC) - Part 5-1: Installation and mitigation guidelines – Section 1 General considerations (Under Development)	Identical with IEC TR 61000-5-1: 2023
ISO/IEC 11801:1995, Information technology – Generic cabling for customer premises	IS/ISO/IEC 11801-1 : 2017 Information technology Generic cabling for customer premises Part 1: General requirements	Identical with ISO/IEC 11801-1: 2017

The technical committee has reviewed the provisions of the following International Standard referred in this adopted draft standard and has decided that it is acceptable for use in conjunction with this standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies:

<i>International Standards</i>	<i>Title</i>
IEC 60050(826):1982	International Electrotechnical Vocabulary (IEV) – Chapter 826: Electrical installations of buildings Amendment 1: 1990 Amendment 2: 1995
IEC 61000-2-5:1995	Electromagnetic compatibility (EMC) – Part 2: Environment – Section 5: Classification of electromagnetic environments – Basic EMC publication
IEC 61024-1:1990	Protection of structures against lightning – Part 1: General principles

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2:2022 ‘Rules for rounding off numerical values (*Second Revision*)’. The number of significant places retained in the rounded off value should be same as that of the specified value in this standard.

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### **SCOPE OF IEC 61000-5-2:1997**

“This technical report (type 3) covers guidelines for the earthing and cabling of electrical and electronic systems and installations aimed at ensuring electromagnetic compatibility (EMC) among electrical and electronic apparatus or systems. More particularly, it is concerned with earthing practices and with cables used in industrial, commercial, and residential installations. This technical report is intended for use by installers and users, and to some extent, manufacturers of sensitive electrical or electronic installations and systems, and equipment with high emission levels that could degrade the overall electromagnetic (EM) environment. It applies primarily to new installations, but where economically feasible, it may be applied to extensions or modifications to existing facilities.”

**Note:** - The Technical content of this document has not been enclosed as these are identical with the corresponding IEC Standard. For details please refer to IEC 61000-5-2:1997 or kindly contact.

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