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Draft Indian Standard

**Low-Voltage Surge Protective Devices - Part 22: Surge Protective
Devices Connected to Telecommunications and Signalling Networks -
Selection and Application Principles**

ICS 29.240.01; 29.240.10

Surge Arrester Sectional
Committee, ETD 30

Last date of receipt of comment
20 October 2025

NATIONAL FOREWORD

This draft Indian Standard which is identical with IEC 61643-22:2015 “Low-voltage surge protective devices –Part 22: Surge protective devices connected to telecommunications and signalling networks – Selection and application principles” issued by the International Electrotechnical Commission (IEC) will be adopted by the Bureau of Indian Standards on the recommendation of the Power Systems Relays Sectional Committee and approval of the Electrotechnical Division Council.

This standard is a guide for the application of SPDs to telecommunications and signaling lines and those SPDs which have telecom or signaling SPDs in the same enclosure with power line SPDs.

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

- a) Wherever the words ‘International Standard’ appear 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 International Standards for which Indian Standards also exists. The corresponding Indian Standards, which are to be substituted, are listed below along with their degree of equivalence for the editions indicated:

<i>International Standard</i>	<i>Corresponding Indian Standard</i>	<i>Degree of Equivalence</i>
IEC 61643-11, Low-voltage surge protective devices – Part 11: Surge protective devices connected to low-voltage power systems – Requirements and test methods	IS 16463 (Part 11): 2016 IEC 61643-11: 2011, Low - Voltage surge protective devices: Part 11 surge protective devices connected to low - Voltage power systems - Requirements and test methods	Identical
IEC 61643-12, Low-voltage surge protective devices – Part 12: Surge protective devices connected to low-voltage power distribution systems – Selection and application principles	IS 16463 (Part 12): 2017 IEC 61643-12: 2008 Low-voltage surge protective devices – Part 12: Surge protective devices connected to low-voltage power distribution systems – Selection and application principles	Identical
IEC 62305-1:2010, Protection against lightning – Part 1: General principles	IS 62305 (Part 1): 2010, Protection against lightning: Part 1 general principles	Identical
IS/IEC 62305-2: 2010, Protection against lightning – Part 2: Risk management	IS/IEC 62305-2: 2010, Protection against lightning: Part 2 risk management	Identical
IEC 62305-3:2010, Protection against lightning – Part 3: Physical damage to structures and life hazard	IS/IEC 62305-3: 2010 IEC 62305-3, Protection against lightning: Part 3 physical damage to structures and life hazard	Identical
IEC 62305-4:2010, Protection against lightning – Part 4: Electrical and electronic systems within structures	IS/IEC 62305-4: 2010, Protection against lightning: Part 4 electrical and electronic systems within structures	Identical
IEC 61000-4-5, Electromagnetic compatibility (EMC) – Part 4-5: Testing and measurement techniques – Surge immunity test	IS 14700 (Part 4/Sec 5): 2019 IEC 61000-4-5: 2017, Electromagnetic compatibility (EMC): Part 4 testing and measurement techniques: Sec 5 surge immunity test (First Revision)	Identical

The technical committee has reviewed the provisions of the following international standards referred in this adopted standard and decided that they are acceptable for use in conjunction with this standard.

<i>International Standard</i>	<i>Title</i>
IEC 61643-21:2012	Low voltage surge protective devices – Part 21: Surge protective devices connected to telecommunications and signalling networks – Performance requirements and testing methods

Only the English language text has been retained while adopting it in this Indian Standard, and as such, the page numbers given here are not the same as in the IEC Publication.

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 of numerical values (*Second Revision*)’. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

NOTES

1. In 4.3.1, ‘componenthas’ to be read as ‘component has’. It's a typographical mistake.

2. In 7.2, 'equipotential bonding bar (EBB)' to be read as 'Main Earth terminal (MET)'. This is the term used in installation standards.

Note: The technical content of the document is not available on website. For details, please refer the corresponding IEC 61643-22: 2015 or kindly contact:

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