



BS 5622 : Part 2 : 1979
IEC 71-2 : 1976

UDC 621.316.91.04

Guide for Insulation co-ordination

Part 2. Application guide

Implementation of CENELEC HD 540.2 S1.



Guide sur la coordination de l'isolement
Partie 2. Guide d'application

Hinweisblatt über Isolierungskoordination
Teil 2. Anwendungshinweisblatt

British Standards Institution

Gr 9



National foreword

This Part of this British Standard is identical with IEC Publication 71-2 'Insulation co-ordination' Part 2 : 1976 'Application guide' and implements CENELEC Harmonization Document (HD) 540.2 S1 : 1991. It is published under the direction of the General Electrotechnical Standards Policy Committee.

The IEC has published IEC 71-3 : 1982 'Phase-to-Phase insulation co-ordination principles, rules and application guide', but this has not been published as Part 3 of BS 5622.

This British Standard gives guidance to those concerned with the design and testing of electrical apparatus. When designing for the UK market, insulation levels of Series I are required (see clause 41 of BS 5622 : Part 1 : 1979).

Cross-references

International standard*	Corresponding British Standard
IEC 60	BS 923 Guide on high-voltage testing techniques
IEC 60-1 : 1989	Part 1 : 1990 General (Identical)
	Part 2 : 1980 Test procedures (Identical)
IEC 60-3 : 1976	Part 3 : 1980 Measuring devices (Identical)
IEC 60-4 : 1977	Part 4 : 1980 Application guide for measuring devices (Identical)
IEC 71-1 : 1976	BS 5622 Guide for insulation co-ordination Part 1 : 1979 Terms, definitions, principles and rules (Identical)
IEC 99-1 : 1970	BS 2914 : 1972 Specification for surge diverters for alternating current power circuits (see note 2)
IEC 99-1A : 1965	Appendix C of BS 2914 : 1972 is technically equivalent (see note 3)
IEC 99-2 : 1962	See note 4
*IEC 282-1 : 1985	BS 2692 Fuses for voltages exceeding 1000 V a.c. Part 1 : 1986 Specification for current-limiting fuses (Technically equivalent, see note 6)

NOTE 1. The references (in B2 and in the explanatory text to figure 17 of this standard) to the 4th edition of IEC 71, for which there is no corresponding British Standard, constitute informative matter only and sufficiently detailed extracts are given in this standard. The 4th edition of IEC 71 has been superseded, firstly by the 5th edition in 1972 and then by IEC 71-1 : 1976 and IEC 71-2 : 1976.

NOTE 2. For the purposes of this standard and taking account of differing terminology, BS 2914 : 1972 is technically equivalent to IEC 99-1 : 1970, except that in tables 6 and 7 it includes a diverter (arrester) rating of 132 kV (which is not in the corresponding tables in IEC 99-1) together with values corresponding to the interpolated values of the IEC 99-1 series, and excludes the arrester rating of 150 kV (which is in the corresponding tables in IEC 99-1) for which there was no demand in the UK.

6.3.5 of BS 2914 : 1972 corresponds to 61.4 of IEC 99-1 : 1970 (referred to in 13.2 of this standard).

NOTE 3. Appendix C of BS 2914 : 1972 is a reproduction of IEC 99-1A : 1965 except that there are also some minor editorial and numbering changes.

NOTE 4. The references (in clauses 2 and 14 and in 16.2 of this standard) to IEC 99-2 : 1962, for which there is no corresponding British Standard, constitute informative matter only as they relate to expulsion-type lightning arresters, which are an alternative type not used in the UK. Since no requirements are involved, the validity of this British Standard is not affected.

NOTE 5. *Textual errors.* When adopting the text of the international standard, the errors listed below were noticed. They have been corrected in this British Standard and have been reported to the International Electrotechnical Commission in a proposal to amend the text of the international standard.

Subclause 7.3, paragraph 3, line 2 (IEC page 21). 'analisers' has been deleted and replaced by 'analysers'.

Clause 22, paragraph 2, line 1 (top of IEC page 53). 'one to three values' has been deleted and replaced by 'one to five values'.

Appendix B, clause B1, final paragraph, line 2 (IEC page 77). 'or than the probability' has been deleted and replaced by 'or that the probability'.

Appendix B, clause B2, first paragraph, line 1 (IEC page 77). 'basis limitations' has been deleted and replaced by 'basic limitations'.

Appendix C, note 1, line 1 (IEC page 83). 'Baussian' has been deleted and replaced by 'Gaussian'.

Appendix C, line 2 of paragraph before formula (18) (IEC page 85). 'Formula (1)' has been deleted and replaced by 'Formula (11)'.

Appendix D, first paragraph, line 1 (top of IEC page 89). 'Table III, page 98' has been deleted and replaced by 'Table III, page 99'.

Table 1, note 3 (bottom of IEC page 95). 'on the insulators may' has been deleted and replaced by 'on the insulators, may'.

Figure 12, block 6 (IEC page 119). 'rated-voltage' has been deleted and replaced by 'rated voltage'.