



BS 5622 : Part 1 : 1979
IEC 71-1 : 1976
UDC 621.319.91.048

Guide for

Insulation co-ordination

Part 1. Terms, definitions, principles and rules

Guide sur la coordination de l'isolement
Partie 1. Termes, définitions, principes et règles

Hinweisblatt über Isolierungskoordination
Teil 1. Begriffe, Definitionen, Grundsätze und Regeln

BS 5622 : Part 1 : 1979

National foreword

This Part of this British Standard is identical with IEC Publication 71-1 'Insulation co-ordination' Part 1 : 1976 'Terms, definitions, principles and rules'. It is published under the direction of the General Electrotechnical Engineering Standards Committee.

Other Parts of this British Standard are to be:

Part 2 : 1979 Application guide (identical with IEC Publication 71-2 : 1976)

Part 3 Insulation co-ordination for Ranges A and B (still under development within the IEC).

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).

Terminology. The text of the international standard has been approved as suitable for publication, without deviation, as a British Standard. Some terminology is not identical with that used in British Standards; attention is especially drawn to the following.

Wherever the words 'this publication' or 'this standard' appear, referring to this standard, they should be interpreted as 'this British Standard' or 'this Part of this British Standard' as appropriate. The words 'the appropriate IEC publications', appearing in clause 39(b), should be interpreted as 'the appropriate British Standards'.

The words 'Apparatus Committee' or 'Apparatus Committees', appearing throughout, should be interpreted as meaning technical committee(s) concerned with the requirements for apparatus. Similarly, the references in note 1 to clause 28 and in the note to table II to 'apparatus standards' should be interpreted as meaning British Standards relating to apparatus. The references in clause 50 and in clause 54(d) to 'IEC Technical Committee' should be interpreted as 'BSI Technical Committee(s)'.

Where, as in 38.1, the words '50 % disruptive discharge voltage' appear, they should be interpreted as having the same sense as '50 % dielectric breakdown voltage' used in BS 923. Terms such as 'disruptive discharge voltage' may be interpreted by analogy.

Where, as in clause 40, the words 'surge arresters' appear, they should be interpreted as having the same sense as 'surge diverters' used in BS 2914.

The printing convention used in the titles of tables I, II, III and IV is not followed in British Standards. In these titles therefore, the italic arabic numerals, the italic symbols and the italic inferior should all be read as upright; the upright symbol should be read as italic.

Cross-references

International standard*	Corresponding British Standard
IEC 60 : 1962	BS 923 : 1972
revised in Parts thus:	Guide on high-voltage testing techniques (related, see note 1)
60-1 : 1973	
60-2 : 1973	
60-3 : 1976	
60-4 : 1977	
IEC 71-2 : 1976 (see note 2)	BS 5622 Guide for insulation co-ordination Part 2 : 1979 Application guide (identical)
IEC 76 : 1967	BS 171 : 1970
revised in Parts thus:	Power transformers (related), revised in identical dual-numbered Parts of BS 171 thus:
76-1 : 1976	Part 1 : 1978 General
76-2 : 1976	Part 2 : 1978 Specification for temperature rise requirements
76-4 : 1976	Part 4 : 1978 Specification for tappings and connections
76-5 : 1976	Part 5 : 1978 Specification for ability to withstand short circuit
(see note 3)	(generic title of the revised BS 171 is unaltered) (see note 3)
IEC 99-1A : 1975	BS 2914 : 1972
	Surge diverters for alternating current power circuits (appendix C is technically equivalent, see note 4)
IEC 186 : 1969	BS 3941 : 1975
*Undated in the text.	Voltage transformers (related, see note 5)

NOTE 1. As stated in its foreword, BS 923 : 1972 is based on IEC 60 : 1962 but 'also incorporates some information which will appear in the next revision of that publication'.

For the purposes of this standard and taking account of differing terminology as noted under 'Terminology' in this national foreword, BS 923 is technically equivalent to IEC 60.

NOTE 2. The 1976 edition of IEC 71-2 is referred to throughout as 'the second edition'.

In the last paragraph of clause 2 of this standard, the words 'will be supplemented' and '(in preparation) which will constitute', relating to IEC 71-2, should be read as 'is supplemented' and 'which constitutes', respectively.

NOTE 3. IEC 76-3 has not yet been published; until it has, IEC 76 : 1967 will continue to apply as appropriate. Similarly, BS 171 : 1970 has not been withdrawn.

The reference to IEC 76 (in the note to clause 55 of this standard) constitutes informative matter only.

NOTE 4. Appendix C of BS 2914 : 1972 is a reproduction of IEC 99-1A : 1965 except as noted under 'Terminology' in this national foreword; there are also some minor editorial and numbering changes.

Clause C.3 of BS 2914 : 1972 corresponds to clause 3 of IEC 99-1A : 1965.

NOTE 5. The reference (in the note to clause 55 of this standard) to IEC 186, for which there is no technically equivalent British Standard, constitutes informative matter only and, since no mandatory requirements are involved, the validity of this British Standard is not affected.