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British Standard

General requirements for a system for electronic components of assessed quality

Part 8. Drafting requirements

Section 8.1 Generic, sectional and blank detail specifications produced under qualification approval

WITHDRAWN

Foreword

This Part of BS 9000 has been prepared under the direction of the Electronic Components Standards Policy Committee (ECL/-). It forms part of a revision of BS 9000 : Part 1 : 1981 and BS 9005 : 1985, both of which are now withdrawn. The revision comprises a vital and necessary restructuring of these standards coupled with the incorporation of text from BS 9000 : Part 2 : 1972 and from various circular letters from PD 9004. The restructuring has resulted in BS 9000 : Part 1 : 1981 and BS 9005 : 1985 being replaced by the following publications.

- Part 1 Specification of general procedures
- Part 4 Specification of procedures for the approval of an organization
- Part 5 Specification of qualification approval and conformance testing procedures
- Part 6 Specification of capability approval procedures
- Part 7 Specification of lot formation, release procedures and certified test records
- Part 8 Drafting requirements
 - Section 8.1 Generic, sectional and blank detail specifications produced under qualification approval
 - Section 8.2 Generic and sectional specifications produced under capability approval

NOTE. A cross-reference between BS 9000 : Part 1 : 1981 and this revision is given in appendix A, table 1 of BS 9000 : Part 1 : 1989.

These publications describe, and specify, the BS 9000 system. They are not intended to apply to the United Kingdom implementation of either the CECC* or IECQ† systems.

It has been decided, after considering the implications of the intended completion of the Internal Market by December 1992, that a complete 'stand alone' publication describing and specifying the UK implementation of the CECC system is needed. A similar 'stand alone' publication for the UK implementation of the IECQ system is also envisaged. BS 9000 : Part 2 and BS 9000 : Part 3 will be revised to implement these decisions.

This revision of BS 9000 : Part 1 : 1981 gives a more complete description of the requirements for capability approval and for the drafting of specifications. The revision will be applied to all approval exercises and to all generic, sectional and blank detail specifications drafted after the date of its publication. The requirements contained in the revision will also apply to the revision of existing BS 9000 standards.

BS 9000 : Part 4 specifies procedures for the approval of organizations. It is intended that the appropriate Part of BS 5750 be invoked in due course as a requirement for approval. It should be noted that BS 9000 : Part 4 contains requirements specific to the System‡ not covered by BS 5750.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

*CENELEC Electronic Components Committee (System for Europe).

†IEC Quality Assessment System for Electronic Components.

‡For definition of 'the System', see 2.1.1 of BS 9000 : Part 1 : 1989.

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Section one. General

1.0 Introduction

The description of the generic specification format given in this Section of BS 9000 details the content of each clause and the recommended clause numbers.

New generic specifications use the 'blank detail specification' pattern rather than the now obsolete 'Rules' documents.

A generic specification comprises two sections.

Section 1. General

This prescribes the principles and procedures applicable to all components of assessed quality which fall within its scope.

Section 2. Test procedures

This prescribes test procedures from which selection is made for compiling the test schedules.

Additional sections may be included, or given separately in a sectional specification, to cover the following two sections.

Section 3. Fixed sample size test schedules

Section 4. Qualification approval testing

The format of a sectional specification follows generally that for a generic specification.

Requirements for the form and content of a blank detail specification are given in appendix A.

Requirements for 'G' detail specifications are given in appendix B.

Requirements for 'F' and 'N' detail specifications are given in appendix C.

Requirements for the registration and control of multi-manufacturer-produced (multi-sourced) 'F' and 'G' detail specifications are given in appendix D.

NOTE 1. The titles of the publications referred to in this standard are listed on page 17.

NOTE 2. This clause is not contained in a generic or sectional specification produced under capability approval.

1.1 Scope

This clause shall be a concise description of the family or sub-family of components covered by the generic specification.

1.2 Related documents

All British Standards and other relevant IEC or ISO publications the application of which is called for in the generic specification shall be listed.

1.3 Terminology

Those terms and definitions related specifically to the family of components covered by the generic specification, which have not been included in BS 4727, shall be listed. The definitions of these special items shall be derived in accordance with the principles contained in BS 4727.

1.4 Letter symbols, signs and abbreviations

Those letter symbols, signs and abbreviations applicable to the family of components covered by the generic specifications, which have not been included in BS 5775, shall be listed. These special symbols, etc., shall be derived in accordance with the principles contained in BS 5775.

1.5 Graphical symbols

Those graphical symbols applicable to the family of components covered by the generic specification, which have not been included in BS 3939, shall be listed. These special graphical symbols shall be derived in accordance with the principles contained in BS 3939.

1.6 Marking of the component and package

The identification and other information which is to be marked on the component and/or the package shall be listed. Full information shall be given of any letter codes or colour codes used which are not already included in BS 1852. The order of priority for the marking of small components shall be given.

The list shall contain items selected from the following as appropriate to the family of components:

- (a) the number of the detail specification;
- (b) approved manufacturer's component designation numbers;
- (c) approved manufacturer's factory code;
- (d) date code;
- (e) identification of terminations, and their polarity where applicable;
- (f) rated value and tolerance;
- (g) climatic category (in accordance with BS 2011);
- (h) application category;
- (i) special marking. The requirements for special marking (relating to hazard and special operating conditions) shall be clearly stated.

1.7 Eligibility for qualification approval

This clause shall clearly define the primary stage of manufacture for each type of component covered by the generic specification which, together with all subsequent processing, is carried out under the direct surveillance of an approved person.

In addition, this clause shall identify all subsequent specialized processes which may be subcontracted in accordance with 3.2.2 of BS 9000 : Part 5 : 1989. It shall also state whether or not the subcontracting procedure given in 3.2.5 of BS 9000 : Part 5 : 1989 is excluded for the family or sub-family covered by the generic specification.

In framing this clause the following points shall be taken into account.

- (a) For some component families the exact point at which the primary stage of manufacture can be identified may be somewhat indeterminate and in such cases the definition of primary stage of manufacture shall be such that the quality of the final component can be assured.
- (b) Components having similar engineering and manufacturing characteristics should have comparable primary stages of manufacture which are based only on technical considerations.

1.8 Structurally-similar components

This clause shall list the common features and their common tests for those components which are to be regarded for sampling inspection purposes as being structurally-similar (see 6.1 of BS 9000 : Part 5 : 1989).

Those tests and measurements which can be applied to structurally-similar but differently identifiable components at sampling inspection shall be listed.

1.9 Delayed delivery

(see 7.2 of BS 9000 : Part 5 : 1989)

This clause shall contain all the information required to enable the inspection procedure for delayed deliveries to be carried out. The maximum delay period shall be stated if other than 24 months.

1.10 Supplementary procedure for reduced inspection for qualification approval

(see 2.3 of BS 9000 : Part 7 : 1989)

This clause shall contain all necessary information regarding any specific procedure to be followed, or alternatively shall state that the procedure shall not be used.

1.11 Certified test records

(see clause 5 of BS 9000 : Part 7 : 1989)

Any additional requirements for the content of the certified test record shall be given.

1.12 Standard ratings and characteristics

All the standard ratings and characteristics for components covered by the generic specification shall be listed together with, where possible, any values or series of values from which the preferred values in detail specifications shall be selected. Whenever possible, these values shall be selected from the appropriate R series or E series of numbers given in BS 2045 and BS 2488 respectively.

1.13 Unchecked parameters

Parameters shall be listed which, although of significance in certain circuit applications are, nevertheless, not assessed by appropriate tests in the relevant detail specifications. Such parameters shall therefore be identified as 'information not for inspection purposes'.

Where appropriate, a warning may be given that the detail specification gives no information on the operation of components under special identified conditions, e.g. under pulse conditions.

1.14 Procedure to be followed in the event of a failure in a periodic test

Any special procedure that is to be followed in the event of failure of specimens during a periodic test shall be given.

Any additions to the procedure given in 7.6 of BS 9000 : Part 5 : 1989 shall be stated.

1.15 Ordering information

The text shall require that the ordering information included in detail specifications shall be sufficient to enable a user to correctly order approved components.

1.16 Release prior to completion of Group B tests

The requirements to be complied with in the event of release for delivery before the completion of Group B tests shall be prescribed.