

Harmonized system of quality assessment for electronic components — Electrical relays — Sectional specification: Electromechanical all-or-nothing relays

[IEC title: Electrical relays

Part 19: Sectional specification: Electromechanical
all-or-nothing relays of assessed quality]

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Electronic Components Standards Committee (ECL/-) to Technical Committee ECL/1, upon which the following bodies were represented:

- Association of Control Manufacturers — TACMA (BEAMA Ltd.)
- British Telecommunications plc
- Electronic Components Industry Federation
- Ministry of Defence
- National Supervising Inspectorate
- Telecommunication Engineering and Manufacturing Association (TEMA)

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National foreword

This British Standard has been prepared under the direction of the Electronic Components Standards Committee. It is identical with IEC Publication 255-19 (QC 160100) “*Electrical relays — Part 19: Sectional specification: Electromechanical all-or-nothing relays of assessed quality*” published in 1983 by the International Electrotechnical Commission (IEC).

This standard is a harmonized specification within the IECQ system of quality assessment for electronic components. IECQ is governed by its Basic Rules (IEC Publication QC 001001) and its Rules of Procedure (IEC Publication QC 001002). The UK standards harmonized with these publications are BS 9000 “*General requirements for a system for electronic components of assessed quality*” — Part 1:1981 “*Specification of basic rules and procedures*” and Part 3:1987 “*Specification for national implementation of IECQ basic rules and rules of procedure*”.

Terminology and conventions. The text of the International Standard has been approved as suitable for publication as a British Standard without deviation. Some terminology and certain conventions are not identical with those used in British Standards; attention is drawn especially to the following.

Cross-references

International Standards ^a	Corresponding British Standards
IEC 68-1:1982	BS 2011 <i>Basic environmental testing procedures</i> Part 1.1:1983 <i>General and guidance</i> (Identical) BS 5992 <i>Electrical relays</i>
IEC 255-0-20:1974	Part 1:1980 <i>Specification for contact performance of electrical relays</i> (Identical)
IEC 255-1-00:1975	Part 2:1980 <i>Specification for all-or-nothing electrical relays</i> (Identical)
IEC 255-5:1977	Part 3:1980 <i>Specification for the insulation testing of electrical relays</i> (Identical) BS QC 160000 <i>Harmonized system of quality assessment for electronic components. Electrical relays. Generic specification: Electromechanical all-or-nothing relays</i>
IEC 255-7:1978	Part 1:1987 <i>Test and measurement procedures</i> (Identical)
IEC 255-10:1979	Part 2:1987 <i>Quality assessment procedures</i> (Identical)
ISO 2015:1976	BS 4760:1971 <i>Specification for numbering of weeks</i> (Technically equivalent)

^a Undated in the text.

The Technical Committee has reviewed the provisions of IEC Publications 410 and 419, to which reference is made in the text, and has decided that they are acceptable for use in conjunction with this standard. Those parts of IEC Publication 410 which are relevant to the needs of this standard are technically equivalent to BS 6001-1:1972. At present there is no British Standard corresponding to IEC Publication 419.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 14, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Section 1. General and definitions

1 General

1.1 Scope and object

This standard specifies the appropriate methods of test, selected from the generic specification IEC Publication 255-7, to be used in detail specifications for electromechanical all-or-nothing relays of assessed quality derived from this specification. It also gives the basic test schedules which are to be used in the preparation of such detail specifications.

The way in which detail specifications are to be written is indicated in the detailed test schedules contained in the separate blank detail specifications which supplement this specification.

1.2 Related documents

IEC Publication 68-1, *Basic environmental testing procedures — Part 1: General and Guidance*.

IEC Publication 255-0-20, *Electrical relays, contact performance of electrical relays*.

IEC Publication 255-1-00, *All-or-nothing electrical relays*.

IEC Publication 255-5, *Electrical relays — Part 5: Insulation tests for electrical relays*.

IEC Publication 255-7, *Electrical relays — Part 7: Test and measurement procedures for electromechanical all-or-nothing relays*.

IEC Publication 255-10, *Electrical relays — Part 10: Application of the IEC quality assessment system for electronic components to all-or-nothing relays*.

IEC Publication 410, *Sampling plans and procedures for inspection by attributes*.

IEC Publication 419, *Guide for the inclusion of lot-by-lot and periodic inspection procedures in specifications for electronic components (or Parts)*.

IEC Publication QC 001001, *Basic rules for the IEC quality assessment system for electronic components (IECQ)*.

IEC Publication QC 001002, *Rules of procedure for the IEC quality assessment system for electronic components (IECQ)*.

ISO Standard 2015, *Numbering of weeks*.

2 Definitions

For the purpose of this standard, the following definitions shall apply:

2.1

primary stage of manufacture

the primary stage of manufacture is the inspection carried out by the relay manufacturer on receipt of goods in order to check that they fulfil his specified requirements

2.2

structurally similar relays

relays are considered structurally similar if having no other differences in design than:

- a) coil wire diameter and number of turns,
- b) types, numbers and material of contacts,
- c) rated coil and/or contact voltage(s),
- d) mounting and terminal variants.

All or any up to a limit prescribed in the detail specification.

Section 2. Quality assessment procedures

3 Diversity of detail specifications

One detail specification shall cover structurally similar relays only (see Sub-clause 2.2).