

**Harmonized system of quality
assessment for electronic components**

Sectional specification: Electromechanical all-or-nothing heavy load relays of assessed quality (Rated from 5 A and above)

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British Standard

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This British Standard, having been prepared under the direction of the Electronic Components Standards Policy Committee, was published under the authority of the Standards Board and comes into effect on 15 February 1994

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National foreword

This British Standard has been prepared under the direction of the Electronic Components Standards Policy Committee. It is identical with EN 116300:1993 *Sectional specification: Electromechanical all-or-nothing heavy load relays of assessed quality (Rated from 5 A and above)*, published by the Electronic Components Committee (CECC) of the European Committee for Electrotechnical Standardization (CENELEC).

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 16, 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.

UDC

Descriptors: Quality, electronic components, relays

English version

**Sectional Specification:
Electromechanical All-Or-Nothing Heavy Load Relays of
Assessed Quality
(Rated from 5 A and above)**

Spécification intermédiaire:

Relais électromécaniques de tout-ou-rien
soumis au régime d'assurance de la qualité,
haute limite de charge (intensité du courant à
partir de 5 A)

Rahmenspezifikation:

Gütebestätigte elektromechanische
Schalt-relais hoher Belastbarkeit
(für Stromstärken ab 5 A)

This European Standard was approved by CENELEC Electronic Components Committee (CECC) on 10 August 1992. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the General Secretariat of the CECC or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the CECC General Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom. The membership of the CECC is identical, with the exception of the national electrotechnical committees of Greece, Iceland and Luxembourg.

CECC

European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

Central Secretariat: rue de Stassart 35, B-1050 Brussels

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Foreword

The CENELEC Electronic Components Committee (CECC) is composed of those member countries of the European Committee for Electrotechnical Standardization (CENELEC) who wish to take part in a harmonized System for electronic components of assessed quality.

The object of the System is to facilitate international trade by the harmonization of the specifications and quality assessment procedures for electronic components, and by the grant of an internationally recognized Mark, or Certificate, of Conformity. The components produced under the System are thereby acceptable in all member countries without further testing.

This specification was prepared by CECC WG 16, Relays.

The text of the draft based on document CECC (Secretariat) 2826 was submitted to the formal vote; together with the voting report, circulated as document CECC (Secretariat) 3143, it was approved by CECC as EN 116300 on 10 August 1992.

The following dates were fixed:

- latest date of announcement of the EN at national level (doa) 1993-05-01
- latest date of publication of an identical national standard (dop) 1993-11-01
- latest date of declaration of national standards obsolescence 1993-11-01
- latest date of withdrawal of conflicting national standards (dow) 2003-05-01

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Section 1. Scope

This sectional specification applies to electromechanical all-or-nothing heavy load relays of assessed quality, rated from 5 A and above.

It selects from the generic specification EN 116000-1:1992 (CECC 16000-1:1990) and other sources the appropriate methods of tests to be used in detail specifications derived from this specification, and contains basic test schedules to be used in the preparation of such specifications. Detailed test schedules are contained in the blank detail specifications supplementary to this specification.

Section 2. General

2.1 Related documents

CECC 00114-II:1991	<i>Quality Assessment Procedures. Part II: Qualification approval for electronic components.</i>
EN 116000-1:1992 (originally CECC 16000-I:1990	<i>Generic Specification: Electromechanical all-or-nothing relays. Part I: General</i>
IEC 410:1973	<i>Sampling plans and procedures for inspection by attributes</i>

Section 3. Quality assessment procedures

3.1 Primary stage of manufacture

The primary stage of manufacture is the assembly of the electromotive part of the relay to the electric switching part of the relay.

3.2 Structurally similar relays

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

- 1) coil wire diameter, number of windings and coil suppression devices
- 2) types and numbers of contacts
- 3) rated coil and/or contact voltage(s)
- 4) mounting and terminal variants

3.3 Subcontracting

Preliminaries for subcontracting are as in CECC 00114-II § 1.2

3.4 Qualification approval procedures

Qualification approval tests shall include all the tests prescribed in the detail specification, and shall be performed by a schedule specifically prescribed in the detail specification.

The number of specimens for each sub-group is to be specified in the blank detail specification. The qualification test schedule shall indicate those considered to be destructive or non-destructive tests.

3.5 Quality conformance inspection

3.5.1 Formation of inspection lots

Inspection lots submitted to group A acceptance tests shall be formed in accordance with section 3.1 of CECC 00114-II and with the sampling plans and procedures given in IEC Publication 410, except where production is too infrequent or too small for sampling plans to apply; in these cases inspection shall be 100 %, or as agreed between the manufacturer, the ONS and when known, the ultimate user.

When sampling is carried out in accordance with IEC Publication 410, the percent defective concept only shall be used. Stratified or representative sampling shall always be used to include all production lines and structurally similar relays in proportion to their respective quantities in the lot. Exceptions from proportionality may become necessary and shall be stated in the detail specification. Specimens shall be as representative as possible of the production.