# INTERNATIONAL STANDARD

### IEC 62246-1

First edition 2002-04

#### Reed contact units -

## Part 1: Generic specification

Contacts à lames souples en enceinte scellée -

Partie 1: Spécification générique

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#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

#### **REED CONTACT UNITS -**

#### Part 1: Generic specification

#### **FOREWORD**

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International Standard IEC 62246-1 has been prepared by IEC technical committee 94: All-ornothing electrical relays.

The text of this standard is based on the following documents:

FDIS	Report on voting
94/156/FDIS	94/164/RVD

Full information on the voting for the approval of this standard can be found in the report on voting indicated in the above table.

This standard cancels and replaces IEC 60255-9 (1979).

The detail specifications (DS), the sectional specifications (SS) and the blank detail specifications (BDS) are not yet available and will be developed as the need arises.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until 2005. At this date, the publication will be

- reconfirmed;
- withdrawn;
- · replaced by a revised edition, or
- amended.

REED CONTACT UNITS -

#### Part 1: Generic specification

#### 1 General

#### 1.1 Scope

This part of IEC 62246 which is the generic specification applies to dry and mercury wetted reed contact units of assessed quality. It lists the tests and measurement procedures which may be selected for use in detail specifications for such units. This standard also specifies the quality assessment procedures to be followed.

This standard applies to those reed contact units which are operated by an applied magnetic field; it is not restricted to any particular type of contact load.

NOTE 1 Since tests using a standard coil and standard resistive loads are the easiest to specify and to define, this standard is currently restricted to tests of this type.

NOTE 2 For elementary relays with reed contact units, this standard is recommended to be used together with the standards IEC 61810-1 and IEC 61811-1 as applicable.

Where in this part of IEC 62246 the term "detail specification" is used, this either has the meaning defined in A.7 of QC 001001 for application within the IECQ system, or it means any appropriate document, for example manufacturer's data sheet, test specification, customer detail specification.

#### 1.2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60027, Letter symbols to be used in electrical terminology

IEC 60050, International Electrotechnical Vocabulary (IEV)

IEC 60068-1:1988, Environmental testing – Part 1: General and guidance Amendment 1(1992)

IEC 60068-2-1:1990, Environmental testing - Part 2: Tests - Tests A: Cold

Amendment 1(1993)

Amendment 2(1994)

IEC 60068-2-2:1974, Environmental testing – Part 2: Tests – Tests B: Dry heat

Amendment 1(1993)

Amendment 2(1994)

IEC 60068-2-3:1969, Environmental testing – Part 2: Tests – Test Ca: Damp heat, steady state

IEC 60068-2-6:1995, Environmental testing – Part 2: Tests – Test Fc: Vibration (sinusoidal)

IEC 60068-2-7:1983, Environmental testing – Part 2: Tests – Test Ga: Acceleration, steady state Amendment 1(1986)

IEC 60068-2-11:1981, Environmental testing – Part 2: Tests – Test Ka: Salt mist

IEC 60068-2-13:1983, Environmental testing – Part 2: Tests – Test M: Low air pressure

IEC 60068-2-14:1984, Environmental testing – Part 2: Tests – Test N: Change of temperature Amendment 1(1986)

IEC 60068-2-17:1994, Basic environmental testing procedures – Part 2: Tests – Test Q: Sealing

IEC 60068-2-20:1979, Environmental testing – Part 2: Tests – Test T: Soldering Amendment 2(1987)

IEC 60068-2-21:1999, Environmental testing – Part 2-21: Tests – Test U: Robustness of terminations and integral mounting devices

IEC 60068-2-27:1987, Environmental testing – Part 2: Tests – Test Ea and guidance: Shock

IEC 60068-2-29:1987, Environmental testing – Part 2: Tests – Test Eb and guidance: Bump

IEC 60068-2-30:1980, Environmental testing – Part 2: Tests – Test Db and guidance: Damp heat, cyclic (12 + 12 hour cycle)
Amendment 1(1985)

IEC 60096 (series), Radio-frequency cables

IEC 60317-1:1990, Specifications for particular types of winding wires – Part 1: Polyvinyl acetal enamelled round copper wire, class 105
Amendment 1(1997)
Amendment 2(1997)

IEC 60410:1973, Sampling plans and procedures for inspection by attributes

IEC 60617, Graphical symbols for diagrams

IEC 61810-1:1998, Electromechanical non-specified time all-or-nothing relays – Part 1: General requirements

IEC 61811-1:1999, Electromechanical non-specified time all-or-nothing relays of assessed quality – Part 1: Generic specification

ISO 1000, SI units and recommendation for the use of their multiples and of certain other units

ITU-T Recommendation K.17:1988, Tests on power-fed repeaters using solid-state devices in order to check the arrangements for protection from external interference

QC 001002, IEC Quality Assessment System for Electronic Components (IECQ) – Rules of Procedure