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SIST EN 60255-6:2001

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EUROPEAN STANDARD

EN 60255-6

NORME EUROPEENNE

EUROPÄISCHE NORM

May 1994

UDC 621.318.56:621.317.7.08:620.1

Descriptors: Measuring relays, protection equipment, requirements, test methods

ENGLISH VERSION

Electrical relays

Part 6: Measuring relays and protection equipment
(IEC 255-6:1988, modified)

Relais électriques

Sixième partie: Relais de mesure

et dispositifs de protection

(CEI 255-6:1988, modifiée)

Elektrische Relais

Teil 6: Meßrelais und

Schutzeinrichtungen

(IEC 255-6:1988, modifiziert)

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This European Standard was approved by CENELEC on 1993-12-08.

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 Central Secretariat 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 Central 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.

CENELEC

European Committee for Electrotechnical Standardization

Comité Européen de Normalisation Electrotechnique

Europäisches Komitee für Elektrotechnische Normung

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

FOREWORD

Following a decision taken by the 75th Technical Board of CENELEC the text of the International Standard IEC 255-6:1988, along with common modifications prepared by BTF 63-5, was submitted to the CENELEC Unique Acceptance Procedure for acceptance as a European Standard.

The text of the draft was approved by CENELEC as EN 60255-6 on 8 December 1993.

The following dates were fixed:

- latest date of publication of an identical national standard (dop) 1995-03-01
- latest date of withdrawal of conflicting national standards (dow) 1995-03-01

For products which have complied with the relevant national standard before 1995-03-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2000-03-01.

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Annexes designated "normative" are part of the body of the standard. In this standard, annex ZA is normative.

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Endorsement notice

The text of the International Standard IEC 255-6:1988 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

3 Standard values

3.2.2 **Replace** "220 V" by "230 V"

Replace "380 V" by "400 V"

3.5 **Add** ":1974" after "IEC Publication 255-0-20".

Table II In note 1, **delete** "National standards,"

In note 5, **add** "(latest edition)" after "IEV 05-02-120".

4 Thermal requirements

4.1 In the first paragraph, **add** ":1984" after "IEC Publication 85".

5 Mechanical requirements

5.4 **Replace** the title and text of this subclause by:

5.4 **Vibration, shock, bump and seismic tests**

5.4.1 Vibration tests (sinusoidal)

The requirements are specified in IEC 255-21-1:1988.

5.4.2 Shock and bump tests

The requirements are specified in IEC 255-21-2:1988.

5.4.3 Seismic tests

The requirements are specified in IEC 255-21-3:1993.

9 Insulation

Add ":1977 (in revision)" after "IEC Publication 255-5" (three times).

10 Additional requirements for static relays

10.1 In the title of the subclause, **replace** "test" by "tests".

Replace the text by:

The requirements are specified in IEC Publication 255-22-1:1988.

COMMON MODIFICATIONS

- 10.2 **Add** "tests" at the end of the title of this subclause.
Replace the text by:
The requirements are specified in the Technical Report IEC 255-22-3:1989 (in revision).
- 10.3 **Add** "tests" at the end of the title of this subclause.
Replace the text by:
The requirements are specified in IEC Publication 255-22-2:1989 (in revision).
- 10.4 **Replace** the title and text of this subclause by:
10.4 *Fast transient disturbance tests*
The requirements are specified in IEC 255-22-4:1992.
Add a new subclause:
10.5 *Interruption to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays*
The requirements are specified in IEC Publication 255-11:1979.

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11 Contact performance

Add ":1974" after "IEC Publication 255-0-20".

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12 Markings and data

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Replace item *t*) by:

t) disturbance tests.

Delete the last paragraph.

14 Test conditions related to operating time for determining errors

Delete "or national standards or as declared by the manufacturer".

16 Tests for mechanical requirements

16.1.1 **Delete** in paragraph d) "or as specified in national standards".

Add a new subclause:

16.2 *Vibration, bump and seismic tests*

Refer to the relevant parts of IEC Publications of 255-21 series.

18 Contact performance test

Add ":1974" after "IEC Publication 255-0-20".

Annex ZA (normative)**Other international publications quoted in this standard
with the references of the relevant European publications**

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

NOTE: When the international publication has been modified by CENELEC common modifications, indicated by (mod), the relevant EN/HD applies.

IEC <u>Publication</u>	<u>Date</u>	<u>Title</u>	<u>EN/HD</u>	<u>Date</u>
50	-	International Electrotechnical Vocabulary (IEV)	-	-
50(05)	1956	Chapter 5: Fundamental definitions (Superseded by Publications 50(101, 111, 121, 131 and 151)	-	-
85	1984	Thermal evaluation and classification of electrical insulation	HD 566 S1	1990
158	Series	Low-voltage controlgear	HD 419	Series
255	-	Electrical relays	-	-
255-0-20	1974	Contact performance of electrical relays	-	-
255-5 (in revision)	1977	Part 5: Insulation tests for electrical relays	-	-
255-11	1979	Part 11: Interruptions to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays	-	-
255-21	-	Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment	-	-
255-21-1	1988	Section One - Vibration tests (sinusoidal)	-	-
255-21-2	1988	Section Two: Shock and bump tests	-	-
255-21-3	1993	Section Three: Seismic tests	-	-
255-22	-	Part 22: Electrical disturbance tests for measuring relays and protection equipment	-	-
255-22-1	1988	Section One - 1 MHz burst disturbance tests	-	-
255-22-2 (in revision)	1989	Section Two - Electrostatic discharge tests	-	-
255-22-3 (in revision)	1989	Section Three - Radiated electromagnetic field disturbance tests	-	-
255-22-4	1992	Section Four - Fast transient disturbance test	-	-
292	*	Low-voltage motor starters	-	-
337	*	Control switches (low-voltage switching devices for control and auxiliary circuits, including contactor relays)	-	-

* IEC 292 series is superseded by IEC 947-4-1, which is harmonized as EN 60947-4-1
IEC 337 series is superseded by IEC 947-5-1, which is harmonized as EN 60947-5-1



IEC/TC95

Corrigendum to EN 60255-6:1994

English version

Add to the common modifications:

3.2.2 Replace "127 V" by "133 V".

Table I Replace "220" by "230" (three times in column 3, five times in column 4).

February 1995

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NORME INTERNATIONALE INTERNATIONAL STANDARD

CEI
IEC
255-6

Deuxième édition
Second edition
1988



Commission Electrotechnique Internationale
International Electrotechnical Commission
Международная Электротехническая Комиссия

Relais électriques

Sixième partie: Relais de mesure et dispositifs de protection

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Electrical relays

Part 6: Measuring relays and protection equipment

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

ELECTRICAL RELAYS

Part 6: Measuring relays and protection equipment

FOREWORD

- 1) The formal decisions or agreements of the IEC on technical matters, prepared by Technical Committees on which all the National Committees having a special interest therein are represented, express, as nearly as possible, an international consensus of opinion on the subjects dealt with.
- 2) They have the form of recommendations for international use and they are accepted by the National Committees in that sense.
- 3) In order to promote international unification, the IEC expresses the wish that all National Committees should adopt the text of the IEC recommendation for their national rules in so far as national conditions will permit. Any divergence between the IEC recommendation and the corresponding national rules should, as far as possible, be clearly indicated in the latter.

PREFACE

This standard has been prepared by Sub-Committee 41 B: Measuring relays and protection equipment, of IEC Technical Committee No. 41: Electrical relays.

This publication supersedes Publication 255-6 (1978) and its first supplement 255-6A (1980).

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

Six Months' Rule	Report on Voting
41 B(CO)39	41 B(CO)42

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

The following IEC publications are quoted in this standard:

- Publications Nos. 50: International Electrotechnical Vocabulary (IEV).
 50(05) (1956): Chapter 5: Fundamental definitions. (This publication has been superseded by Publications 50(101, 111, 121, 131 and 151.)
- 85 (1984): Thermal evaluation and classification of electrical insulation.
 158: Low-voltage controlgear.
 255: Electrical relays.
- 255-0-20 (1974): Contact performance of electrical relays.
 255-5 (1977): Part 5: Insulation tests for electrical relays.
 255-11 (1979): Part II: Interruptions to and alternating component (ripple) in d.c. auxiliary energizing quantity of measuring relays.
 292: Low-voltage motor starters.
 337: Control switches (low-voltage switching devices for control and auxiliary circuits, including contactor relays).