

## SLOVENSKI STANDARD SIST EN 60255-21-1:2001

01-september-2001

Electrical relays - Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment - Section 1: Vibration tests (sinusoidal)

Electrical relays -- Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment -- Section 1: Vibration tests (sinusoidal)

Elektrische Relais -- Teil 21: Schwing-, Schock-, Dauerschock- und Erdbebenprüfungen an Meßrelais und Schutzeinrichtungen -- Hauptabschnitt 1: Schwingprüfungen (sinusförmig)

(standards.iteh.ai)

Relais électriques -- Partie 21: Essais de vibrations, de chocs, de secousses et de tenue aux séismes applicables aux relais de mesure et aux dispositifs de protection -- Section 1: Essais de vibrations (sinusoïdales) 4ed3/sist-en-60255-21-1-2001

Ta slovenski standard je istoveten z: EN 60255-21-1:1995

ICS:

29.120.70 Releji Relays

SIST EN 60255-21-1:2001 en

SIST EN 60255-21-1:2001

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60255-21-1:2001

https://standards.iteh.ai/catalog/standards/sist/5361fac0-8d74-412a-9556-1724ee6c4ed3/sist-en-60255-21-1-2001

## **FUROPEAN STANDARD** NORME EUROPÉENNE **FUROPÄISCHE NORM**

EN 60255-21-1

November 1995

ICS 29.120.70

Descriptors: Measuring relays, sinusoidal vibration tests

**Enalish version** 

### **Electrical relays**

Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment Section 1: Vibration tests (sinusoidal)

(IEC 255-21-1:1988)

Relais électriques

Partie 21: Essais de vibrations, de

séismes applicables aux relais de

mesure et aux dispositifs de protection ds. itel Hauptabschnitt 1: Schwingprüfungen

Section 1: Essais de vibrations

(sinusoidales)

(CEI 255-21-1:1988)

Elektrische Relais

Teil 21: Schwing-, Schock-,

chocs, de secousses et de tenue aux ARD PDauerschock- und Erdbebenprüfungen an Meßrelais und Schutzeinrichtungen

(sinusförmig)

SIST EN 60255-21-1:1988)

standards.iteh.ai/catalog/standards/sist/536 1724ee6c4ed3/sist-en-60255-21-1-2001

This European Standard was approved by CENELEC on 1995-09-20. 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

Page 2 EN 60255-21-1:1995

#### **Foreword**

The text of the International Standard IEC 255-21-1:1988, prepared by SC 41B<sup>\*</sup>), Measuring relays and protection equipment, of IEC TC 41, Electrical relays, was submitted to the Unique Acceptance Procedure and was approved by CENELEC as EN 60255-21-1 on 1995-09-20 without any modification.

The following dates were fixed:

 latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement

(dop) 1996-10-01

 latest date by which the national standards conflicting with the EN have to be withdrawn

(dow) 1996-10-01

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

Annex ZA has been added by CENELEC.

### **Endorsement notice**

The text of the International Standard IEC 255-21-1:1988 was approved by CENELEC as a European Standard without any modification.

<u>SIST EN 60255-21-1:2001</u> https://standards.iteh.ai/catalog/standards/sist/5361fac0-8d74-412a-9556-1724ee6c4ed3/sist-en-60255-21-1-2001

<sup>\*)</sup> IEC SC 41B has been replaced by IEC TC 95, Measuring relays and protection equipment.

Page 3 EN 60255-21-1:1995

### Annex ZA (normative)

# Normative references to international publications with their corresponding 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 (including amendments).

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

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 50	series	International electrotechnical vocabulary (IEV)	-	-
IEC 68-2-6	1982 iT	Basic environmental testing procedures Part 2: Tests - Test Fc and guidance : Vibration (Sinusoidal) PREVIEV	HD 323.2.6 S2 <sup>1)</sup>	1988
IEC 255-7	1978	Electrical relays Part 7: Test and in measurement procedures for electromechanical all-or-nothing relays	-	-
ISO 2041	https://st 1975	tandards.iteh.ai/catalog/standards/sist/5361fac0-8d74-412a-9 <b>Vibration and shock - Vocabulary</b> 2001	9556-	-

<sup>1)</sup> HD 323.2.6 S2 is superseded by EN 60068-2-6:1995, which is based on IEC 68-2-6:1995.

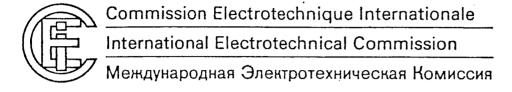
SIST EN 60255-21-1:2001

# iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN 60255-21-1:2001

https://standards.iteh.ai/catalog/standards/sist/5361fac0-8d74-412a-9556-1724ee6c4ed3/sist-en-60255-21-1-2001

# NORME INTERNATIONALE INTERNATIONAL STANDARD



# CEI IEC 255-21-1

Première édition First edition.... 1988

## Relais électriques

Vingt et unième partie; Essais de vibrations, de chocs, de secousses et de tenue aux séismes applicables aux relais de mesure et aux dispositifs de protection. Section un — Essais de vibrations (sinusoidales) ARD PREVIEW

(standards.iteh.ai)

### SIST EN 60255-21-1:2001

https://standards.iteh.ai/catalog/standards/sist/5361fac0-8d74-412a-9556-1724ee6c4ed3/sist-en-60255-21-1-2001

### Electrical relays

Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment

Section One — Vibration tests (sinusoidal)

## CONTENTS

			Page
FOR	REWOR	D	5
PRE	EFACE		5
Cla	use		
1.	Scope	·	7
2.	Objec	t	7
3.	Defin	itions	7
4.	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11 Requ 4.1 4.2 4.3	Vibration test (sinusoidal) Vibration response test Vibration endurance test Fixing point (*) Measuring points (*) Check point (*) Reference points (*) Sweep-cycle (*) Distortion (*) Cross-over frequency Standard acceleration of gravity SISTEN 60255-21-12001 irements form vibration attests (sinusoidal) 8d74.412a-9556- 1724ee6c4ed3/sist-en-60255-21-1-2001 Test apparatus and mounting Test severity classes Test procedure	9 9 11 11 11 11 11
5.	Crite	ria for acceptance	21
	5.1	Acceptance criteria for vibration response test	21
\.	5.2	Acceptance criteria for vibration endurance test	. 21
ΑP	PENDI	X A - Output circuit response during vibration	23

#### INTERNATIONAL ELECTROTECHNICAL COMMISSION

### ELECTRICAL RELAYS

Part 21: Vibration, shock, bump and seismic tests on measuring relays and protection equipment

Section One: Vibration tests (sinusoidal)

#### FOREWORD

- 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.
- 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. STANDARD PREVIEW

# (standards.iteh.ai)

This standards/hasardbeen/correpared/siby/61Sub-Committee 41B: Measuring Relays and Protection Equipment of 102 JEC-1 Technical Committee No. 41: Electrical relays.

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

Six Months' Rule	Report on Voting	
41B(CO)35	41B(CO)37	

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).

68-2-6 (1982): Basic environmental testing procedures, Part 2: Tests. Test Fc and guidance: Vibration (sinusoidal).

255: Electrical relays.

255-7 (1978): Part 7: Test and measurement procedures for electromechanical all-or-nothing relays.

Other publication quoted:

ISO 2041-1975: Vibration and shock - Vocabulary.