

SVENSK STANDARD SS-EN 60715

Fastställd Utgåva Sida Ingår i

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Svenska Elektriska Kommissionen, SEK

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Elkopplare för högst 1 kV – Fästskenor

Dimensions of low-voltage switchgear and controlgear – Standardized mounting on rails for mechanical support of electrical devices in switchgear and controlgear installations

Som svensk standard gäller europastandarden EN 60715:2001. Den svenska standarden innehåller den officiella engelska språkversionen av EN 60715:2001.

Nationellt förord

Europastandarden EN 60715:2001

består av:

- europastandardens ikraftsättningsdokument, utarbetat inom CENELEC
- IEC 60715, First edition, 1981 -Dimensions of low-voltage switchgear and controlgear Standardized mounting on rails for mechanical support
 of electrical devices in switchgear and controlgear installations

jämte

- Amendment No. 1, 1995

utarbetad inom International Electrotechnical Commission, IEC.

Tidigare utgiven svensk standard SS-EN 50022, SS-EN 50023, SS-EN 50024, SS-EN 50035 och SS-EN 50045 gäller ej fr o m 2001-10-01.

ICS 29.120.60

EUROPEAN STANDARD

EN 60715

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English version

Dimensions of low-voltage switchgear and controlgear Standardized mounting on rails for mechanical support of electrical devices in switchgear and controlgear installations

(IEC 60715:1981 + A1:1995)

Dimensions de l'appareillage à basse tension - Montage normalisé sur profilés-supports pour le support mécanique des appareils électriques dans les installations d'appareillage à basse tension (CEI 60715:1981 + A1:1995)

Abmessungen von Niederspannungsschaltgeräten -Genormte Tragschienen für die mechanische Befestigung von elektrischen Geräten in Schaltanlagen (IEC 60715:1981 + A1:1995)

This European Standard was approved by CENELEC on 2000-04-01. 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.

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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

The text of the International Standard IEC 60715:1981 and its amendment 1:1995, prepared by SC 17B, Low-voltage switchgear and controlgear, of IEC TC 17, Switchgear and controlgear, was submitted to the formal vote and was approved by CENELEC as EN 60715 on 2000-04-01 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) 2001-10-01

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

(dow) 2003-04-01

Endorsement notice

The text of the International Standard IEC 60715:1981 and its amendment 1:1995 was approved by CENELEC as a European Standard without any modification.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

DIMENSIONS OF LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR

STANDARDIZED MOUNTING ON RAILS FOR MECHANICAL SUPPORT OF ELECTRICAL DEVICES IN SWITCHGEAR AND CONTROLGEAR INSTALLATIONS

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 17B: Low-voltage Switchgear and Controlgear, of IEC Technical Committee No. 17: Switchgear and Controlgear.

As a result of the decision taken at the meeting held in The Hague in September 1975, a first draft was circulated in December 1976 and discussed at the meeting held in Moscow in June 1977. A second draft was circulated in March 1978 and discussed at the meeting held in Sofia in October 1978.

The third draft, Document 17B(Central Office)108, was submitted to the National Committees for approval under the Six Months' Rule in December 1979.

The National Committees of the following countries voted explicitly in favour of publication:

Australia Netherlands
Austria Poland
Belgium Romania
Bulgaria South Africa (Republic of)

CanadaSpainDenmarkSwedenFranceSwitzerlandGermanyTurkey

Hungary Union of Soviet
Italy Socialist Republics
Japan United Kingdom

DIMENSIONS OF LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR

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INTRODUCTION

The problem of mounting devices, that is switches, circuit-breakers, relays, contactors, terminal blocks, etc., within an assembly in such a manner that they may be easily initially fixed, removed or rearranged, has been studied during the last few years by an increasing number of groups of manufacturers and users.

A solution which has already found a degree of "natural standardization" in a number of highly industrialized countries is rail mounting, for example steel or aluminium sections onto which is attached any device of any group within a certain physical size.

Using the rail method, initial fixing, removal or rearrangement of components within an assembly is readily carried out.

Two methods are used for fixing a device on a rail:

- either directly by clipping on the rail (this method is particularly suitable for "Top hat" rails or "G" rails);
- or by means of a variety of accessories such as sliding nuts and hooked or "T" headed bolts (this method is particularly suitable for "C" rails).

In the case of "G" rails, the first of these methods has been mainly used for mounting terminal blocks which snap in and out of position and are clamped in rows by adjustable end stops.

One or more rails can be used as necessary for fixing devices.

The rail may take the form of a standard section as an integral part of the enclosure.

Rails are also available of composite sections which combine, for example, "Top hat" and "C" section sizes thus accepting devices with various arrangements for mounting.

Since rail mounting may affect the performance of equipment, it may be advisable for equipment manufacturers to give guidance in their literature on the suitability for this form of mounting.

1. Scope

This standard specifies dimensional and functional requirements for the compatible mounting of varied electrical devices on some types of rails in switchgear and controlgear assemblies.

Appendices deal with specific steel mounting rails satisfying the requirements of this standard, and give additional dimensional data and loading requirements applicable to such rails.

2. Object

The object of this standard is to specify those dimensions which are critical for the correct design of rails and equipment. The following sections are covered by this standard:

- "Top hat" section;
- "C" section;
- "G" section.

Notes 1. — The detailed design and material of specific steel rails is given in the appendices.

- 2. Mounting compatibility does not imply functional interchangeability.
- 3. Other types of rails and relevant mountings which are not covered by this standard can be used.

3. Functional requirements

