

SLOVENSKI STANDARD

SIST EN 60439-3:1998

01-februar-1998

Sestavi nizkonapetostnih stikalnih in krmilnih naprav – 3. del: Posebne zahteve za sestave nizkonapetostnih stikalnih naprav, predvidene za vgraditev na mestih, do katerih imajo dostop nestrokovne osebe – Razdelilniki

Low-voltage switchgear and controlgear assemblies -- Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards

Niederspannung-Schaltgerätekombinationen -- Teil 3: Besondere Anforderungen an Niederspannung-Schaltgerätekombinationen zu deren Bedienung Laien Zutritt haben - Installationsverteiler

Ensembles d'appareillage à basse tension -- Partie 3: Règles particulières pour ensembles d'appareillage à basse tension destinés à être installés en des lieux accessibles à des personnes non qualifiées pendant leur utilisation - Tableaux de répartition

Ta slovenski standard je istoveten z: EN 60439-3:1991

ICS:

29.130.20	Nizkonapetostne stikalne in krmilne naprave	Low voltage switchgear and controlgear
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EUROPEAN STANDARD

EN 60439-3

NORME EUROPEENNE

EUROPÄISCHE NORM

February 1991

UDC 621.316.54.027.2:621.315.67

Descriptors: Low voltage switchgear, assemblies, unskilled persons

ENGLISH VERSION

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES
PART 3: PARTICULAR REQUIREMENTS FOR LOW-VOLTAGE
SWITCHGEAR AND CONTROLGEAR ASSEMBLIES INTENDED TO
BE INSTALLED IN PLACES WHERE UNSKILLED PERSONS
HAVE ACCESS FOR THEIR USE - DISTRIBUTION BOARDS
(IEC 439-3:1991, modified)

Ensembles d'appareillage à basse
tension

Troisième partie: Règles
particulières pour ensembles
d'appareillage BT destinés à être
installés en des lieux accessibles à
des personnes non qualifiées pendant
leur utilisation

Tableaux de répartition
(CEI 439-3:1990, modifiée)

Niederspannungs-Schaltgeräte-
kombinationen

Teil 3: Besondere Anforderungen an
Niederspannung-Schaltgeräte-
kombinationen zu deren Bedienung
Laien Zutritt haben

Installationsverteiler

(IEC 439-3:1990, modifiziert)

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Up-to-date lists and bibliographical references concerning such national standards
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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 the decision taken by CENELEC Technical Committee TC 17D at their Brussels meeting in October 1989, the International Standard IEC 439-3:1990, together with the common modifications prepared by CLC/TC 17D, was submitted to the CENELEC Unique Acceptance Procedure (UAP) in April 1990 for acceptance as a European Standard.

The text of the draft was approved by CENELEC as EN 60439-3 on 10 December 1990.

The following dates were fixed:

- latest date of publication of
an identical national standard (dop) 1991-12-01
- latest date of withdrawal of
conflicting national standards (dow) 1991-12-01

For products which have complied with the relevant national standard before 1991-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1996-12-01.

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The text of the International Standard IEC 439-3:1990 was approved by CENELEC as a European Standard with agreed common modifications as given below.

COMMON MODIFICATIONS

7.6.1 Replace the text by:

Fuses for outgoing circuits shall comply with the general requirements of IEC 269-3 or with a relevant National Standard where it is an established practice for such use.

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC
439-3**

Première édition
First edition
1990-12

Ensembles d'appareillage à basse tension

Troisième partie:

**Règles particulières pour ensembles
d'appareillage BT destinés à être installés
en des lieux accessibles à des personnes
non qualifiées pendant leur utilisation –
Tableaux de répartition**

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**Low-voltage switchgear and controlgear
assemblies**

Part 3:

**Particular requirements for low-voltage
switchgear and controlgear assemblies
intended to be installed in places where
unskilled persons have access for their use –
Distribution boards**

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International Electrotechnical Commission
Международная Электротехническая Комиссия

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES

Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards

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.
- 4) The IEC has not laid down any procedure concerning marking as an indication of approval and has no responsibility when an item of equipment is declared to comply with one of its recommendations.

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This standard has been prepared by Sub-Committee 17D: Low-voltage switchgear and controlgear assemblies, of IEC Technical Committee No. 17: Switchgear and controlgear.

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

Six Months' Rule	Report on Voting
17D(CO)36	17D(CO)40

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

Distribution boards shall comply with all requirements of IEC 439-1 (1985): Low-voltage switchgear and controlgear assemblies, Part 1: Requirements for type-tested and partially type-tested assemblies, if not otherwise indicated hereinafter and shall also comply with the particular requirements contained in this publication.

The clauses of this standard supplement, modify or replace clauses in IEC 439-1 (1985).

Where there is no corresponding clause or sub-clause in this standard, the clause or sub-clause of the main document applies without modification.

In view of the fact that this publication should be read in conjunction with IEC 439-1, the numbering of its clauses and sub-clauses correspond to the latter.

The following IEC publications are quoted in this standard:

Publications Nos. 269-3 (1987): Low-voltage fuses, Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications).

529 (1989): Degrees of protection provided by enclosures (IP Code).

695-2-1 (1980): Fire hazard testing, Part 2: Test methods - Glow-wire test and guidance.

Other publication quoted:

ISO 4046 (1978): Paper, board, pulp and related terms - Vocabulary.

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LOW-VOLTAGE SWITCHGEAR AND CONTROLGEAR ASSEMBLIES

Part 3: Particular requirements for low-voltage switchgear and controlgear assemblies intended to be installed in places where unskilled persons have access for their use - Distribution boards

1 General

1.1 Scope

Replace the second note by:

This standard gives supplementary requirements for such enclosed distribution boards (DBU), which are stationary, type tested assemblies (TTA) for indoor use, containing protective devices and intended for use either in domestic (household) applications or in other places where unskilled persons have access for their use. Control and/or signalling devices may also be included. They are for use on a.c., with a nominal voltage to earth not exceeding 300 V. The outgoing circuits contain short-circuit protective devices, each having a rated current not exceeding 125 A with a total incoming load current not exceeding 250 A.

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NOTE - The nominal voltage to earth in an IT system is taken as the nominal voltage of the system.

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Unskilled persons normally have access to these assemblies, e.g. for switching operations and for replacing fuse-links.

Requirements for assemblies for outdoor use are under consideration.

2 Definitions

2.1 General definitions

2.1.1.2 Partially type tested assembly (PTTA)

Not applicable.

2.1.9 Test situation

Not applicable.

2.1.10 Distribution board

An assembly containing switching or protective devices (e.g. fuses or miniature circuit-breakers) associated with one or more outgoing circuits fed from one or more incoming circuits, together with terminals for the neutral and protective circuit conductors. It may also include signalling and other control devices. Means of isolation may be included in the board or may be provided separately.

2.2 Definitions concerning constructional units of assemblies

2.2.8 Withdrawable part

Not applicable.

2.2.9 Connected position

The position of a removable part when it is fully connected for its normally intended function.

2.2.10 Test position

Not applicable.

2.2.11 Disconnected position

Not applicable.

2.3 Definitions concerning the external design of assemblies

2.3.1 Open-type assembly

Not applicable.

2.3.2 Dead front assembly

Not applicable.

2.3.3.3 Desk-type assembly

Not applicable.

2.3.4 Busbar trunking system (busway)

Not applicable.

2.4 Definitions concerning the structural parts of assemblies

2.4.15 Parts for aesthetic purposes

Parts which are provided only to improve the appearance of an assembly and are not intended to give any electrical or mechanical protection.

2.5 Definitions concerning the conditions of installation of assemblies

2.5.4 Movable assembly

Not applicable.

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2.7 Gangways within assemblies

Not applicable.

3 Classification of assemblies

Delete:

- the conditions of installation with respect to mobility (see 2.5.3 and 2.5.4).

4 Electrical characteristics of assemblies

4.2 Rated current (of a circuit of an assembly)

Renumber existing 4.2 to read 4.2.1.

Add a new sub-clause:

4.2.2 Rated current of a distribution board

The rated current of a distribution board is that stated by the manufacturer as the rated current of the incoming circuit or circuits. If there is more than one incoming circuit the rated current of a distribution board is the arithmetic sum of the rated currents of all incoming circuits that are intended to be used simultaneously. This current or currents shall be carried without the temperature rise of the several parts exceeding the limits specified in 7.3 when tested according to 8.2.1.

4.8 Rated diversity factor

Replace the note and Table 1 by the following:

For the purpose of this standard the number of main circuits is the number of outgoing circuits connected to each supply phase. In the absence of information concerning the actual currents, the conventional values given in Table 1 may be used.

Table 1

Number of main circuits	Diversity factor
2 and 3	0.8
4 and 5	0.7
6 to 9 inclusive	0.6
10 (and above)	0.5

Delete the last sentence of 4.8.