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**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 – Dopolnilo A2**

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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EUROPEAN STANDARD

**EN 60439-3/A2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2001

ICS 29.130.20

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 60439-3:1990/A2:2001)

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  
(CEI 60439-3:1990/A2:2001)

Niederspannung-  
Schaltgerätekombinationen  
Teil 3: Besondere Anforderungen an  
Niederspannung-  
Schaltgerätekombinationen zu deren  
Bedienung Laien Zutritt haben -  
Installationsverteiler  
(IEC 60439-3:1990/A2:2001)

<https://standards.iteh.ai/catalog/standards/sist/58b8b0be-flb5-4eff-b903->

This amendment A2 modifies the European Standard EN 60439-3:1991; it was approved by CENELEC on 2001-05-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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, Czech Republic, 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

The text of document 17D/239/FDIS, future amendment 2 to IEC 60439-3:1990, prepared by SC 17D, Low-voltage switchgear and controlgear assemblies, of IEC TC 17, Switchgear and controlgear, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as amendment A2 to EN 60439-3:1991 on 2001-05-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented  
at national level by publication of an identical  
national standard or by endorsement (dop) 2002-02-01
- latest date by which the national standards conflicting  
with the amendment have to be withdrawn (dow) 2004-05-01

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## Endorsement notice

The text of amendment 2:2001 to the International Standard IEC 60439-3:1990 was approved by CENELEC as an amendment to the European Standard without any modification.

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NORME  
INTERNATIONALE  
INTERNATIONAL  
STANDARD

CEI  
IEC

60439-3

1990

AMENDEMENT 2  
AMENDMENT 2  
2001-02

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Amendement 2

**Ensembles d'appareillage à basse tension –**

**Partie 3:  
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**

[SIST EN 60439-3:1998/A2:2002](https://standards.iteh.ai/catalog/standards/sist/58b8b0be-flb5-4eff-b903-amendment/2-en-60439-3-1998-a2-2002)

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[Amendment 2-en-60439-3-1998-a2-2002](https://standards.iteh.ai/catalog/standards/sist/58b8b0be-flb5-4eff-b903-amendment/2-en-60439-3-1998-a2-2002)

**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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Commission Electrotechnique Internationale  
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For price, see current catalogue*

## FOREWORD

This amendment has been prepared by subcommittee 17D: Low-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

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

FDIS	Report on voting
17D/239/FDIS	17D/243/RVD

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

The committee has decided that the contents of the base publication and its amendments will remain unchanged until 2004. At this date, the publication will be

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

## INTRODUCTION

The clauses of the document supplement, modify or replace the corresponding clauses in IEC 60439-3 – First edition (1990): 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.

Where there is no corresponding clause or subclause in this amendment, the clause or subclause of IEC 60439-3:1990 applies without modifications.

Page 5

### FOREWORD

*Replace, in the ultimate and penultimate paragraphs of page 5, the reference “IEC 439-1 (1985)” by “IEC 60439-1 (1999)”.*

*Replace, in the penultimate paragraph of page 5, the title of Part 1 by the following correct title:*

Part 1: Type-tested and partially type-tested assemblies.

Page 9

### 2 Definitions

*Renumber subclause “2.1.10” as “2.1.12”.*

Page 11

### 2.4 Definitions concerning the structural parts of assemblies

*Renumber subclause “2.4.15” as “2.4.18”.*

Page 13

### 3 Classification of assemblies

*Add to the list of deletions:*

- the form of internal separation (see 7.7);
- the types of electrical connections of functional units (see 7.11).

#### 4.8 Rated diversity factor

*Renumber subclause "4.8" as "4.7".*

*Delete the last line.*

Page 15

### 5.1 Nameplates

*Replace "Information specified under items a), b), c), d), e), l) and r)" by "Information specified under items a), b), c), d), e), and l)".*

*Delete "In the fourth line replace q) by r)".*

*Add after item l), r) Not applicable.*

*s) Not applicable.*

*Replace "r) rated current of distribution board (see 4.2.2)" by*

*u) rated current of distribution board. The rated current of the distribution board shall be marked on the ASSEMBLY or the nameplate.*

### 5.2 Markings

*Delete this subclause.*

## 6 Service conditions

*Add:*

#### 6.1.2.3 Pollution degree

*Replace the last paragraph by:*

"Standard pollution degree for an ASSEMBLY to IEC 60439-3:

ASSEMBLIES to this standard are generally for use in a pollution degree 2 environment. Other pollution degrees may apply, depending upon particular applications or the micro-environment.

NOTE The pollution degree of the micro-environment may be influenced by installation in an enclosure."

### 7.1.1 General

Replace, in the final paragraph of page 15, the references “8.2.11” by “8.2.12” and “8.2.12” by “8.2.13”.

Replace, on page 17, in the first paragraph, “8.2.10” by “8.2.11”.

Replace, on page 17, in the second paragraph, “8.2.9” by “8.2.10”.

Page 17

Add, after 7.2.1.1, the following subclauses:

**7.2.1.2** Replace IP2X by IP2XC.

**7.2.1.3** Not applicable.

### 7.2.1.5

Replace “7.2.1.5 Not applicable.” by “7.2.1.6 Not applicable.”.

Page 19

### 7.4.2.2.3 a)

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Replace the text of this subclause by:

**7.4.2.2.3 a)** Replace the existing text by the following:  
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a) Removal or opening shall necessitate the use of a key or a tool.

Where any parts inside the ASSEMBLY need occasional handling (such as replacement of a lamp or a fuse-link), an obstacle shall be provided so as to prevent persons from coming unintentionally into contact with live parts not protected by another protective measure. However, this obstacle need not prevent persons from coming intentionally into contact by bypassing this obstacle with the hand. It shall not be possible to remove the obstacle, except through the use of a key or tool.

Live parts, the voltage of which fulfills the condition for SELV (safety extra-low voltage), need not be covered.

Add:

**7.4.2.2.3 c)** and **7.4.2.2.3 d)** are not applicable.

### 7.4.3.2.2 Protection by total insulation

Replace the existing text of 7.4.3.2.2 d) by the following new text:

**7.4.3.2.2 d)** Delete, in the first paragraph, the words “The enclosure shall give at least the degree of protection IP3XD\*.” and the corresponding footnote.



## 8 Test specifications

Replace the existing subclause 8.1 with the following text:

8.1 Replace Table 7 by the following:

**Table 7 – List of type tests to be performed**

Characteristics to be checked		Sub-clause	Type test according to 8.1.1	Test order in sequence		
				A	B	C
a)	Temperature rise limits	8.2.1	Verification of temperature rise limits	3*		
b)	Dielectric properties	8.2.2	Verification of dielectric properties	4		2
c)	Short circuit withstand strength	8.2.3	Verification of short circuit withstand strength			1*
d)	Effectiveness of the protective circuit	8.2.4				3*
	Effective connection between the exposed conductive parts of the ASSEMBLY and the protective circuit	8.2.4.1	Verification of the effective connection between the exposed conductive parts of the ASSEMBLY and the protective circuit by inspection or by resistance measurement			
	Short-circuit withstand strength of the protective circuit	8.2.4.2	Verification of short-circuit withstand strength of the protective circuit			
e)	Clearances and creepage distances	8.2.5	Verification of clearances and creepage distances		2*	
f)	Mechanical operation	8.2.6	Verification of mechanical operation		1	
g)	Degree of protection	8.2.7	Verification of degree of protection	6*		
h)	Construction and marking	8.2.9	Verification of construction and marking	1*		
i)	Impact strength	8.2.10	Verification of impact strength	5		
j)	Resistance to rusting and to humidity	8.2.11 8.2.14	Verification of resistance to rusting and to humidity			4
k)	Resistance of insulating materials to heat	8.2.12	Verification of resistance of insulating materials to heat		3	
l)	Resistance of insulating materials to abnormal heat and to fire	8.2.13	Verification of resistance of insulating materials to abnormal heat and fire due to internal electrical effects			5
m)	Mechanical strength of fastening means of enclosures	8.2.15	Verification of mechanical strength of fastening means of enclosures	2		
* No failures by any samples.						