

**Madalpingelised aparaadikoosted. Osa 3: Erinõuded
madalpingelistele lülitusaparaadikoostetele, millele
pääsevad kasutamiseks juurde tavaisikud. Jaotuskilbid
KONSOLIDEERITUD TEKST**

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 to their use -
Distribution boards CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 60439-3:2007 sisaldab Euroopa standardi EN 60439-3:1991+A1:1994+A2:2001+AC:2009 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 16.04.2001 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 28.02.1991. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 60439-3:2007 consists of the English text of the European standard EN 60439-3:1991+A1:1994+A2:2001+AC:2009. This standard is ratified with the order of Estonian Centre for Standardisation dated 16.04.2001 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation. Date of Availability of the European standard text 28.02.1991. The standard is available from Estonian standardisation organisation.
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ICS 29.130.20

aparaadikooste, jaotuskilbid, lülitusaparaat, madalpinge, tüüpne kooste

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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)

This European Standard was approved by CENELEC on 1990-12-10.

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

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.

ENDORSEMENT NOTICE

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.

CENELEC

Central Secretariat

Corrigendum to EN 60439-3:1991

English version

Add:

Annex ZA (informative)

A-deviations

A-deviation: National deviation due to regulations, the alteration of which is for the time being outside the competence of the CEN/CENELEC member.

This European Standard falls under Directive 73/23/EEC.

NOTE (from CEN/CENELEC IR Part 2, 3.1.9): Where standards fall under EC Directives, it is the view of the Commission of the European Communities (OJ No C 59; 1982-03-09) that the effect of the decision of the Court of Justice in case 815/79 Cremonini/Vrankovich (European Court Reports 1980, p. 3583) is that compliance with A-deviations is no longer mandatory and that the free movement of products complying with such a standard should not be restricted except under the safeguard procedure provided for in the relevant Directive.

A-deviations in an EFTA-country are **valid instead** of the relevant provisions of the European Standard in that country until they have been removed.

Clause No.	A Deviation
	United Kingdom The Electricity Supply Regulations 1988 (S.I 1988 No. 1057) require electricity suppliers to state the maximum prospective short circuit current at the supply terminals. This information is given in Electricity Association publication P25. To meet this condition the following requirements are to be incorporated: Additional Definition:
2.1.11	Customer Distribution Board : An integrated assembly, for the control and distribution of electrical energy, principally in a household or similar premise, incorporating manual means of double-pole isolation on the incoming circuit(s), with polarity observed throughout. They are designed for use exclusively with specific protective devices on the outgoing circuits, and type-tested for use when energized through the specified 100 amp fuse. Note: Generally known in the UK as a Consumer Unit.
8.2	Additional Test 8.2.3 Verification of the Assembly Capability to withstand a 16 kA fault The following test is applied to customer distribution boards as covered by the definition in Clause 2.1.11. 8.2.3.1 Test arrangements. The Customer Distribution Board shall be set up as in normal use. It will be sufficient to test a single functional use if the remaining functional units are constructed in the same way and cannot affect the test result.

Clause No.	A Deviation																				
	8.2.3.2 <u>Short-circuit test procedure.</u> The following test procedure is intended to verify the performance of the incoming device and its connections, and any other item in the Consumer Distribution Board not separately rated in excess of 16 kA, when the complete Customer Distribution Board is protected by a fuse-link complying with BS 1361 :1971. This type test shall be deemed to cover the use of any other short-circuit protective device having a Joule integral (I^2t) and cut-off current not exceeding the values given in item (b) below, at the rated voltage, prospective current and power factor. a) It shall be verified that the representative samples of the final circuit protective devices used for the test comply with tables 101 and 102 where applicable b) The reference fuse shall be a 100 A fuse-link complying with type II of BS 1361 : 1971. Details of the fuse-links used for the test, i.e. manufacturer's name, reference, rated current, rated voltage and pre-arcing I^2t, shall be given in the test report c) The final circuit protective device shall be mounted as in service in the manufacturer's smallest recommended enclosure complying with Part 13 of BS 5486 (metal if offered in the catalogue). The connection on the load side of the protective device under test shall be in accordance with table 103 and 0.6 ± 0.05 m in length. d) The test circuit shall be connected as shown in figure 101. The relative positions of the closing switch, inductive reactor and resistor are not obligatory, but the resistor shall be in series with the master circuit-breaker. e) The impedance used for limiting the prospective short-circuit fault current to the required value shall be inserted on the supply side of the circuit. Resistors shall be connected between line and neutral, after the impedances for adjusting the prospective current, so as to draw current of 10 A per phase at rated voltage from the supply. If an air-cored inductor is used, a resistor taking approximately 1% of the current through the inductor shall be connected in parallel with it. A lower value of shunt current may be used with the consent of the manufacturer <table border="1"><caption>Table 101:- Requirements for final circuit protective devices: Miniature Circuit Breakers complying with BS 3871 Part 1</caption><thead><tr><th>Circuit Breaker Type</th><th>Time h</th><th>Test Current Rated Current</th><th>Result</th></tr></thead><tbody><tr><td rowspan="3">1,2,3,4,</td><td>2</td><td>1.0</td><td>No Trip</td></tr><tr><td rowspan="2">1</td><td>1.5 (rating <10A)</td><td>Trip</td></tr><tr><td>1.35 (rating >10A)</td><td>Trip</td></tr><tr><td rowspan="2">B.C.D</td><td>1</td><td>1.13</td><td>No Trip</td></tr><tr><td>1*</td><td>1.45</td><td>Trip</td></tr></tbody></table> Notes:- Test to be conducted at specified reference ambient temperature. * This test shall commence within 5 seconds of the end of the test at 1.13 In.	Circuit Breaker Type	Time h	Test Current Rated Current	Result	1,2,3,4,	2	1.0	No Trip	1	1.5 (rating <10A)	Trip	1.35 (rating >10A)	Trip	B.C.D	1	1.13	No Trip	1*	1.45	Trip
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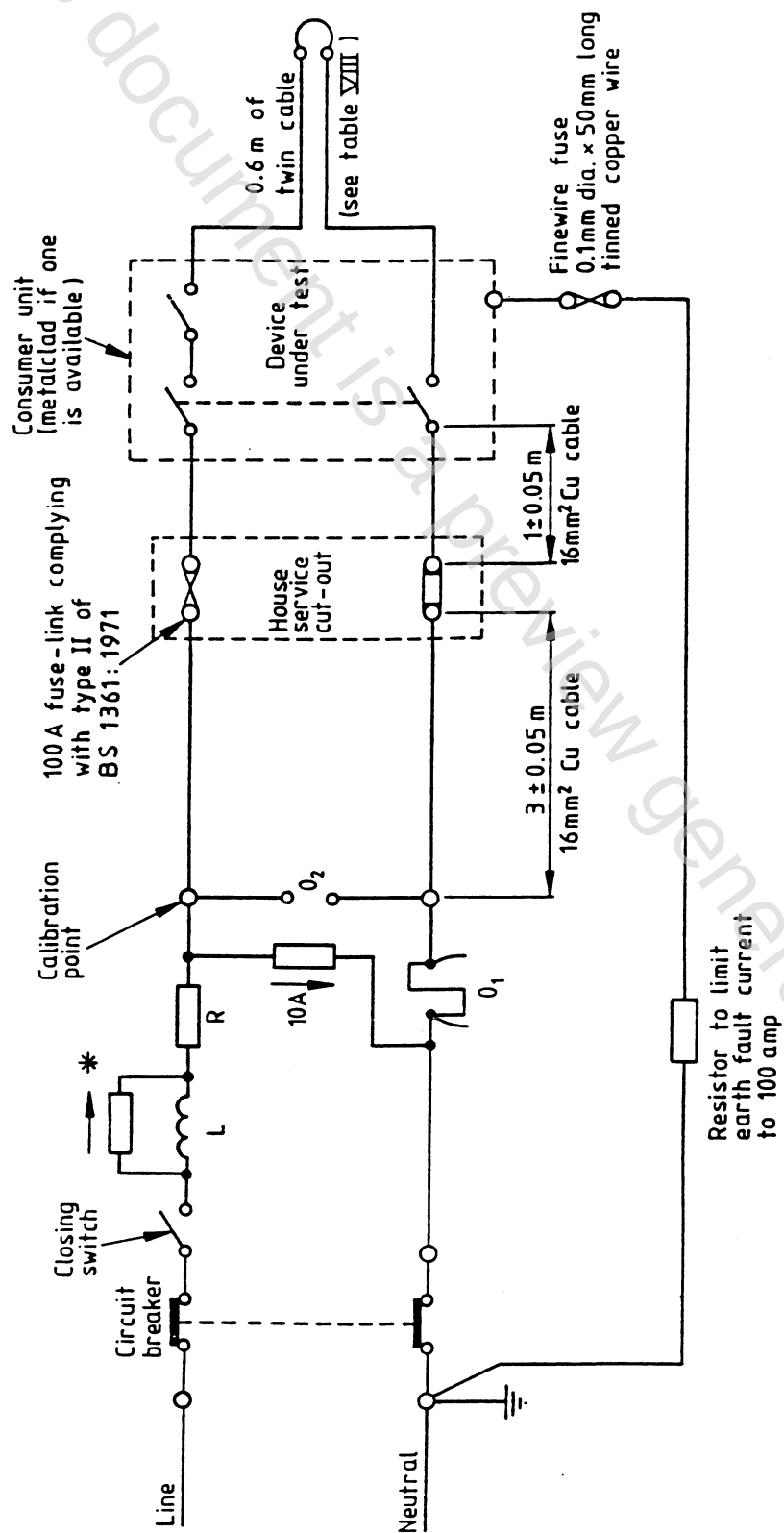
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	<table><tr><td colspan="4">Table 102. Requirements for final circuit protective devices : Semi-enclosed fuses complying with BS 3036 and cartridge fuses complying with BS 1361, type 1</td></tr><tr><td>Fuse rating</td><td>Time</td><td>Test current Rated current</td><td>Result</td></tr><tr><td>A</td><td>h</td><td></td><td></td></tr><tr><td>5(6)</td><td>0.75</td><td>)</td><td>)</td></tr><tr><td>15(16)</td><td>1.0</td><td>)</td><td>)</td></tr><tr><td>20</td><td>1.0</td><td>) 1.0</td><td>) Fuse intact</td></tr><tr><td>30(32)</td><td>1.25</td><td>)</td><td>)</td></tr><tr><td>45</td><td>1.5</td><td>)</td><td>)</td></tr><tr><td>5(6)</td><td>0.75</td><td>)</td><td>)</td></tr><tr><td>15(16)</td><td>1.0</td><td>)</td><td>)</td></tr><tr><td>20</td><td>1.0</td><td>) 2.0</td><td>) Fuse melted</td></tr><tr><td>30(32)</td><td>1.25</td><td>)</td><td>)</td></tr><tr><td>45</td><td>1.5</td><td>)</td><td>)</td></tr></table> <table><tr><td colspan="2">Table 103. Cross sections of copper conductors on load side of protective device under test</td></tr><tr><td>Device rating</td><td>Conductor</td></tr><tr><td>A</td><td>mm²</td></tr><tr><td><6</td><td>1.0</td></tr><tr><td>>6 <10</td><td>1.5</td></tr><tr><td>>10 <20</td><td>2.5</td></tr><tr><td>>20 <32</td><td>6.0</td></tr><tr><td>>32 <40</td><td>10.0</td></tr></table>	Table 102. Requirements for final circuit protective devices : Semi-enclosed fuses complying with BS 3036 and cartridge fuses complying with BS 1361, type 1				Fuse rating	Time	Test current Rated current	Result	A	h			5(6)	0.75	)	)	15(16)	1.0	)	)	20	1.0	) 1.0	) Fuse intact	30(32)	1.25	)	)	45	1.5	)	)	5(6)	0.75	)	)	15(16)	1.0	)	)	20	1.0	) 2.0	) Fuse melted	30(32)	1.25	)	)	45	1.5	)	)	Table 103. Cross sections of copper conductors on load side of protective device under test		Device rating	Conductor	A	mm ²	<6	1.0	>6 <10	1.5	>10 <20	2.5	>20 <32	6.0	>32 <40	10.0
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	8.2.3.3 <u>Circuit conditions.</u> The applied voltage shall be not less than 100% and not more than 110% of the rated single phase voltage of the final circuit protective device. The recovery voltage measured two cycles after operation shall be not less than 95% nor more than 105% of the rated single phase voltage of the final circuit protective device, and shall be maintained for at least 30 s after the interruption of the short-circuit current. The higher limit of 105% may be exceeded with the consent of the manufacturer. The value of the prospective short-circuit current shall be 16 kA - 0% at a power factor of 0.6 ± 0.05 determined from a calibration oscillogram taken with a link of negligible impedance positioned as shown in figure 101. All parts of the equipment normally earthed in service, including its enclosure, shall be insulated from earth, but shall be connected to the neutral of the supply or to a substantially inductive artificial neutral, permitting a prospective fault current of at least 100 A. This connection shall include a reliable device, such as a fuse consisting of a copper wire of 0.1 mm diameter and not less than 50 mm in length, for the detection of the fault current and, if necessary a resistor to limit the value of the prospective fault current to approximately 100 A.																																																																				

Clause No.	A Deviation
	8.2.3.4 <u>Test sequence.</u> The Customer Distribution Board shall be subject to the following two tests A and B with the outgoing way fitted with a final circuit protective device of the maximum thermal current rating. If the final circuit protective devices have a short-circuit rating less than 16 kA, two further tests A and B shall be carried out with a device of the minimum thermal rating fitted. In addition, if the Customer Distribution Board is designed to accept different types or ranges of outgoing devices, each type shall be further tested separately. The two tests are as follows: a) <u>Test A.</u> With the circuit connected as described above, with all fuses in place and all circuit-breakers closed, the test voltage is applied with the point-on-wave controlled to provide initiation of the fault at between 00 and 200 (electrical) on the rising voltage. b) <u>Test B.</u> A further short-circuit operation shall be applied after suitable preparation as indicated in table dependent on which of the alternative results of test A is achieved. If circuit-breakers are included in the Customer Distribution Board, the test shall be applied by reclosing a circuit-breaker with the test circuit energized. If fuses are used, the test shall be as in Test A. During the tests cheesecloth shall be placed on the outside of the enclosure at all openings, e.g. arc vents and handles. There shall be no ignition of the cheesecloth. The cheesecloth shall be clean and dry bleached plain cotton of approximately 30 g to 40 g per square metre. When placed into position the cheesecloth shall be folded loosely in such a manner that cut and torn edges will not be exposed directly to the arc or flash. Ignition of the cheesecloth is considered to have occurred when a flame is visible. Smouldering is not considered to be evidence of ignition. The cheesecloth may be changed following each test B. Details of the I_{at} let through by the combination of devices during the test shall be given in the test report. A new Customer Distribution Board of the same design may be used for each of the two test sequences.

Table 104. Preparation for test B

		Result of test A		
Reference fuse complying with BS 1361		Intact	Blown	
Protective device		Operated		Not operated
Final circuit preparation for test B	MCB complying with BS 3871 or RCCB complying with BS 4293	Nil	Replace reference fuse	Replace reference fuse, open circuit breaker
	Fuse complying with BS 3036	Rewire test fuse	Replace reference fuse. Rewire test fuse	Replace reference fuse
	Fuse complying with BS 1361	Replace test fuse	—	—

Clause No.	A Deviation
	8.2.3.5 <u>Conditions after test.</u> Where the incoming switch is a protective device, e.g. miniature circuit-breaker (rccb), the test report shall state which of the protective devices operated during the test, i.e. the incoming and/or outgoing devices. The earth fault indicating device shall be intact and the degree of protection of the enclosure shall not be impaired. The insulation resistance (a) shall be measured within 3 min of the conclusion of the series of tests. The insulation resistance for (b) and (c) shall be measured as soon as practical after measurement of (a), the times of measurement of (b) and (c) being recorded in the test report. The values shall be measured at 500 V d.c. and shall not be less than the following: a) 0.10 MΩ between the final circuit protective device incoming terminal and the corresponding outgoing terminal, with the isolating device open and with the blown fuse in position or the mcb opened, whichever is applicable. b) 0.25 MΩ between the final circuit protective device terminals and earth, with the final circuit fuse rewired, the final circuit cartridge fuse replaced, or the mcb reclosed, whichever is applicable, and with the incoming isolating device open. c) 0.25 MΩ between the final circuit protective device incoming terminals and any other metal parts which are unearthed and exposed in service. The condition of the incoming isolating device shall comply with its produce specification with regard to isolating properties. The conductors shall not be deformed such that the clearance and creepage distances specified in 7.1.2 are impaired. There shall be no loosening of parts used for the connection of the conductors. Where an rccb is included in the Customer Distribution Board its operation shall be checked. With the rccb fully closed and connected to a supply at 0.85 times rated voltage $\pm$ 5% the test device shall be operated. The rccb shall open.



* Regulator to take approximately 1 % of the current through the inductor.
NOTE. O_1 and O_2 are oscillograph connections.

Figure 101. Test circuit to prove coordination of characteristics

Corrigendum 2 to EN 60439-3:1991

English version

Annex ZA (see corrigendum April 1994)

Replace the reference of the A-deviation for the United Kingdom by:

UK Electricity, Safety and Quality Regulations SI 2002 N° 2965

Corrigendum 2 à la EN 60439-3:1991

Version française

Annexe ZA (voir corrigendum avril 1994)

Remplacer la référence de la divergence A pour la Grande Bretagne par:

UK Electricity, Safety and Quality Regulations SI 2002 N° 2965

Corrigendum 2 zu EN 60439-3:1991

Deutsche Fassung

Anhang ZA (siehe Corrigendum April 1994)

Die Referenz der A-Abweichung für das Vereinigte Königreich ist wie folgt zu **ersetzen**:

UK Electricity, Safety and Quality Regulations SI 2002 N° 2965

**NORME
INTERNATIONALE
INTERNATIONAL
STANDARD**

**CEI
IEC**

60439-3

**Edition 1.2
2001-05**

Edition 1:1990 consolidée par les amendements 1:1993 et 2:2001
Edition 1:1990 consolidated with amendments 1:1993 and 2:2001

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
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Tableaux de répartition**

**Low-voltage switchgear and controlgear
assemblies –**

Part 3:

**Particular requirements for low-voltage
switchgear and controlgear assemblies intended
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Distribution boards**



Numéro de référence
Reference number
CEI/IEC 60439-3:1990+A1:1993+A2:2001

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**NORME
INTERNATIONALE
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60439-3

Edition 1.2

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Edition 1:1990 consolidée par les amendements 1:1993 et 2:2001
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International Electrotechnical Commission
Telefax: +41 22 919 0300

3, rue de Varembeé Geneva, Switzerland
e-mail: inmail@iec.ch IEC web site: <http://www.iec.ch>



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International Electrotechnical Commission
Международная Электротехническая Комиссия

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

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

AVANT-PROPOS

- 1) La CEI (Commission Électrotechnique Internationale) est une organisation mondiale de normalisation composée de l'ensemble des comités électrotechniques nationaux (Comités nationaux de la CEI). La CEI a pour objet de favoriser la coopération internationale pour toutes les questions de normalisation dans les domaines de l'électricité et de l'électronique. A cet effet, la CEI, entre autres activités, publie des Normes internationales. Leur élaboration est confiée à des comités d'études, aux travaux desquels tout Comité national intéressé par le sujet traité peut participer. Les organisations internationales, gouvernementales et non gouvernementales, en liaison avec la CEI, participent également aux travaux. La CEI collabore étroitement avec l'Organisation Internationale de Normalisation (ISO), selon des conditions fixées par accord entre les deux organisations.
- 2) Les décisions ou accords officiels de la CEI concernant les questions techniques représentent, dans la mesure du possible, un accord international sur les sujets étudiés, étant donné que les Comités nationaux intéressés sont représentés dans chaque comité d'études.
- 3) Les documents produits se présentent sous la forme de recommandations internationales. Ils sont publiés comme normes, spécifications techniques, rapports techniques ou guides et agréés comme tels par les Comités nationaux.
- 4) Dans le but d'encourager l'unification internationale, les Comités nationaux de la CEI s'engagent à appliquer de façon transparente, dans toute la mesure possible, les Normes internationales de la CEI dans leurs normes nationales et régionales. Toute divergence entre la norme de la CEI et la norme nationale ou régionale correspondante doit être indiquée en termes clairs dans cette dernière.
- 5) La CEI n'a fixé aucune procédure concernant le marquage comme indication d'approbation et sa responsabilité n'est pas engagée quand un matériel est déclaré conforme à l'une de ses normes.
- 6) L'attention est attirée sur le fait que certains des éléments de la présente Norme internationale peuvent faire l'objet de droits de propriété intellectuelle ou de droits analogues. La CEI ne saurait être tenue pour responsable de ne pas avoir identifié de tels droits de propriété et de ne pas avoir signalé leur existence.

La Norme internationale CEI 60493-3 a été établie par le sous-comité 17D: Ensemble d'appareillage à basse tension, du comité d'études 17 de la CEI: Appareillage.

La présente version consolidée de la CEI 60439-3 comprend la première édition (1990) [documents 17D(BC)36 et 17D(BC)40], son amendement 1 (1993) [documents 17D(BC)53 et 17D(BC)58] et son amendement 2 (2001) [documents 17D/239/FDIS et 17D/243/RVD].

Le contenu technique de cette version consolidée est donc identique à celui de l'édition de base et à ses amendements; cette version a été préparée par commodité pour l'utilisateur.

Elle porte le numéro d'édition 1.2.

Une ligne verticale dans la marge indique où la publication de base a été modifiée par les amendements 1 et 2.

Sauf indication contraire dans le texte qui suit, les tableaux de répartition doivent répondre à l'ensemble des règles énoncées dans la CEI 60439-1 (1999): *Ensembles d'appareillage à basse tension, Première partie: Règles pour les ensembles de série et les ensembles dérivés de série*, ainsi qu'aux règles particulières fixées dans la présente publication.

Les articles de la présente norme complètent, modifient ou remplacent les articles correspondants de la CEI 60439-1 (1999).

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 IEC (International Electrotechnical Commission) is a worldwide organization for standardization comprising all national electrotechnical committees (IEC National Committees). The object of the IEC is to promote international co-operation on all questions concerning standardization in the electrical and electronic fields. To this end and in addition to other activities, the IEC publishes International Standards. Their preparation is entrusted to technical committees; any IEC National Committee interested in the subject dealt with may participate in this preparatory work. International, governmental and non-governmental organizations liaising with the IEC also participate in this preparation. The IEC collaborates closely with the International Organization for Standardization (ISO) in accordance with conditions determined by agreement between the two organizations.
- 2) The formal decisions or agreements of the IEC on technical matters express, as nearly as possible, an international consensus of opinion on the relevant subjects since each technical committee has representation from all interested National Committees.
- 3) The documents produced have the form of recommendations for international use and are published in the form of standards, technical specifications, technical reports or guides and they are accepted by the National Committees in that sense.
- 4) In order to promote international unification, IEC National Committees undertake to apply IEC International Standards transparently to the maximum extent possible in their national and regional standards. Any divergence between the IEC Standard and the corresponding national or regional standard shall be clearly indicated in the latter.
- 5) The IEC provides no marking procedure to indicate its approval and cannot be rendered responsible for any equipment declared to be in conformity with one of its standards.
- 6) Attention is drawn to the possibility that some of the elements of this International Standard may be the subject of patent rights. The IEC shall not be held responsible for identifying any or all such patent rights.

International Standard IEC 60439-3 has been prepared by subcommittee 17D: Low-voltage switchgear and controlgear assemblies, of IEC technical committee 17: Switchgear and controlgear.

This consolidated version of IEC 60439-3 consists of the first edition (1990) [documents 17D(CO)36 and 17D(CO)40], its amendment 1 (1993) [documents 17D(CO)53 and 17D(CO)58] and its amendment 2 (2001) [documents 17D/239/FDIS and 17D/243/RVD].

The technical content is therefore identical to the base edition and its amendments and has been prepared for user convenience.

It bears the edition number 1.2.

A vertical line in the margin shows where the base publication has been modified by amendments 1 and 2.

Distribution boards shall comply with all requirements of IEC 60439-1 (1999): *Low-voltage switchgear and controlgear assemblies, Part 1: 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 60439-1 (1999).

Lorsque cette norme ne comporte pas d'article ou de paragraphe correspondant, l'article ou le paragraphe de la norme principale s'applique sans modification.

Afin que la présente publication puisse être lue conjointement avec la CEI 60439-1, la numérotation de ses articles et paragraphes correspond à cette publication.

Les publications suivantes de la CEI sont citées dans la présente norme:

CEI 60269-3:1987, *Fusibles basse tension – Troisième partie: Règles supplémentaires pour les fusibles destinés à être utilisés par des personnes non qualifiées (fusibles pour usages essentiellement domestiques et analogues)*

CEI 60529:1989, *Degrés de protection procurés par les enveloppes (Code IP)*

CEI 60695-2-1:1980, *Essais relatifs aux risques du feu – Deuxième partie: Méthodes d'essai – Essai au fil incandescent et guide*

Autre publication citée:

ISO 4046:1978, *Papier, carton, pâtes et termes connexes – Vocabulaire*

Le comité a décidé que le contenu de la publication de base et de ses amendements ne sera pas modifié avant 2004. A cette date, la publication sera

- reconduite;
- supprimée;
- remplacée par une édition révisée, ou
- amendée.

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

In view of the fact that this publication should be read in conjunction with IEC 60439-1, the numbering of its clauses and subclauses correspond to the latter.

The following IEC publications are quoted in this standard:

IEC 60269-3:1987, *Low-voltage fuses – Part 3: Supplementary requirements for fuses for use by unskilled persons (fuses mainly for household and similar applications)*

IEC 60529:1989, *Degrees of protection provided by enclosures (IP Code)*

IEC 69695-2-1:1980, *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*

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.

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

1 Généralités

1.1 Domaine d'application

Remplacer la deuxième note par:

Cette norme donne des prescriptions supplémentaires pour les tableaux de répartition (TRN) sous enveloppe lorsque ce sont des ensembles de série (ES) fixes comportant des dispositifs de protection et qu'ils sont destinés à être utilisés à l'intérieur, soit dans les applications domestique soit en d'autres lieux où des personnes non qualifiées ont accès pendant leur utilisation. Des dispositifs de commande et/ou de signalisation peuvent également être inclus. Ils sont destinés à être utilisés en courant alternatif, sous une tension nominale phase/terre ne dépassant pas 300 V. Les circuits de départ comportent des dispositifs de protection contre les courts-circuits ayant chacun un courant assigné ne dépassant pas 125 A avec un courant total à l'arrivée ne dépassant pas 250 A.

NOTE La tension nominale phase/terre dans un schéma IT est considérée comme la tension nominale de ce schéma.

Les personnes non qualifiées ont normalement accès à ces ensembles, par exemple pour des opérations de manœuvre et de remplacement des fusibles.

2 Définitions

2.1 Définitions générales

2.1.1.2 Ensemble dérivé de série (EDS)

Ne s'applique pas.

2.1.9 Conditions d'essai

Ne s'applique pas.

2.1.12 Tableau de répartition

Ensemble comportant des dispositifs de manœuvre ou de protection (par exemple des fusibles ou de petits disjoncteurs) associés à un ou plusieurs circuits de départ alimentés par un ou plusieurs circuits d'arrivée, ainsi que des bornes pour les conducteurs neutre et du circuit de protection. Il peut aussi comporter des dispositifs de signalisation et d'autres dispositifs de commande. Des dispositifs de sectionnement peuvent être compris dans le tableau ou peuvent être fournis séparément.

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.

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

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

2 Definitions

2.1 General definitions

2.1.1.2 Partially type tested assembly (PTTA)

Not applicable.

2.1.9 Test situation

Not applicable.

2.1.12 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.