

Low-voltage switchgear and controlgear assemblies —

Part 5: Particular requirements for assemblies intended to be installed outdoors in public places — Cable distribution cabinets (CDCs) for power distribution in networks

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ICS 29.130.20

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- Association of British Mining Equipment Companies
- Association of Consulting Engineers
- ASTA Certification Services
- Building Employers' Confederation
- Department of Trade and Industry (Consumer Safety Unit, CA Division)
- Electrical Installation Equipment Manufacturers' Association (BEAMA Ltd.)
- Electricity Association
- ERA Technology Ltd.
- GAMBICA (BEAMA Ltd.)
- Institute of Petroleum
- Institution of Incorporated Executive Engineers
- National Inspection Council for Electrical Installation Contracting

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National foreword

This British Standard has been prepared by Subcommittee PEL/17/3 and is the English language version of EN 60439-5:1996, *Low-voltage switchgear and controlgear assemblies. Part 5: Particular requirements for assemblies intended to be installed outdoors in public places — Cable distribution cabinets (CDCs) for power distribution in networks*, including amendment A1:1998, published by the European Committee for Electrotechnical Standardization (CENELEC). It is identical with IEC 60439-5:1996, including amendment 1:1998, published by the International Electrotechnical Commission (IEC).

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to IEC text carry the number of the IEC amendment. For example, text altered by IEC amendment 1 is indicated by **A1** **A1**.

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index” or by using the “Find” facility of the BSI Standards Electronic Catalogue.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 19 and a back cover.

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English version

Low-voltage switchgear and controlgear assemblies —
Part 5: Particular requirements for assemblies intended
to be installed outdoors in public places —
Cable distribution cabinets (CDCs) for power distribution
in networks

(includes amendment A1:1998)
(IEC 60439-5:1996 + A1:1998)

Ensembles d'appareillage à basse tension —
Partie 5: Règles particulières pour les
ensembles destinés à être installés à l'extérieur,
en des lieux publics —
Ensembles d'appareillage pour réseaux de
distribution (ERD)
(inclut l'amendement A1:1998)
(CEI 60439-5:1996 + A1:1998)

Niederspannung-
Schaltgerätekombinationen —
Teil 5: Besondere Anforderungen an
Niederspannung- Schaltgerätekombinationen,
die im Freien an öffentlich zugängigen Plätzen
aufgestellt werden — Kabelverteilerschränke
in Energieversorgungsnetzen
(enthält Änderung A1:1998)
(IEC 60439-5:1996 + A1:1998)

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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Foreword

The text of document 17D/161/FDIS, future edition 1 of IEC 439-5, 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 EN 60439-5 on 1996-03-05.

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) 1996-12-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 1996-12-01

For products which have complied with the relevant national standard before 1996-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 2001-12-01.

Annexes designated “normative” are part of the body of the standard. In this standard, annexes A and ZA are normative. Annex ZA has been added by CENELEC.

Foreword to amendment A1

The text of document 17D/201/FDIS, future amendment 1 to IEC 60439-5:1996, 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 A1 to EN 60439-5:1996 on 1998-08-01.

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- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2001-05-01

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1 General

1.1 Scope and object

This standard gives supplementary requirements for cable distribution cabinets (CDCs), which are stationary, type-tested assemblies (TTA) for outdoor installation in places which are exposed to the public, but where only skilled persons have access for their use. They are for use in public three-phase systems.

NOTE 1 If a CDC is equipped with additional equipment (for example meters), in such a way that the main function is changed considerably, then other standards may also apply as agreed between user and manufacturer (see 7.6).

NOTE 2 Where local regulations and practices permit, a CDC according to this standard may be used in other than public networks.

1.2 Normative references

The following normative documents contain provisions, which through reference in this text, constitute provisions of this part of IEC 439. At the time of publication, the editions indicated were valid. All normative documents are subject to revision, and parties to agreements based on this part of IEC 439 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. Members of IEC and ISO maintain registers of currently valid normative documents.

IEC 68-2-11:1981, *Environmental testing — Part 2: Tests — Test Ka: Salt mist*.

IEC 68-2-30:1980, *Environmental testing — Part 2: Tests — Test Db and guidance: Damp heat, cyclic (12 + 12-hour cycle)*.

IEC 238:1991, *Edison screw lampholders*.

IEC 269-1:1986, *Low-voltage fuses — Part 1: General requirements*.

IEC 439-1:1992, *Low-voltage switchgear and controlgear assemblies — Part 1: Type-tested and partially type-tested assemblies*.

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

IEC 707:1981, *Methods of test for the determination of the flammability of solid electrical insulating materials when exposed to an igniting source*.

IEC 1238-1:1993, *Compression and mechanical connectors for power cables with copper or aluminium conductors — Part 1: Test methods and requirements*.

ISO 3231:1993, *Paints and varnishes — Determination of resistance to humid atmospheres containing sulphur dioxide*.

ISO 4628-3:1982, *Paints and varnishes — Evaluation of degradation of paint coatings — Designation of intensity, quantity and size of common types of defect — Part 3: Designation of degree of rusting*.

ISO 4892-2:1994, *Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon arc sources*.

ISO 6506:1981, *Metallic materials — Hardness test — Brinell test*.

ISO 9223:1992, *Corrosion of metals and alloys — Corrosivity of atmosphere — Classification*.

2 Definitions

The definitions of part 1 apply with the following additions and modifications:

2.1 General

2.1.1.2

partially type-tested low-voltage switchgear and controlgear assembly (PTTA)

Not applicable.

2.1.10

cable distribution cabinet (CDC)

a cubicle-type ASSEMBLY for stationary outdoor installation, to be used for the distribution of electrical energy through cable to other equipment. This other equipment is not intended to consume electrical energy (see Figure 1)

2.1.10.1

ground-mounted cable distribution cabinet

a cable distribution cabinet for installation at ground level on a foundation. The cabinet entries for external conductors are suitable for cables

2.1.10.2

pole-mounted cable distribution cabinet

a cable distribution cabinet for installation on a pole, on which a transformer is normally mounted, in an aerial network. The cabinet entries for external conductors are suitable for cables or insulated overhead line conductors

2.1.10.3

wall-mounted surface type cable distribution cabinet

a cable distribution cabinet for installation on the surface of a wall. The cabinet entries for external conductors are suitable for cables

2.1.10.4

wall-mounted recessed type cable distribution cabinet

a cable distribution cabinet for installation into a recess in a wall. A CDC is not designed to support the portion of the wall above the CDC. The cabinet entries for external conductors are suitable for cables