
Električne inštalacije nad 1 kV AC in 1,5 kV DC - 0. del: Načela, ki jih je treba upoštevati pri projektiranju in postavitvi visokonapetostnih inštalacij - Varnost visokonapetostnih inštalacij

Power installations exceeding 1 kv AC and 1,5 kv DC - Part 0: Principles to be observed in the design and erection of high voltage installations - Safety of high voltage installations

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ICS:

29.020	Elektrotehnika na splošno	Electrical engineering in general
29.080.01	Električna izolacija na splošno	Electrical insulation in general
29.240.01	Omrežja za prenos in distribucijo električne energije na splošno	Power transmission and distribution networks in general

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99/529/CDV

COMMITTEE DRAFT FOR VOTE (CDV)

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IEC TC 99 : INSULATION CO-ORDINATION AND SYSTEM ENGINEERING OF HIGH VOLTAGE ELECTRICAL POWER INSTALLATIONS ABOVE 1,0 kV AC AND 1,5 kV DC

SECRETARIAT:

Australia

SECRETARY:

Ms Erandi Chandrasekare

OF INTEREST TO THE FOLLOWING COMMITTEES:

TC 1,TC 2,TC 8,TC 9,TC 11,TC 14,TC 17,TC 18,TC 22,TC 42,TC 44,TC 64,TC 88,TC 115,TC 117,TC 122,PC 127,PC 128,TC 129

HORIZONTAL FUNCTION(S):

TC 99 Horizontal Group Safety

ASPECTS CONCERNED:

Safety

SUBMITTED FOR CENELEC PARALLEL VOTING

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TITLE:

Power installations exceeding 1 kV AC and 1,5 kV DC - Part 0: Principles to be observed in the design and erection of high voltage installations - Safety of high voltage installations

PROPOSED STABILITY DATE: 2031

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

**Power installations exceeding 1 kV AC and 1,5 kV DC -
Part 0: Principles to be observed in the design and erection of high
voltage installations - Safety of high voltage installations**

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IEC TS 61936-0 This document has been prepared by technical committee 99: Insulation coordination and system engineering of high voltage electrical power installations above 1,0 kV AC and 1,5 kV DC. It is a Technical Specification. This XXX edition cancels and replaces the XXX edition published in [publication_date], Amendment 1:[publication_date] and Amendment 2:[publication_date]. This edition constitutes a technical revision. This edition includes the following significant technical changes with respect to the previous edition: a) ...; b) ... The text of this Technical Specification is based on the following documents: Draft Report on voting 99/XX/DTS99/XX/RVDTS Full information on the voting for its approval can be found in the report on voting indicated in the above table. The language used for the development of this Technical Specification is English [change language if necessary]. This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/publications. A list of all parts in the IEC 61936 (all parts) [1], published under the general title Power installations exceeding 1 kV AC and 1,5 kV DC, can be found on the IEC website. The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be reconfirmed/withdrawn/revised.

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INTRODUCTION

The scope of TC 99 is the standardisation of insulation co-ordination for high voltage systems and common rules and particular requirements for system engineering and erection of high voltage electrical power installations for power generation, transmission, distribution, and consumer premises, in both indoor and outdoor situations, with particular consideration of safety aspects.

With the increasing development of electric power systems and renewable energy devices, there is an increasing demand for Technical Committees to define installations, systems and equipment at voltages above 1,0 kV AC and 1,5 kV DC.

The objective of this GSP (Group safety publication) is to give the principles for TCs in how to define requirements with respect to HV installations to ensure that safety of such systems is maintained and that a consistent approach is taken by all TCs involved with HV installations with respect to design, operation and maintenance of installation at voltages above 1,0 kV AC and 1,5 kV DC.

Figure 1 below describes the relationship of this document to other IEC standards:

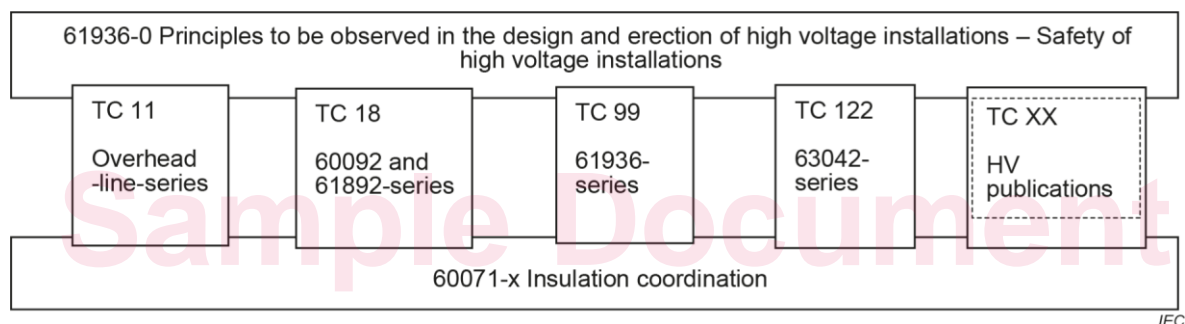


Figure 1 – Relationship of IEC 61936-0 to other IEC standards

Further reading:

IEC 60038, *IEC standard voltages*

IEC 60092, *Electrical installations in ships*

IEC 60417, *Graphical symbols for use on equipment*, available at <https://std.iec.ch/iec60417>

IEC 60990, *Methods of measurement of touch current and protective conductor current*

IEC 61892 (all parts), *Mobile and fixed offshore units - Electrical installations*

IEC 63042 (all parts), *UHV AC transmission systems*

B3/CIREN Technical Brochure Substation earthing system design optimisation through the application of quantified risk analysis Reference: 749, 2018

Norwegian “Regulations on electrical supply installations”, 2006

CIGRE Technical Brochure 391 “Guide for measurement of radio frequency interference from HV and MV substations”

CIGRE Technical Brochure 535 “EMC within power plants and substations”