IEC 62271-214

Edition 1.0 2019-06

INTERNATIONAL STANDARD

NORME INTERNATIONALE

High-voltage switchgear and controlgear – Part 214: Internal arc classification for metal-enclosed pole-mounted switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

Appareillage à haute tension – Partie 214: Classification arc interne des appareillages sous enveloppe métallique de tensions assignées supérieures à 1 kV et inférieures ou égales à 52 kV montés sur poteau

IEC 62271-214:2019-06(en-fr)

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CONTENTS

FOREWORD 4
INTRODUCTION 6
1 Scope 7
2 Normative references 7
3 Terms and definitions 7
3.1 General terms and definitions 8
4 Normal and special service conditions 10
4.1 General 10
5 Ratings 10
5.1 General 10
5.2 Rated voltage (U_r) 10
5.2.1 General 10
5.3 Rated insulation level (U_d, U_p, U_s) 10
5.4 Rated frequency (f_r) 10
5.101 Ratings of the internal arc classification (IAC) 10
5.101.1 General 10
5.101.2 Rated approach distance (D_{AP}) 10
5.101.3 Rated arc fault currents (I_A, I_{Ae}) 11
5.101.4 Rated arc fault duration (t_A, t_{Ae}) 11
6 Design and construction 11
6.11 Nameplate 11
6.11.1 General 11
6.101 Internal arc fault 12
6.102 Enclosure 12
7 Type tests 13
7.1 General 13
7.1.1 Basics 13
7.1.2 Information for identification of test object 13
7.1.3 Information to be included in type-test reports 14
7.101 Internal arc type test 14
7.101.1 General 14
7.101.2 Test conditions 15
7.101.3 Arrangement of the equipment 15
7.101.4 Indicators (for assessing the thermal effects of the gases) 17
7.101.5 Arrangement of indicators 17
7.101.6 Test parameters 17
7.101.7 Test procedure 19
7.101.8 Criteria to pass the test 23
7.101.9 Transferability of the test results 23
8 Routine tests 24
9 Guide to the selection of switchgear and controlgear 24
9.1 General 24
9.101 Internal arc fault 24
9.101.1 General 24
9.101.2 Causes and preventive measures 24
9.101.3 Supplementary protective measures 25

9.101.4 Considerations for the selection and installation 26
9.101.5 Internal arc test 26
9.101.6 IAC designation 26
10 Information to be given with enquiries, tenders and orders (informative) 27
10.1 General 27
11 Transport, storage, installation, operation instruction and maintenance 27
11.1 General 27
11.2 Conditions during transport, storage and installation 27
11.3 Installation 28
11.3.1 General 28
11.101 Maintenance 28
11.101.1 General 28
12 Safety 28
12.1 General 28
13 Influence of the product on the environment 28
Annex A (normative) Identification of the test objects 29
A.1 General 29
A.2 Data 29
A.3 Drawings 29
Bibliography 30

Figure 1 – Examples of enclosures and compartment(s) in different arrangements 13
Figure 2 –Test arrangement for pole-mounted switchgear and controlgear 16
Figure 3 – Horizontal indicator 17
Figure 4 – Flow-chart for the choice of arc initiation depending on the construction 21

Table 1 – Nameplate information 12
Table 2 – Parameters for internal fault test according to enclosure and compartment construction 20
Table 3 – Locations, causes and examples of measures to decrease the probability of internal arc faults 25
Table 4 – Single phase-to-earth arc fault current depending on the network neutral earthing 27

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HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 214: Internal arc classification for metal-enclosed pole-mounted switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

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International Standard IEC 62271-214 has been prepared by subcommittee 17C Assemblies, of IEC technical committee 17: Switchgear and controlgear.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
17C/706/FDIS	17C/710/RVD

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

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

This standard shall be read in conjunction with IEC 62271-1, second edition, published in 2017, to which it refers and which is applicable unless otherwise specified in this standard. In order to simplify the indication of corresponding requirements, the same numbering of clauses and subclauses is used as in IEC 62271-1. Amendments to these clauses and subclauses are given under the same references whilst additional subclauses are numbered from 101. Any clause with the term “Not Applicable” relates to the clause not being relevant to IEC 62271-214 and does not infer the clause is or is not relevant for its applicable switchgear standard.

A list of all parts of the IEC 62271 series, published under the general title *High-voltage switchgear and controlgear*, 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 "http://webstore.iec.ch" in the data related to the specific document. At this date, the document will be

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

INTRODUCTION

IEC 62271-214 has been developed due to the requirement to remove IAC Type C designated pole mounted switchgear from IEC 62271-200. Only enclosed terminal equipment is to be considered within IEC 62271-200. For this reason, IEC 62271-214 is to be considered independent of IEC 62271-200, however it is still related to other product standards of the IEC 62271 series.

Only open terminal pole mounted switchgear has been considered within this document.

This equipment relates to operation in three-phase, two-phase and single-phase systems.

HIGH-VOLTAGE SWITCHGEAR AND CONTROLGEAR –

Part 214: Internal arc classification for metal-enclosed pole-mounted switchgear and controlgear for rated voltages above 1 kV and up to and including 52 kV

1 Scope

This part of IEC 62271 specifies requirements for internal arc classification of metal-enclosed pole-mounted switchgear installations used for alternating current with rated voltages above 1 kV and up to and including 52 kV with service frequencies up to and including 60 Hz. This document is applicable to three-phase, two-phase and single phase equipment. Enclosures may include fixed and removable components and may be filled with fluid (liquid or gas) to provide insulation.

NOTE For the use of this document high-voltage (IEC 60050-601:1985, 601-01-27) is the rated voltage above 1 000 V. However, medium voltage (IEC 60050-601:1985, 601-01-28) is commonly used for distribution systems with voltages above 1 kV and generally applied up to and including 52 kV; refer to [1] of the Bibliography.

This document does not preclude that other equipment may be included in the same enclosure. In such a case, any possible influence of that equipment on the switchgear and controlgear is to be taken into account.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

IEC 60050-151:2001, *International Electrotechnical Vocabulary – Part 151: Electrical and magnetic devices*

IEC 60050-441:1984, *International Electrotechnical Vocabulary – Part 441: Switchgear, controlgear and fuses*

IEC 62271-1:2017, *High-voltage switchgear and controlgear – Part 1: Common specifications for alternating current switchgear and controlgear*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in IEC 60050-151, IEC 60050-441 and IEC 62271-1 as well as the following apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at http://electropedia.org
- ISO Online browsing platform: available at http://www.iso.org/obp

NOTE Additional definitions are classified so as to be aligned with the classification system used in IEC 60050-441.