

# INTERNATIONAL STANDARD

## NORME INTERNATIONALE

**High-voltage fuses –  
Part 1: Current-limiting fuses**

**Fusibles à haute tension –  
Partie 1: Fusibles limiteurs de courant**



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## CONTENTS

|                                                                                                                            |    |
|----------------------------------------------------------------------------------------------------------------------------|----|
| FOREWORD.....                                                                                                              | 6  |
| 1 General .....                                                                                                            | 8  |
| 1.1 Scope.....                                                                                                             | 8  |
| 1.2 Normative references .....                                                                                             | 8  |
| 2 Normal and special service conditions.....                                                                               | 8  |
| 2.1 Normal service conditions .....                                                                                        | 8  |
| 2.2 Other service conditions .....                                                                                         | 10 |
| 2.3 Special service conditions.....                                                                                        | 10 |
| 2.4 Environmental behaviour .....                                                                                          | 10 |
| 3 Terms and definitions .....                                                                                              | 10 |
| 3.1 Electrical characteristics .....                                                                                       | 10 |
| 3.2 Fuses and their component parts .....                                                                                  | 14 |
| 3.3 Additional terms.....                                                                                                  | 15 |
| 4 Ratings and characteristics .....                                                                                        | 17 |
| 4.1 General .....                                                                                                          | 17 |
| 4.2 Rated voltage .....                                                                                                    | 17 |
| 4.3 Rated insulation level (of a fuse-base) .....                                                                          | 18 |
| 4.4 Rated frequency .....                                                                                                  | 19 |
| 4.5 Rated current of the fuse-base.....                                                                                    | 19 |
| 4.6 Rated current of the fuse-link.....                                                                                    | 19 |
| 4.7 Temperature-rise limits .....                                                                                          | 20 |
| 4.8 Rated breaking capacity.....                                                                                           | 22 |
| 4.8.1 Rated maximum breaking current.....                                                                                  | 22 |
| 4.8.2 Rated minimum breaking current and class .....                                                                       | 22 |
| 4.9 Limits of switching voltage .....                                                                                      | 22 |
| 4.10 Rated transient recovery voltage (rated TRV).....                                                                     | 24 |
| 4.10.1 General .....                                                                                                       | 24 |
| 4.10.2 Representation of TRV.....                                                                                          | 25 |
| 4.10.3 Representation of rated TRV.....                                                                                    | 25 |
| 4.11 Time-current characteristics.....                                                                                     | 26 |
| 4.12 Cut-off characteristic .....                                                                                          | 27 |
| 4.13 $I^2t$ characteristics .....                                                                                          | 27 |
| 4.14 Mechanical characteristics of strikers.....                                                                           | 27 |
| 4.15 Special requirement for Back-Up fuses intended for use in switch-fuse<br>combination according to IEC 62271-105 ..... | 28 |
| 4.15.1 General .....                                                                                                       | 28 |
| 4.15.2 Maximum body temperature under pre-arcing conditions .....                                                          | 29 |
| 4.15.3 Maximum arcing withstand time .....                                                                                 | 29 |
| 5 Design, construction and performance .....                                                                               | 29 |
| 5.1 General requirements with respect to fuse operation .....                                                              | 29 |
| 5.1.1 General .....                                                                                                        | 29 |
| 5.1.2 Standard conditions of use.....                                                                                      | 29 |
| 5.1.3 Standard conditions of behaviour .....                                                                               | 30 |
| 5.2 Identifying markings.....                                                                                              | 30 |
| 5.3 Dimensions .....                                                                                                       | 31 |
| 6 Type tests.....                                                                                                          | 31 |

|       |                                                                                   |    |
|-------|-----------------------------------------------------------------------------------|----|
| 6.1   | Conditions for making the tests .....                                             | 31 |
| 6.2   | List of type tests .....                                                          | 31 |
| 6.3   | Common test practices for all type tests .....                                    | 31 |
| 6.3.1 | General .....                                                                     | 31 |
| 6.3.2 | Condition of device to be tested .....                                            | 32 |
| 6.3.3 | Mounting of fuses .....                                                           | 32 |
| 6.4   | Dielectric tests .....                                                            | 32 |
| 6.4.1 | Test practices .....                                                              | 32 |
| 6.4.2 | Application of test voltage for impulse and power-frequency test .....            | 32 |
| 6.4.3 | Atmospheric conditions during test .....                                          | 33 |
| 6.4.4 | Lightning impulse voltage dry tests .....                                         | 33 |
| 6.4.5 | Power-frequency voltage dry tests .....                                           | 33 |
| 6.4.6 | Power-frequency wet tests .....                                                   | 33 |
| 6.5   | Temperature-rise tests and power-dissipation measurement .....                    | 34 |
| 6.5.1 | Test practices .....                                                              | 34 |
| 6.5.2 | Measurement of temperature .....                                                  | 35 |
| 6.5.3 | Measurement of power dissipation .....                                            | 36 |
| 6.6   | Breaking tests .....                                                              | 36 |
| 6.6.1 | Test practices .....                                                              | 36 |
| 6.6.2 | Test procedure .....                                                              | 43 |
| 6.6.3 | Alternative test methods for Test Duty 3 .....                                    | 47 |
| 6.6.4 | Breaking tests for fuse-links of a homogeneous series .....                       | 48 |
| 6.6.5 | Acceptance of a homogeneous series of fuse-links by interpolation .....           | 49 |
| 6.6.6 | Acceptance of a homogeneous series of fuse-links of different lengths .....       | 50 |
| 6.7   | Tests for time-current characteristics .....                                      | 50 |
| 6.7.1 | Test practices .....                                                              | 50 |
| 6.7.2 | Test procedures .....                                                             | 50 |
| 6.8   | Tests of strikers .....                                                           | 51 |
| 6.8.1 | General .....                                                                     | 51 |
| 6.8.2 | Strikers to be tested .....                                                       | 51 |
| 6.8.3 | Operation tests .....                                                             | 51 |
| 6.8.4 | Test performance .....                                                            | 52 |
| 6.9   | Electromagnetic compatibility (EMC) .....                                         | 53 |
| 7     | Special tests .....                                                               | 53 |
| 7.1   | General .....                                                                     | 53 |
| 7.2   | List of special tests .....                                                       | 53 |
| 7.3   | Thermal shock tests .....                                                         | 53 |
| 7.3.1 | Test sample .....                                                                 | 53 |
| 7.3.2 | Arrangement of the equipment .....                                                | 54 |
| 7.3.3 | Test method .....                                                                 | 54 |
| 7.4   | Power-dissipation tests for fuses not intended for use in enclosures .....        | 54 |
| 7.5   | Waterproof test (ingress of moisture) .....                                       | 54 |
| 7.5.1 | Test conditions .....                                                             | 54 |
| 7.5.2 | Test sample .....                                                                 | 54 |
| 7.5.3 | Test method .....                                                                 | 54 |
| 7.6   | Tests for Back-Up fuses for use in switch-fuse combination of IEC 62271-105 ..... | 54 |
| 7.6.1 | General .....                                                                     | 54 |
| 7.6.2 | Pre-arcing temperature rise test .....                                            | 54 |
| 7.6.3 | Arcing duration withstand test .....                                              | 55 |

|           |                                                                                                                                                           |    |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----|
| 7.7       | Oil-tightness tests.....                                                                                                                                  | 55 |
| 8         | Routine tests .....                                                                                                                                       | 56 |
| 9         | Application guide .....                                                                                                                                   | 56 |
| 9.1       | Object .....                                                                                                                                              | 56 |
| 9.2       | General .....                                                                                                                                             | 56 |
| 9.3       | Application.....                                                                                                                                          | 56 |
| 9.3.1     | Mounting.....                                                                                                                                             | 56 |
| 9.3.2     | Selection of the rated current of the fuse-link .....                                                                                                     | 57 |
| 9.3.3     | Selection according to class (see 3.3.2) and minimum breaking current.....                                                                                | 58 |
| 9.3.4     | Selection of the rated voltage of the fuse-link .....                                                                                                     | 59 |
| 9.3.5     | Selection of the rated insulation level .....                                                                                                             | 59 |
| 9.3.6     | Time-current characteristics of high-voltage fuses.....                                                                                                   | 60 |
| 9.3.7     | Fuses connected in parallel.....                                                                                                                          | 60 |
| 9.4       | Operation .....                                                                                                                                           | 61 |
| 9.4.1     | Locking of the fuse-link in the service position.....                                                                                                     | 61 |
| 9.4.2     | Replacement of the fuse-link.....                                                                                                                         | 61 |
| 9.5       | Disposal .....                                                                                                                                            | 61 |
| Annex A   | (normative) Method of drawing the envelope of the prospective transient recovery voltage of a circuit and determining the representative parameters ..... | 62 |
| Annex B   | (informative) Reasons which led to the choice of TRV values for Test Duties 1, 2 and 3 .....                                                              | 64 |
| Annex C   | (informative) Preferred arrangements for temperature-rise tests of oil-tight fuse-links for switchgear.....                                               | 66 |
| Annex D   | (informative) Types and dimensions of current-limiting fuse-links specified in existing national standards.....                                           | 67 |
| Annex E   | (normative) Requirements for certain types of fuse-links intended for use at surrounding temperatures above 40 °C.....                                    | 70 |
| Annex F   | (informative) Determination of derating when the ambient temperature of the fuse exceeds 40 °C .....                                                      | 74 |
| Annex G   | (informative) Criteria for determining $I_t$ testing validity.....                                                                                        | 82 |
|           | Bibliography .....                                                                                                                                        | 83 |
| Figure 1  | – Terminology .....                                                                                                                                       | 14 |
| Figure 2  | – Permissible switching voltages for fuse-links of small current ratings (Table 8).....                                                                   | 23 |
| Figure 3  | – Representation of a specified TRV by a two-parameters reference line and a delay line .....                                                             | 26 |
| Figure 4  | – Various stages of the striker travel.....                                                                                                               | 28 |
| Figure 5  | – Example of a two-parameters reference line for a TRV complying with the conditions of the type test.....                                                | 39 |
| Figure 6  | – Breaking tests – Arrangement of the equipment .....                                                                                                     | 43 |
| Figure 7  | – Breaking tests – Typical circuit diagram for Test Duties 1 and 2 .....                                                                                  | 44 |
| Figure 8  | – Breaking tests – Typical circuit diagram for Test Duty 3 .....                                                                                          | 44 |
| Figure 9  | – Breaking tests – Interpretation of oscillograms for Test Duty 1 .....                                                                                   | 45 |
| Figure 10 | – Breaking tests – Interpretation of oscillograms for Test Duty 2 (calibration traces as in a) of Figure 9) .....                                         | 46 |
| Figure 11 | – Breaking tests – Interpretation of oscillograms for Test Duty 3 .....                                                                                   | 46 |

|                                                                                                                           |    |
|---------------------------------------------------------------------------------------------------------------------------|----|
| Figure A.1 – Example of a two-parameters reference line for a TRV whose initial portion is concave towards the left ..... | 63 |
| Figure A.2 – Example of a two-parameters reference line for an exponential TRV .....                                      | 63 |
| Figure C.1 – Test tank for temperature-rise tests of oil-tight fuses .....                                                | 66 |
| Figure C.2 – Details of clamping arrangement for fuse-link in the tank .....                                              | 66 |
| Figure F.1 – Derating curves for some allowed temperature limits.....                                                     | 78 |
| Figure F.2 – Practical example: dimensions.....                                                                           | 79 |
| Figure F.3 – Extract from IEC 60890 .....                                                                                 | 80 |
| Figure F.4 – Practical example of application.....                                                                        | 81 |
| Table 1 – Altitude correction factors – Test voltage and rated voltage .....                                              | 9  |
| Table 2 – Altitude correction factors – Rated current and temperature rise.....                                           | 9  |
| Table 3 – Rated voltages.....                                                                                             | 17 |
| Table 4 – Fuse-base rated insulation levels – Series I .....                                                              | 18 |
| Table 5 – Fuse-base rated insulation levels – Series II .....                                                             | 19 |
| Table 6 – Limits of temperature and temperature rise for components and materials.....                                    | 21 |
| Table 7 – Maximum permissible switching voltages .....                                                                    | 22 |
| Table 8 – Maximum permissible switching voltages for certain fuse-links of small current ratings.....                     | 23 |
| Table 9 – Standard values of rated TRV – Series I.....                                                                    | 24 |
| Table 10 – Standard values of rated TRV – Series II.....                                                                  | 25 |
| Table 11 – Mechanical characteristics of strikers .....                                                                   | 28 |
| Table 12 – Electrical connection to the test circuit – Conductor sizes .....                                              | 34 |
| Table 13 – Breaking tests – Parameters .....                                                                              | 38 |
| Table 14 – TRV for Test Duty 2 – Series I.....                                                                            | 40 |
| Table 15 – TRV for Test Duty 2 – Series II.....                                                                           | 41 |
| Table 16 – Breaking test requirements for fuse-links of a homogeneous series.....                                         | 49 |
| Table F.1 – Temperature limits extracted from Table 6 .....                                                               | 77 |

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## HIGH-VOLTAGE FUSES –

### Part 1: Current-limiting fuses

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International Standard IEC 60282-1 has been prepared by subcommittee 32A: High-voltage fuses, of IEC technical committee 32: Fuses.

This seventh edition cancels and replaces the sixth edition published in 2005. The changes introduced by this new edition are only editorial.

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

|              |                  |
|--------------|------------------|
| FDIS         | Report on voting |
| 32A/274/FDIS | 32A/277/RVD      |

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

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

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- reconfirmed,
- withdrawn,
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- amended.

## HIGH-VOLTAGE FUSES –

### Part 1: Current-limiting fuses

#### 1 General

##### 1.1 Scope

This part of IEC 60282 applies to all types of high-voltage current-limiting fuses designed for use outdoors or indoors on alternating current systems of 50 Hz and 60 Hz and of rated voltages exceeding 1 000 V.

Some fuses are provided with fuse-links equipped with an indicating device or a striker. These fuses come within the scope of this standard, but the correct operation of the striker in combination with the tripping mechanism of the switching device is outside the scope of this standard; see IEC 62271-105.

##### 1.2 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 60060-1:1989, *High-voltage test techniques – Part 1: General definitions and test requirements*

IEC 60071-1:2006, *Insulation co-ordination – Part 1: Definitions, principles and rules*

IEC 60085:2007, *Electrical insulation – Thermal evaluation and designation*

IEC 60265-1:1998, *High-voltage switches – Part 1: Switches for rated voltages above 1 kV and less than 52 kV*

IEC 60549:1976, *High-voltage fuses for the external protection of shunt power capacitors*

IEC 60644:1979, *Specification for high-voltage fuse-links for motor circuit applications*

IEC/TR 60787:2007, *Application guide for the selection of high-voltage current-limiting fuse-links for transformer circuits*

IEC 62271-105:2002, *High-voltage switchgear and controlgear – Part 105: Alternating current switch-fuse combinations*

ISO 148-2, *Metallic materials – Charpy pendulum impact test – Part 2: Verification of test machines*

ISO 179 (all parts), *Plastics – Determination of Charpy impact properties*

#### 2 Normal and special service conditions

##### 2.1 Normal service conditions

Fuses complying with this standard are designed to be used under the following conditions.