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## Linor för friledning innehållande ett eller flera hålrum

*Concentric lay stranded overhead electrical conductors containing one or more gap(s)*

Som svensk standard gäller europastandarden EN 62420:2008. Den svenska standarden innehåller den officiella engelska språkversionen av EN 62420:2008.

### Nationellt förord

Europastandarden EN 62420:2008

består av:

- **europastandardens ikraftsättningsdokument**, utarbetat inom CENELEC
- **IEC 62420, First edition, 2008 - Concentric lay stranded overhead electrical conductors containing one or more gap(s)**

utarbetad inom International Electrotechnical Commission, IEC.

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Postadress: SEK, Box 1284, 164 29 KISTA  
Telefon: 08 - 444 14 00. Telefax: 08 - 444 14 30  
E-post: sek@elstandard.se. Internet: www.elstandard.se

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Du som vill dra nytta av dessa möjligheter är välkommen att kontakta SEKs kansli för mer information.

### **SEK Svensk Elstandard**

Box 1284  
164 29 Kista  
Tel 08-444 14 00  
[www.elstandard.se](http://www.elstandard.se)

**Concentric lay stranded overhead electrical conductors  
containing one or more gap(s)  
(IEC 62420:2008)**

Conducteurs pour lignes électriques  
aériennes câblés en couches  
concentriques comprenant  
un ou plusieurs intervalle(s)  
(CEI 62420:2008)

Leiter für Freileitungen aus  
konzentrisch verseilten runden Drähten  
mit einem oder mehreren  
Zwischenraum/räumen  
(IEC 62420:2008)

This European Standard was approved by CENELEC on 2008-06-01. 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.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**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

The text of document 7/587/FDIS, future edition 1 of IEC 62420, prepared by IEC TC 7, Overhead electrical conductors, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 62420 on 2008-06-01.

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) | 2009-03-01 |
| – latest date by which the national standards conflicting with the EN have to be withdrawn                                               | (dow) | 2011-06-01 |

Annex ZA has been added by CENELEC.

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## Endorsement notice

The text of the International Standard IEC 62420:2008 was approved by CENELEC as a European Standard without any modification.

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## Annex ZA (normative)

### Normative references to international publications with their corresponding European publications

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.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

| <u>Publication</u> | <u>Year</u> | <u>Title</u>                                                                   | <u>EN/HD</u>                          | <u>Year</u>          |
|--------------------|-------------|--------------------------------------------------------------------------------|---------------------------------------|----------------------|
| IEC 60104          | 1987        | Aluminium-magnesium-silicon alloy wire for overhead line conductors            | —                                     | —                    |
| IEC 60888          | 1987        | Zinc-coated steel wires for stranded conductors                                | —                                     | —                    |
| IEC 60889          | 1987        | Hard-drawn aluminium wire for overhead line conductors                         | EN 60889                              | 1997                 |
| IEC 61232 (mod)    | 1993        | Aluminium-clad steel wires for electrical purposes                             | EN 61232<br>+ corr. February<br>+ A11 | 1995<br>1996<br>2000 |
| IEC 61395          | 1998        | Overhead electrical conductors - Creep test procedures for stranded conductors | EN 61395                              | 1998                 |
| IEC 62004          | 2007        | Thermal resistant aluminium alloy wire for overhead line conductor             | —                                     | —                    |



## CONTENTS

|       |                                                                          |    |
|-------|--------------------------------------------------------------------------|----|
| 1     | Scope .....                                                              | 6  |
| 2     | Normative references .....                                               | 6  |
| 3     | Terms and definitions .....                                              | 6  |
| 4     | Designation system .....                                                 | 8  |
| 5     | Requirements for stranded conductors .....                               | 8  |
| 5.1   | Material .....                                                           | 8  |
| 5.2   | Conductor sizes .....                                                    | 8  |
| 5.3   | Surface .....                                                            | 8  |
| 5.4   | Stranding .....                                                          | 8  |
| 5.4.1 | General .....                                                            | 8  |
| 5.4.2 | Lay ratio for core wires .....                                           | 8  |
| 5.4.3 | Lay ratio for aluminium layer(s) .....                                   | 9  |
| 5.4.4 | Joints .....                                                             | 9  |
| 5.4.5 | Linear mass .....                                                        | 9  |
| 5.4.6 | Conductor strength .....                                                 | 10 |
| 6     | Tests .....                                                              | 10 |
| 6.1   | Classification of tests .....                                            | 10 |
| 6.2   | Type Tests .....                                                         | 10 |
| 6.2.1 | Length of sample required .....                                          | 10 |
| 6.2.2 | Joints in aluminium wires .....                                          | 10 |
| 6.2.3 | Annular gap(s) .....                                                     | 10 |
| 6.2.4 | Stress-strain curves .....                                               | 11 |
| 6.2.5 | Breaking strength of conductor .....                                     | 11 |
| 6.2.6 | Creep curves .....                                                       | 11 |
| 6.3   | Sample tests .....                                                       | 11 |
| 6.3.1 | Cross-sectional area .....                                               | 12 |
| 6.3.2 | Overall diameter .....                                                   | 12 |
| 6.3.3 | Linear mass .....                                                        | 12 |
| 6.3.4 | Surface condition .....                                                  | 12 |
| 6.3.5 | Lay ratio and direction of lay .....                                     | 12 |
| 6.3.6 | Breaking strength of wires after stranding (if requested) .....          | 13 |
| 6.3.7 | Wire canting on the outside layer (if requested) .....                   | 13 |
| 7     | Inspection .....                                                         | 13 |
| 7.1   | Test location .....                                                      | 13 |
| 7.2   | Acceptance or rejection .....                                            | 13 |
| 8     | Packaging and marking .....                                              | 14 |
| 8.1   | Packaging .....                                                          | 14 |
| 8.2   | Marking and tare .....                                                   | 14 |
| 8.3   | Random lengths .....                                                     | 14 |
|       | Annex A (normative) Information to be supplied by purchaser .....        | 18 |
|       | Annex B (normative) Stress-strain test method .....                      | 19 |
|       | Annex C (normative) Nominal mass of grease for stranded conductors ..... | 22 |

|                                                                                            |    |
|--------------------------------------------------------------------------------------------|----|
| Annex D (informative) Alternate method of measuring the gap(s) within the conductor.....   | 25 |
| Annex E (informative) Recommended conductor sizes and tables of conductor properties ..... | 26 |
| Figure 1 – Examples of conductors containing one or more gaps .....                        | 16 |
| Figure 2 – Method of measuring wire canting .....                                          | 17 |
| Figure C.1 – Illustration for calculation of mass of grease in round wire layer (s) .....  | 22 |
| Figure C.2 – Illustration of calculation of mass of grease for core layer(s).....          | 23 |
| Figure C.3 – Illustration of calculation of grease for annular gap(s).....                 | 24 |
| Table 1 – Metal combinations permitted .....                                               | 15 |
| Table 2 – Number of joints permitted in aluminium wires.....                               | 16 |
| Table 3 – Standard increments <sup>a</sup> due to stranding .....                          | 16 |
| Table E.1 – Properties of some A1G/S1A conductors with gaps.....                           | 27 |



## CONCENTRIC LAY STRANDED OVERHEAD ELECTRICAL CONDUCTORS CONTAINING ONE OR MORE GAP(S)

### 1 Scope

This International Standard specifies the electrical and mechanical characteristics of concentric lay stranded overhead electrical conductors, containing one or more self-supporting aluminium or aluminium alloy layer(s) as depicted in Figure 1, made of combinations of any of the following metal wires:

- a) hard-drawn aluminium as per IEC 60889, designated A1;
- b) aluminium alloy type A or B as per IEC 60104, designated A2 or A3;
- c) thermal resistant aluminium alloy type as per IEC 62004, designated AT1, AT2, AT3 or AT4;
- d) regular strength steel as per IEC 60888, designated S1A or S1B;
- e) high strength steel as per IEC 60888, designated S2A or S2B;
- f) extra-high strength steel as per IEC 60888, designated S3A;
- g) aluminium-clad steel as per IEC 61232, designated 20SA, 27SA, 30SA or 40SA.

NOTE This standard covers the construction of self-damping conductors, as well as gap-type conductors. Although both types of conductors share a common design feature and the presence of one or more gaps between layers, they are intended for different purposes. Self-damping conductors (SDC) may have more than one gap to provide increased self-damping, whereas gap-type conductors are so designed as to allow the aluminium layers to slide freely over the core during installation, and therefore usually do not require more than one gap.

The various metal combinations permitted by this standard shall be in accordance with Table 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 60104:1987, *Aluminium-magnesium-silicon alloy wire for overhead line conductors*

IEC 60888:1987, *Zinc-coated steel wires for stranded conductors*

IEC 60889:1987, *Hard-drawn aluminium wire for overhead line conductors*

IEC 61232:1993, *Aluminium-clad steel wires for electrical purposes*

IEC 61395:1998, *Creep test procedures for stranded conductors*

IEC 62004:2007, *Thermal resistant aluminium alloy wire for overhead line conductors*