SLOVENSKI STANDARD
SIST EN 50262:1999/A1:2002

01-april-2002

Kabelske kite za električne inštalacije

Cable glands for electrical installations

Kabelverschraubungen für elektrische Installationen

Presse-étoupe pour installations électriques

Ta slovenski standard je istoveten z: **EN 50262:1998/A1:2001**

ICS:

29.080.20 Skoznjiki Bushings

SIST EN 50262:1999/A1:2002 **en**

EUROPEAN STANDARD **EN 50262/A1**

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ICS 29.080.20

English version

Metric cable glands for electrical installations

Presse-étoupe à pas métrique pour installations électriques

Metrische Kabelverschraubungen für elektrische Installationen

This amendment A1 modifies the European Standard EN 50262:1998; it was approved by CENELEC on 2001-03-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment 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 amendment 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.

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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

Ref. No. EN 50262:1998/A1:2001 E

Foreword

This amendment to the European Standard EN 50262 was prepared by the Technical Committee CENELEC TC 20, Electric cables.

It includes requirements for testing multi-orifice seals and basic corrosion resistance tests for metric cable glands.

The text of the draft amendment was submitted to the formal vote and was approved by CENELEC as amendment A1 to EN 50262:1998 on 2001-03-01.

The following dates were fixed:

- latest date by which the amendment has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2002-04-01

- latest date by which the national standards conflicting with the amendment have to be withdrawn (dow) 2003-04-01

Contents

General

Replace references to "equipment" or "electrical equipment" by "enclosure" as follows:

Clause	Detail of change
1, NOTE	Change "equipment" to "the enclosure"
3.2	Change "equipment" to "enclosure"
4 – paragraph 2	Change "equipment" to "enclosure"

1 Scope

Delete second paragraph.

2 Normative references

Add the following normative references:

EN ISO 6988 1994 Metallic and other non-organic coatings - Sulphur dioxide test with general condensation of moisture (ISO 6988:1985)

EN 60068-2-52 1996 Environmental testing - Part 2: Tests: Test Kb: Salt mist, cyclic (sodium chloride solution) (IEC 60068-2-52:1996)

3 Definitions

Replace 3.1 by:

a device designed to permit the entry of a cable, flexible cable or insulated conductor into an enclosure, and which provides sealing and retention. It may also provide other functions such as earthing, bonding, insulation, cable guarding, strain relief or a combination of these

Delete 3.3.

Replace 3.7 by:

cable retention
the ability of a cable gland to limit the displacement of a fitted cable under static load

Replace 3.8 by:

cable anchorage
the ability of a cable gland to limit the displacement of a fitted cable under dynamic and torque loads

Renumber 3.4 to 3.11 as 3.3 to 3.10.

4 General requirements

Replace the first paragraph by:

Cable glands shall be designed to ensure the protection of the inserted cables, flexible cables or insulated conductors in normal use.

5 General conditions for tests

Add the following note after the second paragraph of 5.2:

NOTE Re-mounting of the sample between tests is not considered to be adjustment.

Replace in 5.7 "Table 2" by "Table 2A".

6 Classification

Add the following subclauses to 6.2:

6.2.4 Cable retention for armoured cable

6.2.4.1 Class A

6.2.4.2 Class B

Change 6.3.1.1 to “Equipotential bonding”

Change 6.3.1.3 to “Protective connection to earth”

Add a subclause to 6.4:

6.4.3 resistance to salt and sulphur dioxide laden atmospheres

Add the following new subclause:

6.5 According to sealing system

6.5.1 With a single orifice seal

NOTE A single orifice seal may consist of different sealing arrangements such as:
- a single seal;
- multi-layer seal;
- two or more seals;

6.5.2 With a multi orifice seal

NOTE A multi orifice seal may consist of a single seal with more than one orifice, each orifice being suitable for the passage of a separate cable, flexible cable or insulated conductor of the same or different sizes or profiles.

7 Marking and documentation

Add the following dashed items to the end of 7.3:

- resistance to salt and sulphur dioxide laden atmospheres (if applicable);
- multi orifice seals.

9 Mechanical properties

Replace the fourth paragraph of 9.1 by:

For cable glands with a sealing system in accordance with 6.5.1, a test mandrel equivalent to the minimum value of the sealing range of the cable gland as declared by the manufacturer or supplier with a sleeve thickness as specified in Table 2A, is fixed to the sample.

For cable glands with a sealing system in accordance with 6.5.2, a test mandrel equivalent to the minimum value of the sealing range of the smallest orifice of the cable gland with a sleeve thickness as specified in Table 2A, is fixed into the smallest orifice of the sample, and each remaining orifice is plugged with a plug equivalent to the minimum value of its sealing range.

Replace the fifth paragraph of 9.1 by:

The circular test mandrel is loaded until the tensile force is in accordance with the values given in Table 2A.

Replace the ninth paragraph of 9.1 by:

The test is repeated using a test mandrel equivalent to the maximum value of the sealing range of the cable gland as declared by the manufacturer or supplier, with the test value of the relevant maximum cable diameter specified in Table 2A.

Replace the heading of Table 2 by:

Table 2A - Pull forces for cable retention and cable anchorage

Add the following table after Table 2A:

Table 2B - Pull forces for cable retention for armoured cable

Cable diameter mm	Cable retention Class A N	Cable retention Class B N
> 4 to 8	75	640
> 8 to 11	120	880
> 11 to 16	130	1280
> 16 to 23	140	1840
> 23 to 31	250	2480
> 31 to 43	350	3440
> 43 to 55	400	4400
> 55	450	5600

Replace the third paragraph of 9.3 by:

For cable glands with a sealing system in accordance with 6.5.1, a test mandrel equivalent to the minimum value of the anchorage range of the cable gland as declared by the manufacturer or supplier with a sleeve thickness as specified in Table 2A, is fixed to the sample.

For cable glands with a sealing system in accordance with 6.5.2, a test mandrel equivalent to the minimum value of the anchorage range of the smallest orifice of the cable gland with a sleeve thickness as specified in Table 2A, is fixed into the smallest orifice of the sample, and each remaining orifice is plugged with a plug equivalent to the minimum value of its sealing range.

Replace the fifth paragraph of 9.3 by:

The test mandrel is pulled for a duration of 1 s, 50 times, without jerks in the direction of the axis with the relevant force specified in Table 2A.

Replace the second paragraph of 9.4 by:

Compliance is checked with new samples by the following test.

Replace the third paragraph of 9.4 by:

For cable glands with a sealing system in accordance with 6.5.1, a test mandrel equivalent to the minimum value of the sealing range of the cable gland as declared by the manufacturer or supplier with a sleeve thickness as specified in Table 3, is fixed to the sample and then the test is carried out at the minimum temperature in accordance with 8.6.

For cable glands with a sealing system in accordance with 6.5.2, a test mandrel equivalent to the minimum value of the sealing range of the smallest orifice of the cable gland with a sleeve thickness as specified in Table 3, is fixed into the smallest orifice of the sample, and each remaining orifice is plugged with a plug equivalent to the minimum value of its sealing range The test is carried out at the minimum temperature in accordance with 8.6.

Replace the 6th paragraph of 9.4 by:

The sample shall be mounted so that:
- the direction of impact is perpendicular to the surface being tested if it is flat, or perpendicular to the tangent of the surface at the point of impact if it is not flat
- there is no movement of the cable gland support which could influence the test results

Move the 7th paragraph after the 8th paragraph of 9.4.

Replace the second paragraph of 9.5 by:

Compliance is checked with new samples by the following tests.

Replace the third paragraph of 9.5 by:

For cable glands with a sealing system in accordance with 6.5.1, a test mandrel equivalent to the maximum value of the sealing range of the cable gland as specified by the manufacturer or supplier with a sleeve thickness as specified in Table 3 is fixed to the sample with the torque(s) equal to 1,5 times that (those) declared by the manufacturer or supplier.

For cable glands with a sealing system in accordance with 6.5.2, a test mandrel equivalent to the maximum value of the sealing range of the smallest orifice of the cable gland with a sleeve thickness as specified in Table 3, is fixed into the smallest orifice of the sample with the torque(s) equal to 1,5 times that (those) declared by the manufacturer or supplier, and each remaining orifice is plugged with a plug equivalent to the maximum value of its sealing range.

10 Electrical properties

Change title of 10.1 to “Equipotential Bonding”

Replace the first paragraph of 10.1 by:

Cable glands declared in accordance with 6.3.1.1 shall have adequate conductivity to the enclosure.

Replace in the 2nd paragraph of 10.1 “a new sample” by “new samples”

Replace in the 2nd paragraph of 10.2 “a new sample” by “new samples”

Replace in the 2nd paragraph of 10.3 “a new sample” by “new samples”

Change title of 10.4 to “Protective Connection to Earth”

Replace the second paragraph of 10.4.1 by:

For each sample, one cable gland is fixed and the other cable gland is loaded in accordance with the values given in Table 2B.