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STN	**Skúšanie požiarnej odolnosti prevádzkových zariadení Časť 11: Protipožiarne ochranné systémy káblových systémov a súvisiacich komponentov**	**STN EN 1366-11** 92 0811

Fire resistance tests for service installations - Part 11: Fire protective systems for cable systems and associated components

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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English Version

Fire resistance tests for service installations - Part 11: Fire protective systems for cable systems and associated components

Essais de résistance au feu des installations de service - Partie 11: Systèmes de protection incendie pour les systèmes de câbles et composants associés

Feuerwiderstandsprüfungen für Installationen - Teil 11: Brandschutzsysteme für Kabelanlagen und zugehörige Komponenten

This European Standard was approved by CEN on 9 April 2017.

CEN 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 CEN-CENELEC Management Centre or to any CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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European foreword

This document (EN 1366-11:2018) has been prepared by Technical Committee CEN/TC 127, "Fire safety in buildings" the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by November 2018, and conflicting national standards shall be withdrawn at the latest by November 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

The EN 1366 series, *Fire resistance tests for service installations* consists of the following:

Part 1: Ducts

Part 2: Fire dampers

Part 3: Penetration seals

Part 4: Linear joint seals

Part 5: Service ducts and shafts

Part 6: Raised access floors and hollow floors

Part 7: Closures for conveyors and trackbound transportation systems

Part 8: Smoke extraction ducts

Part 9: Single compartment smoke extraction ducts

Part 10: Smoke control dampers

Part 11: Fire protective systems for cable systems and associated components

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The purpose of this test is to evaluate the ability of the protective system to allow cables and components of their installation (connectors, glands, junctions, mountings, etc.) to maintain during a defined time a reliable function whilst exposed to fire. The purpose of this test is to verify compliance with requirements regarding the circuit integrity of systems for example as those for firefighting lifts, pressure boosters, emergency lighting, fire alarm systems etc.

The fire exposure conditions and general arrangement in this European Standard are similar to those given in EN 50577, developed by CLC/TC 20, and prCLC/TR 50658 under development by CLC/TC 213. Each of these standards has been developed under a Mode 4 co-operation between CEN TC 127, CLC/TC 213 and CLC/TC 20.

CAUTION: The attention of all persons concerned with managing and carrying out this fire resistance test is drawn to the fact that fire testing may be hazardous and that there is a possibility that toxic and/or harmful smoke and gases may be evolved during the test. Mechanical and operational hazards may also arise during the construction of the test elements or structures, their testing and disposal of test residues.

An assessment of all potential hazards and risks to health should be made and safety precautions should be identified and provided. Written safety instructions should be issued. Appropriate training should be given to relevant personnel. Laboratory personnel should ensure that they follow written safety instructions at all times.

1 Scope

This European Standard describes the method to evaluate the performance of protective systems for electrical cable and busbar systems in order to maintain the circuit integrity under fire conditions to classify the protective system according to EN 13501-3 for the P classification. The test examines the behaviour of cable protection systems exposed to fire from outside. The tests specified in this standard are not aimed for assessing the performance of the fire protective system and the penetration seal for maintaining the requirements of the penetrated wall or ceiling (classification E / I).

This method is very different to EN 50200 for the PH classification and also to IEC 60331-11, IEC 60331-21, IEC 60331-23, and IEC 60331-25, which are not designed for fire protective systems for electrical cable systems.

This standard should be used in conjunction with EN 1363-1.

The test results apply to fire protective systems for electrical cable systems rated for voltages up to 1 kV.

The test procedure should also be used to determine the performance of protective systems for use with data and optical cables, however, verification procedures for such cables are still under development. Proposals are given in Annex C.

The protective system may include ventilation devices, inspection hatches, fixed or removable lids etc.

The tests specified in this standard are not aimed for assessing the performance of sprayed or painted coatings (e.g. intumescent or ablative coating, plastic film, epoxy resin) and similar protective layers (e.g. wrap, bandage) applied directly on the cables or bus bars as fire protective system. Also, cables and bus bars with intrinsic resistance to fire, and without fire protective systems around, are excluded (see CENELEC standard EN 50577).

This test method is not applicable for cabinets for electrical accessory containing bus systems, relays or similar.

2 Normative references

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

EN 1363-1, *Fire resistance tests - Part 1: General Requirements*

EN 1363-2, *Fire resistance tests - Part 2: Alternative and additional procedures*

EN 13501-3, *Fire classification of construction products and building elements - Part 3: Classification using data from fire resistance tests on products and elements used in building service installations: fire resisting ducts and fire dampers*

EN 50288-7, *Multi-element metallic cables used in analogue and digital communication and control - Part 7: Sectional specification for instrumentation and control cables*

EN 50525-2-11, *Electric cables - Low voltage energy cables of rated voltages up to and including 450/750 V (Uo/U) - Part 2-11: Cables for general applications - Flexible cables with thermoplastic PVC insulation*

EN 60269-1, *Low-voltage fuses - Part 1: General requirements (IEC 60269-1)*

EN 61537, *Cable management - Cable tray systems and cable ladder systems (IEC 61537)*

EN ISO 13943, *Fire safety - Vocabulary (ISO 13943)*

HD 603 S1, *Distribution cables of rated voltage 0,6/1 kV*