

ICS 13.220.50; 29.060.20; 91.140.50

English Version

Cable management systems (CMS) providing support for cables with intrinsic fire resistance

Systèmes de câblage servant à soutenir les câbles à
résistance intrinsèque au feu

Führungssysteme für Kabel und Leitungen (CMS) zur
Verlegung von Kabeln mit intrinsischem Feuerwiderstand

This Technical Report was approved by CENELEC on 2022-09-12.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

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European foreword

This document (CLC/TR 50658:2022) has been prepared by CLC/TC 213 "Cable management systems".

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Introduction

The purpose of the test detailed in this document is to evaluate the ability of a Cable Management System (CMS) to support cables with intrinsic fire resistance enabling them to maintain their function for a specified time period whilst exposed to fire. The test is conducted under conditions of a standard time/temperature curve when installed in a standardised representative condition.

This document for cable management products is used for electrotechnical purposes. It relates to the Council Directives on the approximation of laws, regulations and administrative provisions of the Member States relating to Low Voltage Directive 2014/35/EU through consideration of the essential requirements of this Directive.

This document is supported by separate standards to which references are made.

1 Scope

This document specifies test methods for cable management systems intended (CMS) to provide support for intrinsic fire-resistant cables in order to determine their abilities to maintain the function of electrical power cables and signal/control cables for a specified duration when subjected to fire under defined conditions.

This document establishes a non-hierarchical classification for this ability.

Additional devices to fix the cable management systems providing fire resistant support (CMS-support) to the building structure for example screws, anchors etc. are not covered by this document.

CMS intended to provide support and fire protection for cables are tested according to EN 1366-11.

This document does not apply to powertrack systems.

NOTE Rules for testing CMS-support for fibre optic cables and communication cables are under consideration.

2 Normative references

There are no normative references in this document.

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

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

3.1

cable management system (CMS)

assembly including different system components intended for the accommodation of insulated conductors, cables and other electrical equipment in electrical and/or communication systems

Note 1 to entry: Examples of CMS or CMS products are cable tray systems, mesh cable tray systems, cable ladder systems, cable trunking systems, conduit systems, cable ducting systems, cable cleats, cable ties.

3.2

cable management systems providing fire resistant support (CMS-Support)

cable management system providing support for cables with intrinsic fire resistance to maintain their function for a specified time period under defined test conditions

Note 1 to entry: Support of the cables may be provided for example by suitable cable tray systems, mesh cable tray systems, cable ladder systems, cable trunking systems, conduit systems, cable ducting systems, cable cleats, cable ties.

3.3

product type

group of system components of similar design with limited variations

Note 1 to entry: Cable tray lengths and fittings, mesh cable tray lengths and fittings and cable ladder lengths and fittings - variation in width and/or variation in perforation of the base area of the tested product but not more than $\pm 5\%$ (e.g., if the tested product has a perforation of 15 % the group has to be between 10 % and 20 %).

Note 2 to entry: Cable trunking lengths and fittings - variation in width.