

FIRE PROTECTION OF ELECTRICAL SYSTEMS



NUVIATech Protection, brand of NUVIA Group, offers various protection products for electrical systems. Products intended for the fire zoning through anti-propagation systems such as flame screens or mats for cable trays or cable shafts. Products for maintaining the functionality of electrical systems through rigid enclosures or flexible wrapping around cable trays.

Products designed to reduce the fire load of various equipment and cables.

Context

Electrical systems, for safety or security reasons, may require to maintain their functionality in case of fire.

Electrical systems can also be considered as fire initiators. As such, it is necessary to provide dedicated protections to inhibit the contribution of the fire load input.

Electrical systems can also be considered as a vehicle for fire. To break the propagation of fire along cables or from electrical equipment, it is necessary to provide dedicated protections allowing sectorization.

Issues

Functional protection ensures that the temperature under protection does not exceed the maximum temperature allowed for the protected equipment or system.

The fire load subtraction is very useful, especially during the FRA (fire risk assessment), in order, for example, to decommission equipment or to reduce the protection performance in the rest of the room. In order to be certified, products/solutions must undergo a multitude of tests, often destructive (fire resistance), unitary or cumulative, in order to meet the different workload.

The implementation of products/solutions is a key aspect for NUVIATech Protection, because it is the key to success in the realization of a construction or renovation project. This aspect of constructability is therefore considered from the design phase to ensure installation in a complex environment that complies with certifications.

Applicable standards and norms

The fire resistance tests of the construction elements are carried out according to standardized test methods described in the order of fire resistance of the Ministry of the interior.

For years, the fire protection needs of electrical systems were not covered by an official test standard. All qualification was done through specific fire tests in accredited laboratories (ISO 17025).

Since 2018, a European standard has been published - EN 1366-11 - on functional protection.

Our products/solutions are also qualified with the following norms USA (UL, ASTM, NFPA).

Our products/solutions also meet the specific requirements of our customers (EDF, ITER, CEA, NAVAL GROUP) not only in terms of fire, but also in terms of watertightness, displacement and any other requirements from industrial sensitive sites.



Areas of activity



INDUSTRY



NUCLEAR



BUILDING



NAVAL / MARINE



DEFENCE