

Cable installations - fire regulations

General

[Information within brackets in this document refers to local regulations]

These instructions provide advice regarding risks and safety measures as well as proposals for improvements of cable installations as a preventive measure.

A cable fire can have disastrous consequences with long stoppages in production, cleanup and huge secondary costs. In this case up-to-date documentation is of the utmost importance for a rapid rebuilding of the cabling. It is also of great importance that the relevant processing, electrical and fire personnel know quickly and with certainty what has to be done.

This version primarily differs to the previous one in its layout and also in that the references to other standards and regulations have been updated.

Contents

- 1 Introduction
- 2 Causes of fire
- 3 Limitation of fire hazards
- 4 Design of cable runs
- 5 Cable laying instructions
- 6 Sealing and sectioning
- 7 Flame-retardant paint
- 8 Sealing of penetrations
- 9 Shielding between runs
- 10 Existing installations
- 11 Clean-up
- 12 Documentation
- 13 Labelling of cable rack routes
- 14 References

1 Introduction

According to Swedish standards SS 421 01 101 High voltage installations with nominal voltages of over 1kV AC and SS 436 40 00 Electrical installation regulations, the risk of fire spreading is reduced by the choice of suitable materials and through suitable installation.

With regard for the upkeep and periodic inspection of installations, SSG's Special Instructions (SSG 4500) state that the owner is responsible for ensuring that machines, cables and other installation components are kept free of inflammable, heat insulating or conductive materials unless the risk of ignition, overheating or conduction is prevented by the design of the installation components.

Defects observed in the course of inspection and measurement shall be rectified as soon as possible.

[Insurance companies usually require regular audit inspection of electrical plants in industry. The inspection engineer shall be authorised by the Electrical Council (EN) of the Swedish Fire Protection Association (SBF), and shall examine and assess the design and maintenance of the installation to ensure that