

SSG-REPORT

SSG F/I 8602 F

Date 1997-03-01 Edition 3

Designation TKE/TKI

Page 1 (5)

Cable installations - fire regulations

General

The main difference between this and the previous edition is that this edition has been harmonised with current Swedish Power Regulations and Swedish standards.

The document provides information on fire hazards and protective measures, with proposals on how to improve cable installations to that end.

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 Cleanup
- 12 Documentation
- 13 References

1 Introduction

Under the Swedish Power Regulations, measures shall be taken to prevent the spread of fire along the cable route in instances in which numbers of cables are run in common. However, such measures shall not interfere with necessary cable cooling. It is further stipulated that "a permanently laid cable shall, by virtue of its design position or special arrangement, be protected from physical damage, chemical attack, heat or cold." The requirements relate firstly, to the design of the installation, and secondly, to the construction of the cables.

In the context of the maintenance and periodic inspection of the installation, the Regulations further stipulate that the cables shall, as far as possible and with regard to the nature of the application, be maintained free of flammable or con-ductive material. Otherwise, the risk of ignition or conduction may be prevented by the design of the system components. Defects observed in the course of inspection and measurement shall be rectified as soon as possible.

Insurance companies require regular audit inspection of electrical plant 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 it is in conformity with the regulations published by a statutory authority or of an insurer's regulations as specified by EN.