PD IEC/TR 62757:2015

BSI Standards Publication

Fire prevention measures on converters for high-voltage direct current (HVDC) systems, static var compensators (SVC) and flexible ac transmission systems (FACTS) and their valve halls

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National foreword

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The UK participation in its preparation was entrusted to Technical Committee PEL/22, Power electronics.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

FIRE PREVENTION MEASURES ON CONVERTERS FOR HIGH-VOLTAGE DIRECT CURRENT (HVDC) SYSTEMS, STATIC VAR COMPENSATORS (SVC) AND FLEXIBLE AC TRANSMISSION SYSTEMS (FACTS) AND THEIR VALVE HALLS

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IEC/TR 62757, which is a technical report, has been prepared by subcommittee 22F: Power electronics for electrical transmission and distribution systems, of IEC technical committee 22: Power electronic systems and equipment.

The text of this technical report is based on the following documents:

Enquiry draft	Report on voting
22F/347/DTR	22F/353A/RVC

Full information on the voting for the approval of this technical report can be found in the report on voting indicated in the above table.

This publication has been drafted in accordance with the ISO/IEC Directives, Part 2.

The committee has decided that the contents of this publication will remain unchanged until the stability date indicated on the IEC website under "http://webstore.iec.ch" in the data related to the specific publication. At this date, the publication will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

FIRE PREVENTION MEASURES ON CONVERTERS FOR HIGH-VOLTAGE DIRECT CURRENT (HVDC) SYSTEMS, STATIC VAR COMPENSATORS (SVC) AND FLEXIBLE AC TRANSMISSION SYSTEMS (FACTS) AND THEIR VALVE HALLS

1 Scope

IEC TR 62757, which is a technical report, deals with fire prevention measures on converters and their valve halls for high voltage direct current (HVDC) systems, static VAR compensators (SVC) and flexible AC transmission systems (FACTS). It is intended to be primarily for the use of the utilities and consultants who are responsible for issuing technical specifications for new converter valves and valve halls. It concerns fire incidents in HVDC projects using line commutated converters (LCC) or voltage sourced converter (VSC) technology and it is from these projects that most examples of fires and fire incidents are taken. This technical report also addresses converter valves and valve halls for SVC and FACTS.

This technical report provides general recommendations to be considered while preparing specifications for these systems. Specific requirements for a particular project need to be clearly specified and mutually agreed upon between the supplier and the purchaser.

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.

Void.

3 Terms and definitions

For the purpose of this document the following terms and definitions apply.

3.1
alarm system
installation for initiating a fire alarm

3.2
automatic fire detector
device that detects abnormally high temperature, rate of temperature rise, visible or invisible particles, infra-red or visible radiation, or gases produced by a fire

3.3
automatic fire extinguishing system
any system designed and installed to detect a fire and subsequently discharge an extinguishing agent without the necessity of human intervention

3.4
burn, intransitive verb
undergo combustion

[SOURCE: ISO 13943:2008, 4.28]