

IEEE Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV AC

Sponsor

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Abstract: IEEE Std 1067-1990, *IEEE Guide for In-Service Use, Care, Maintenance, and Testing of Conductive Clothing for Use on Voltages up to 765 kV AC*, provides recommendations for the in-service use, care, maintenance, and electrical testing of conductive clothing (including suits, gloves, socks, and boots) for use on voltages up to 765 kV ac.

Keywords: *conductive clothing, nondestructive testing.*

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1. Scope

This guide provides recommendations for the in-service use, care, maintenance, and electrical testing of conductive clothing, including suits, gloves, socks, and boots, for use on voltages up to 765 kV ac.

Testing pertains only to nondestructive electrical tests that can be performed periodically to check if there is any reduction in the conductivity of the clothing.

2. Purpose

The purpose of this guide is to present, in one document, sufficient details of presently used methods and techniques to enable the in-service use, care, maintenance, and testing of conductive clothing.

This guide is intended to direct attention to appropriate standards or other documents relating to the care or testing of conductive clothing.

It is not intended that this guide should replace present proven utility standards, or imply that these recommendations are superior to existing practices and, therefore, should be universally adopted as utility standards. This compilation of many accepted practices is presented specifically in the form of a guide to be used by those utilities that are seeking guidance in establishing methods and procedures for the use, care, maintenance, and testing of conductive clothing.

This guide is not intended, nor should it be considered, as establishing a standard for the use, care, maintenance, and testing of conductive clothing in the electrical utility industry.

3. References

[1] ANSI A92.2-1979, Vehicle Mounted Elevating and Rotating Aerial Devices.¹

[2] IEC 895 (1987), Specification for Conductive Clothing for Live Working at Nominal Voltage up to 800 kV ac.²

4. Use of Conductive Clothing

4.1 General. Conductive clothing provides a shield around the worker's body that minimizes discomfort due to voltage induced currents. During barehand work, it also puts the worker at the same potential as the conductor or device to which he/she is bonded.

A worker may be assigned his/her own suit and be made responsible for its care and cleanliness. Training should be provided in the inspection and care of conductive clothing.

4.2 How Conductive Clothing is Worn. Conductive suits should be worn over work clothing. Under certain circumstances when other clothing is worn over the conductive suit it may contact items which are at a different potential than to what the suit is bonded. This has, in the past, caused burning resulting in injury to the worker. (See 4.5 for exception for gloves.)

¹ANSI publications can be obtained from the Sales Department, American National Standards Institute, 1430 Broadway, New York, NY 10018, USA.

²IEC publications are available from the International Electrotechnical Commission, 3 rue de Varembe, Case Postale 131, CH 1211, Genève 20, Switzerland/Suisse. IEC publications are also available in the United States from ANSI.