

IEEE Guide for Preparation Techniques of Extruded Dielectric, Shielded Cables Rated 2.5 kV through 46 kV and the Installation of Mating Accessories

IEEE Power and Energy Society

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Insulated Conductors Committee

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Abstract: Accepted best industry practices for the preparation of extruded dielectric shielded medium voltage cables rated 2.5 kV through 46 kV for the installation of mating accessories are defined in this guide. The information is intended to supplement cable accessory manufacturer installation instructions. The guide aims to provide a single source covering the proper methods to prepare cables for termination and jointing to maximize long-term, reliable operation of electrical power cable systems.

Keywords: accessory installation, cable, cable preparation, IEEE 1816™, separable connectors, system reliability

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Introduction

This introduction is not part of IEEE Std 1816-2013, IEEE Guide for Preparation Techniques of Extruded Dielectric, Shielded Cables Rated 2.5 kV through 46 kV and the Installation of Mating Accessories.

This guide is the first IEEE guide issued that addresses solid dielectric cable preparation and installation of cable accessories. This application guide is the product of close collaboration between representatives of both end users and manufacturers of cable accessories. Members of the B19 discussion and B19 working groups of the Insulated Conductors Committee provided valuable input and support.

This guide is intended to be used in concert with IEEE Std 48™, IEEE Std 386™, IEEE Std 404™, IEEE Std 592™, and IEEE Std 1215™, which define the construction specifications, qualification tests, ratings, and service conditions for terminations, separable connectors, and joints.

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1. Overview

1.1 Scope

This document defines accepted best industry practices for the preparation of extruded dielectric shielded medium voltage cables rated 2.5 kV through 46 kV and the installation of mating accessories.

1.2 Purpose

The purpose of this guide is to provide general information on cable preparation for the installation of cable accessories. It is intended to be basic and to supplement the manufacturer’s specific recommendations and established utility practices.