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IEEE Standard for Identification of Contact Wire Used in Overhead Contact Systems

IEEE Vehicular Technology Society

Sponsored by the
Rail Transportation Standards Committee

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USA

IEEE Std 1896™-2016

IEEE Standard for Identification of Contact Wire Used in Overhead Contact Systems

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of the
IEEE Vehicular Technology Society

Approved 12 May 2016

IEEE-SA Standards Board

Abstract: Parameters to be used in the identification of contact wires used in transit systems and electric railways and railroads are defined. The identification of contact wire by metallurgical content, electrical conductivity, and agency ownership is the intended use of this standard. This standard is not intended to replace or supersede existing identification standards using grooving but rather to simplify identification methods.

Keywords: contact wire, electric trolley buses, IEEE 1896™, light rail system, OCS, OCS design, OCS styles, overhead contact system, streetcars, transit systems, trolley, trolley wire

The Institute of Electrical and Electronics Engineers, Inc.
3 Park Avenue, New York, NY 10016-5997, USA

PDF: ISBN 978-1-5044-0857-8 STD20897
Print: ISBN 978-1-5044-0858-5 STDPD20897

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Participants

At the time this IEEE standard was completed, the Identification of Contact Wire Used in Overhead Contact Systems Working Group had the following membership:

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Steve Gilchrist, *Co-Chair*

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The following members of the individual balloting committee voted on this standard. Balloters may have voted for approval, disapproval, or abstention.

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Introduction

This introduction is not part of IEEE Std 1896-2016, IEEE Standard for Identification of Contact Wire Used in Overhead Contact Systems.

The Overhead Contact Systems Subcommittee was formed in 2001 with the purpose of developing standards governing the design and construction of overhead contact systems for rail transit. The primary concern of the Identification of Contact Wire Used in Overhead Contact Systems Working Group was to simplify practices and applications for the identification of contact wire used in overhead contact systems (OCSs) for rail transit vehicles, electric trolleybuses (ETBs) and electric railway locomotives. The majority of the present operating electrified rail systems use contact wires that have no identification markings so the type of wire in use cannot be identified in the field or on trolley reels as to electrical conductivity or metallurgical composition. This standard specifies the parameters solely used in the marking of contact wire used in overhead contact systems. This standard does not cover the markings of other types of wires and cables used with overhead or underground transit and railway systems.

This standard is intended to apply to all rail transit and railway systems that are electrically powered utilizing overhead contact wires, which are defined to include heavy rail vehicles ("subway or elevated cars") and light rail vehicles (streetcars), trolley buses, locomotives and railway electric multiple units (EMUs) cars, fully-automated, driverless implementations of rail transit vehicles sometimes included in the mode of transit referred to as Automated Guideway Transit (AGT), and, to the extent that the vehicles using overhead contact wires do not have other unique requirements, where this standard can be applied.

Contents