

IEEE Recommended Practice for Marine Cable for Use on Shipboard and Fixed or Floating Facilities

IEEE Industry Applications Society

Developed by the
Petroleum and Chemical Industry Committee

IEEE Std 1580™-2021
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IEEE SA Standards Board

Abstract: This recommended practice is for single or multiconductor cables, with or without metal armor and/or jacket, and rated 300 V to 35 kV AC (RMS phase-to-phase) or up to 2000 V dc, intended to be installed aboard marine vessels, fixed and floating offshore facilities, and in accordance with industry installation standards and the regulations of the authorities having jurisdiction (AHJ). The recommendations define what is considered good engineering practice with reference to the reliability and durability of the cable.

Keywords: IEEE 1580™, marine cable, offshore facilities, platforms, shipboard

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Introduction

This introduction is not part of IEEE Std 1580-2021, IEEE Recommended Practice for Marine Cable for Use on Shipboard and Fixed or Floating Facilities.

Prior to 2001, IEEE Std 45™, Recommended Practice for Electrical Installations on Shipboard, was the standard that addressed the construction, testing, and installation of marine wire and cable for shipboard use on commercial vessels or military coastal vessels. With the advancement and expansion of new insulation and jacketing materials, as well as new uses and applications for the cables (for example, offshore oil and gas drilling and production facilities, variable frequency drives, critical circuits requiring fire resistance, etc.), it was decided to move the content related to the construction details and testing requirements for these cables to a standalone document. IEEE Std 1580™, Recommended Practice for Marine Cable for use on Shipboard and Fixed or Floating Facilities, was first published in 2001. It was subsequently revised in 2010. The second revision incorporated changes in technology and addressed revisions to referenced standards.

For topics related to the selection and installation of these cables, the user should refer to IEEE Std 45.8™.

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