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## Road vehicles — Test methods and performance requirements for voltage class B connectors

*Véhicules routiers — Méthodes d'essai et exigences de performance pour connecteurs haute tension*



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## Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 32, *Electrical and electronic components and general system aspects*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).

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## Introduction

High voltage connectors differ from low voltage connectors in several ways due to their higher operating voltage and need for shielding. These differences lead to unique failure modes and a need for unique validation tests. This document is a test specification that is unique to high voltage connectors on road vehicles. Some of the unique items that are tested in this document are:

- higher limits on dielectric withstanding voltage,
- more exhaustive testing for airtightness,
- evaluation of EMC compatibility, and
- evaluation of unique components such as shielding and metal housings (also for electrical shielding).

Note that safety features in a connector design to prevent electric shock (such as high voltage interlock) are specific to the connector and the vehicle electrical architecture and therefore must be assessed separately.