INTERNATIONAL STANDARD

ISO 11992-1

Second edition
2003-04-15

Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles —

Part 1: Physical layer and data-link layer

Véhicules routiers — Échange d'informations numériques sur les connexions électriques entre véhicules tracteurs et véhicules tractés —

Partie 1: Couche physique et couche de liaison de données

Reference number
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Contents

Page

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 11992-1 was prepared by Technical Committee ISO/TC 22, *Road vehicles*, Subcommittee SC 3, *Electrical and electronic equipment*.

This second edition cancels and replaces the first edition (ISO 11992-1:1998), reviewed in the light of changing legislative requirements and which has been technically revised.

ISO 11992 consists of the following parts, under the general title *Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles*:

— *Part 1: Physical layer and data-link layer*

— *Part 2: Application layer for brakes and running gear*

— *Part 3: Application layer for equipment other than brakes and running gear*

Part 4, *Diagnostics*, is under preparation.

Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles —

Part 1:
Physical layer and data-link layer

1 Scope

This part of ISO 11992 specifies the interchange of digital information between road vehicles with a maximum authorized total mass greater than 3 500 kg, and towed vehicles, including communication between towed vehicles in terms of parameters and requirements of the physical and data link layer of the electrical connection used to connect the electrical and electronic systems.

It also includes conformance tests of the physical layer.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4141-1, *Road vehicles — Multicore connecting cables — Part 1: Test methods and requirements for basic performance sheathed cables*

ISO 7637-1, *Road vehicles — Electrical disturbance by conduction and coupling — Part 1: Definitions and general considerations*

ISO 7637-2, *Road vehicles — Electrical disturbance by conduction and coupling — Part 2: Commercial vehicles with nominal 24 V supply voltage — Electrical transient conduction along supply lines only*

ISO 8092-2, *Road vehicles — Connections for on-board electrical wiring harnesses — Part 2: Definitions, test methods and general performance requirements*

ISO 11898:1993[1)], *Road vehicles — Interchange of digital information — Controller area network (CAN) for high-speed communication*

ISO 11992-2, *Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles — Part 2: Application layer for brakes and running gear*

ISO 11992-3, *Road vehicles — Interchange of digital information on electrical connections between towing and towed vehicles — Part 3: Application layer for equipment other than brakes and running gear*

1) Amended in 1995. Under revision.