



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN IEC 55036:2020/A1:2023

Electric and hybrid electric road vehicles - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-

Véhicules routiers électriques et hybrides
électriques - Caractéristiques de
perturbations radioélectriques - Limites
et méthodes de mesure pour la

Elektro- und Hybrid-Straßenfahrzeuge -
Funkstöreigenschaften - Grenzwerte und
Messverfahren zum Schutz von
außerhalb befindlichen Empfängern

06/2023



National Foreword

This European Standard EN IEC 55036:2020/A1:2023 was adopted as Luxembourgish Standard ILNAS-EN IEC 55036:2020/A1:2023.

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ILNAS-EN IEC 55036:2020/A1:2023

EUROPEAN STANDARD **EN IEC 55036:2020/A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2023

ICS 33.100.10; 33.100.20

English Version

**Electric and hybrid electric road vehicles - Radio disturbance characteristics - Limits and methods of measurement for the protection of off-board receivers below 30 MHz
(CISPR 36:2020/AMD1:2023)**

Véhicules routiers électriques et hybrides électriques -
Caractéristiques de perturbations radioélectriques - Limites
et méthodes de mesure pour la protection des récepteurs
extérieurs en dessous de 30 MHz
(CISPR 36:2020/AMD1:2023)

Elektro- und Hybrid-Straßenfahrzeuge -
Funkstöreigenschaften - Grenzwerte und Messverfahren
zum Schutz von außerhalb befindlichen Empfängern
unterhalb 30 MHz
(CISPR 36:2020/AMD1:2023)

This amendment A1 modifies the European Standard EN IEC 55036:2020; it was approved by CENELEC on 2023-06-21. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this amendment the status of a national standard without any alteration.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

The text of document CIS/D/483/CDV, future CISPR 36/AMD1, prepared by CISPR SC D "Electromagnetic disturbances related to electric/electronic equipment on vehicles and internal combustion engine powered devices" of CISPR "International special committee on radio interference" was submitted to the IEC-CENELEC parallel vote and approved by CENELEC as EN IEC 55036:2020/A1:2023.

The following dates are fixed:

- latest date by which the document has to be implemented at national (dop) 2024-03-21 level by publication of an identical national standard or by endorsement
- latest date by which the national standards conflicting with the (dow) 2026-06-21 document have to be withdrawn

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Endorsement notice

The text of the International Standard CISPR 36:2020/AMD1:2023 was approved by CENELEC as a European Standard without any modification.



INTERNATIONAL STANDARD

NORME INTERNATIONALE

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE
COMITÉ INTERNATIONAL SPÉCIAL DES PERTURBATIONS RADIOÉLECTRIQUES

AMENDMENT 1
AMENDEMENT 1

**Electric and hybrid electric road vehicles – Radio disturbance characteristics –
Limits and methods of measurement for the protection of off-board receivers
below 30 MHz**

**Véhicules routiers électriques et hybrides électriques – Caractéristiques de
perturbations radioélectriques – Limites et méthodes de mesure pour la
protection des récepteurs extérieurs en dessous de 30 MHz**

INTERNATIONAL ELECTROTECHNICAL COMMISSION

INTERNATIONAL SPECIAL COMMITTEE ON RADIO INTERFERENCE

**ELECTRIC AND HYBRID ELECTRIC ROAD VEHICLES –
RADIO DISTURBANCE CHARACTERISTICS –
LIMITS AND METHODS OF MEASUREMENT FOR
THE PROTECTION OF OFF-BOARD RECEIVERS BELOW 30 MHz**

AMENDMENT 1**FOREWORD**

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Amendment 1 to CISPR 36:2020 has been prepared by CISPR subcommittee D: Electromagnetic disturbances related to electric/electronic equipment on vehicles and internal combustion engine powered devices.

The text of this Amendment is based on the following documents:

Draft	Report on voting
CIS/D/483/CDV	CIS/D/490A/RVC

Full information on the voting for its approval can be found in the report on voting indicated in the above table.

The language used for the development of this Amendment is English.

This document was drafted in accordance with ISO/IEC Directives, Part 2, and developed in accordance with ISO/IEC Directives, Part 1 and ISO/IEC Directives, IEC Supplement, available at www.iec.ch/members_experts/refdocs. The main document types developed by IEC are described in greater detail at www.iec.ch/standardsdev/publications/.

The committee has decided that the contents of this document will remain unchanged until the stability date indicated on the IEC website under webstore.iec.ch in the data related to the specific document. At this date, the document will be

- reconfirmed,
- withdrawn,
- replaced by a revised edition, or
- amended.

INTRODUCTION

Delete the existing second paragraph.

1 Scope

Replace the existing second and third paragraphs with the following:

This document applies to the emission of electromagnetic energy which might cause interference to radio reception and which is emitted from electric and hybrid electric vehicles (see 3.2 and 3.3) propelled by an electric motor supplied with electric energy by internal rechargeable energy storage system (with voltages above 60 V) when operated on the road.

Replace the existing seventh paragraph with the following:

The radiated emission requirements in this document are not intended to be applicable to the intentional transmissions from a radio transmitter as defined by the ITU-R, including their spurious emissions.

3 Terms and definitions

3.2

electric vehicle

Replace the existing definition and the existing note to entry with the following new definition and new note to entry:

vehicle propelled exclusively by electric motor(s) powered by on-board REESS

Note 1 to entry: Vehicles equipped with an additional power source (e.g. auxiliary combustion engine, fuel cell) used to provide electric power to the electric motor/REESS only, without contributing to the mechanical propulsion of the vehicle, are considered electric vehicles for the purposes of this document.

3.7

traction battery

Replace the existing term and the existing definition with the following new term, new definition and new note to entry:

3.7

rechargeable energy storage system

REESS

storage system that provides electric energy for electric propulsion, which can be recharged

Note 1 to entry: Components of the REESS can be high voltage (HV) batteries.

Add, after the existing definition of 3.8, the following new term, definition and note to entry:

3.9

high voltage

HV

operating voltage above 60 V

Note 1 to entry: The term high voltage can be defined with a different voltage range in other standards.

4.1 Determination of conformance of vehicle with limits

Replace the existing first paragraph with the following new paragraph:

The vehicle shall comply with the quasi-peak detector magnetic field strength limits specified in 4.2, when operated as per 5.4.2.2.

Add, after the second paragraph, the following new paragraph and new Figure 6:

If an initial peak detector prescan is performed (i.e., before any quasi peak detector measurements), then the compliance shall be determined based on the flowchart in Figure 6.