

ILNAS

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

ILNAS-EN 50436-2:2007

Alcohol interlocks - Test methods and performance requirements - Part 2: Instruments having a mouthpiece and measuring breath alcohol for general

Alkohol-Interlocks - Prüfverfahren und
Anforderungen an das Betriebsverhalten
- Teil 2: Geräte mit Mundstück zur
Messung des Atemalkohols für den

Ethylotests anti-démarrage - Méthodes
d'essais et exigences de performance -
Partie 2: Appareils équipés d'un embout
et mesurant le taux d'alcoolémie de l'air

12/2007



National Foreword

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English version

**Alcohol interlocks -
Test methods and performance requirements -
Part 2: Instruments having a mouthpiece and measuring breath alcohol
for general preventive use**

Alcootests électroniques anti-démarrage -
Méthodes d'essai
et exigences de performance -
Partie 2: Instruments munis
d'une embouchure et effectuant la mesure
du taux d'alcoolémie de l'air expiré,
à usage préventif général

Alkohol-Interlocks -
Prüfverfahren und Anforderungen
an das Betriebsverhalten -
Teil 2: Geräte mit Mundstück
zur Messung des Atemalkohols
für den allgemein-präventiven Einsatz

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B - 1050 Brussels

Foreword

This European Standard was prepared by the CENELEC BTTF 116-2, Alcohol interlocks.

The text of the draft was submitted to the formal vote and was approved by CENELEC as EN 50436-2 on 2007-12-01.

The following dates were fixed:

- latest date by which the EN has to be implemented
at national level by publication of an identical
national standard or by endorsement (dop) 2008-12-01
- latest date by which the national standards conflicting
with the EN have to be withdrawn (dow) 2010-12-01

The purpose of this European Standard is to specify essential performance requirements and to provide the respective test methods for presently available technologies. The technology of alcohol interlocks is rapidly evolving, and further innovations can be expected. These could be considered in future amendments or new parts of this European Standard.

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Introduction

The main purpose of alcohol interlocks is to prevent persons with blood alcohol concentrations exceeding a set limit value from driving a vehicle. The general preventive use, being the object of this standard, is complementary to the use according to the standard EN 50436-1 directed towards programs for drink-driving offenders to enhance traffic safety. The general preventive use concerns a much larger number of drivers and vehicles. The primary target is to hinder a casually intoxicated person with temporarily impaired judgement from driving a vehicle. It applies both to professional and private drivers, and it applies to all vehicles in which careless driving could be hazardous.

Alcohol interlocks should not represent a significant impediment to the normal use of a vehicle.

The purpose of this European Standard is to specify essential performance requirements and to provide the respective test methods for presently available technologies. The technology of alcohol interlocks is rapidly evolving, and further innovations can be expected. These could be considered in future amendments or new parts of this European Standard.

Furthermore, it should be recognised that the purpose of alcohol interlocks may to some degree violate the privacy. There is thus good reason to apply a principle of caution when defining requirements and test methods for alcohol interlocks.

1 Scope

This European Standard specifies test methods and performance requirements for breath alcohol controlled alcohol interlocks having a mouthpiece. It covers alcohol interlocks intended for general preventive use.

This European Standard is mainly directed to test laboratories and manufacturers for alcohol interlocks. It defines requirements and test procedures for type approval.

Several parameters (as for example alcohol concentration or breath volume) are specified in this European Standard for the purpose of type testing according to this standard only. However, it may be necessary according to national regulations or depending on user requests to set the values of the prescribed parameters differently for use of the alcohol interlocks.

This European Standard also applies to alcohol interlocks integrated into other systems of the vehicle.

This European Standard does not apply to

- alcohol interlocks intended to be used mainly in traffic safety programs for drink driving offenders (see EN 50436-1),
- instruments measuring the alcohol concentration in the ambient air in the vehicle,
- alcohol interlocks not having a mouthpiece.

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.

EN 60068-2-78:2001, *Environmental testing – Part 2-78: Tests – Test Cab: Damp heat, steady state (IEC 60068-2-78:2001)*

EN 60529:1991 + A1:2000, *Degrees of protection provided by enclosures (IP Code) (IEC 60529:1989 + A1:1999)*

ISO 7637-2:2004, *Road vehicles – Electrical disturbances from conduction and coupling – Part 2: Electrical transient conduction along supply lines only*

ISO 7637-3:1995, *Road vehicles – Electrical disturbances by conduction and coupling – Part 3: Vehicles with nominal 12 V or 24 V supply voltage - Electrical transient transmission by capacitive and inductive coupling via lines other than supply lines*

ISO 16750-2:2006, *Road vehicles – Environmental conditions and testing for electrical and electronic equipment – Part 2: Electrical loads*

ISO 16750-3:2006, *Road vehicles – Environmental conditions and testing for electrical and electronic equipment – Part 3: Mechanical loads*

ISO 16750-4:2006, *Road vehicles – Environmental conditions and testing for electrical and electronic equipment – Part 4: Climatic loads*

Commission Directive 2004/104/EC of 14 October 2004 adapting to technical progress Council Directive 72/245/EEC relating to the radio interference (electromagnetic compatibility) of vehicles and amending Directive 70/156/EEC on the approximation of the laws of the Member States relating to the type-approval of motor vehicles and their trailers, Official Journal of the European Communities No. L 337 of 13.11.2004, p.13

International Recommendation OIML R 126:1998, *Evidential breath analyzers*. International Bureau of Legal Metrology, 11, rue Turgot – 75 009 Paris – France