

# SLOVENSKI STANDARD SIST EN 1949:2011/kFprA1:2012

01-oktober-2012

# Specifikacija za vgradnjo sistemov na utekočinjeni naftni plin (UNP) v bivalna vozila za prosti čas in druga vozila - Dopolnilo A1

Specification for the installation of LPG systems for habitation purposes in leisure accommodation vehicles and accommodation purposes in other vehicles

Festlegungen für die Installation von Flüssiggasanlagen in bewohnbaren Freizeitfahrzeugen und zu Wohnzwecken in anderen Fahrzeugen

Spécifications relatives aux installations des systèmes GPL pour les besoins domestiques dans les véhicules habitables de loisirs et dans les autres véhicules

Ta slovenski standard je istoveten z: EN 1949:2011/FprA1:2012

ICS:

43.100 Osebni avtomobili. Bivalne Passenger cars. Caravans

prikolice in lahke prikolice and light trailers

97.200.30 Oprema za taborjenje in Camping equipment and

tabori camp-sites

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**SIST EN 1949:2011/kFprA1:2012** 

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#### **English Version**

# Specification for the installation of LPG systems for habitation purposes in leisure accommodation vehicles and accommodation purposes in other vehicles

Spécifications relatives aux installations des systèmes GPL pour les besoins domestiques dans les véhicules habitables de loisirs et dans les autres véhicules Festlegungen für die Installation von Flüssiggasanlagen in bewohnbaren Freizeitfahrzeugen und zu Wohnzwecken in anderen Fahrzeugen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 181.

This draft amendment A1, if approved, will modify the European Standard EN 1949:2011. If this draft becomes an amendment, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

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Contents		Page
1	Modification to 3.5:	
2	Modification to 3.9:	
3	Modification to 3.10:	4
4	Modification to 3.11:	4
5	Modification to 4.4	4
6	Modification to 5.1:	
7	Modification to 5.4	4
8	Modification to 5.5:	
9	Modification to 6.1.1	5
10	Modification to 6.1.3:	
11	Modification to 6.6:	
12	Modification to 9.2	5
13	Modification to 9.3	5
14	Modification to 11.2	6
15	Modification to 12.1	6
16	Modification to 12.2	6
17	Modification to Bibliography	8

#### **Foreword**

This document (EN 1949:2011/FprA1:2012) has been prepared by Technical Committee CEN/TC 181 "Dedicated liquefied petroleum gas appliances", the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

#### 1 Modification to 3.5:

Replace the text by the following:

#### "3.5 liquified petroleum gas (LPG)

mixture of light hydrocarbons, gaseous under conditions of normal temperature and pressure, and maintained in the liquid state by increase of pressure or lowering of temperature. The principle components are propane, propene, butanes and butenes"

#### 2 Modification to 3.9:

Replace the text by the following:

#### "3.9 pressure regulation system

system incorporating one or more regulators with or without change-over device to reduce the supply pressure of the system to the required working pressure for the appliance(s)"

#### 3 Modification to 3.10:

Replace the text by the following:

#### "3.10 regulator

device which maintains a regulated pressure within preset limits, whatever the upstream pressure, rate and temperature"

#### 4 Modification to 3.11:

Replace the text by the following:

#### "3.11 change over device

device which maintains the gas supply continuity by using gas from a "cylinder", a "tank" or an external supply manually chosen by the user or automatically"

#### 5 Modification to 4.4

Replace the fifth paragraph by the following:

"Inside the cylinder compartment it shall be clearly indicated by a label which appliances are supplied by each gas supply."

#### 6 Modification to 5.1

Replace the paragraph after Figure 2 by the following:

"Alternatively, thermal shielding shall be installed to prevent entry of exhaust heat gases into the compartment, or projection of the exhaust heat flow towards the cylinder(s) (see Figure 2)."

#### 7 Modification to 5.4

Replace the last sentence by the following:

"A label shall be placed with a pictogram of a cylinder and a warning sign "read instructions", see figure 3, in the vicinity of the cylinder(s)."

#### 8 Modification to 5.5:

Add a note after the last paragraph:

"NOTE Low level means in the floor, or if in the side wall touching the floor. The longer dimension of the ventilation is on the floor level"

#### 9 Modification to 6.1.1

Replace the second paragraph by the following:

"Pressure regulation systems in road vehicles shall have a fixed working pressure of 30 mbar and comply with EN 12864 (Annex D or Annex M with a maximum flow rate of 1,5 kg/h). Automatic change-over devices in vehicles shall comply with EN 13786 (Annex B or Annex J with a maximum flow rate of 1,5 kg/h). For each LPG supply (if a second gas supply exists) the flow rate of the pressure regulation system shall be at least the maximum capacity of the concerned installation, including all appliances installed by the manufacturer."

#### 10 Modification to 6.1.3:

Replace the text by the following:

"If the heating system or any other appliance is intended for use while the vehicle is in motion there shall be means to prevent uncontrolled release of LPG due to accidental disconnection (according to the European Directives 2006/119/EC)."

#### 11 Modification to 6.6:

Modify figure 6 key as follows:

"3 change over device"

#### 12 Modification to 9.2

Replace the text by the following:

"For cooking appliances which need to be moved from their transport position to their operation position, the requirement of 9.1 does not apply provided a low pressure hose complying with 7.1 is used and the following conditions are met:

- the length of the hose shall be as short as possible and not exceeding 750 mm;
- a shut-off valve shall be fitted immediately before the flexible hose assembly;
- the hose shall be protected against any stress, mechanical damage and overheating by positioning;
- the hose shall be readily accessible and shall not pass through or be installed behind walls, above ceilings or under floors."

#### 13 Modification to 9.3

Replace the text by the following:

"Requirement 9.1 does not apply to cooking appliances in caravan holiday homes that have been certified for installation with a flexible hose and that hose is supplied as a component of the appliance."

#### 14 Modification to 11.2

Replace the seventh paragraph by the following:

"Flue terminals positioned on a wall or a roof for gas appliances of more than 30 g/h LPG consumption shall not be located within 300 mm of a ventilator for the living space or an opening part of a window see figure 9 and 10."

Replace the eighth paragraph by the following:

"Where the flue terminal of an appliance of more than 30 g/h LPG consumption is positioned vertically below an opening part of a window, the appliance shall be fitted with an automatic shut-off device to prevent operation when the window is open."

The ninth paragraph shall be deleted.

#### 15 Modification to 12.1

Replace the text by the following:

"LPG tanks shall comply with Pressure Equipment Directive and the technical requirements of UN/ECE Regulation No 67-01, Part I, Annex 10. The LPG tank shall be at least equipped with the following accessories and they shall comply with the requirements of UN/ECE Regulation No 67-01, Part I, Chapter 6.3:

— 80 % filling stop val	ve;
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- level indicator;
- pressure relief valve (discharge valve);
- excess flow valve;
- manually operated service valve directly fitted at the tank;

This service valve may be used as the manually operated valve to isolate the LPG installation in case of refilling if:

- 1) it is in the immediate vicinity of the LPG filling point;
- 2) and it can be operated without further actions by the user.

If not, there shall be an additional valve in the immediate vicinity of the filling point or an automatic valve. The automatic valve shall isolate the LPG installation from the tank in the event of refilling:

- pressure relief device (fuse);
- gas-tight housing (if necessary);
- filling unit;
- a means (additionally to the 80% filling stop valve) to prevent liquid phase entering the regulator (e.g. a separator) during refilling and normal operation of the gas system."

#### 16 Modification to 12.2

Replace the text of the first four paragraphs by the following:

"The LPG tank and the fitted service valve shall be mounted and fixed in a manner that it is only possible to withdraw LPG from the gaseous phase in the tank. The correct mounting position of the LPG tank shall be indicated on the shape of the LPG tank. Gaseous phase gas may be distributed to all installed appliances.

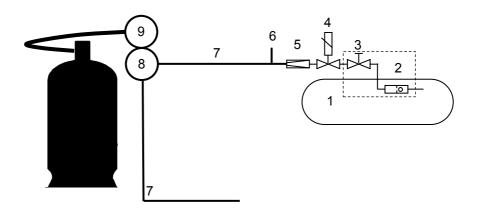
The LPG tank, the fitted tank accessories and the components of the LPG system from the filling unit to the LPG tank (components in contact with LPG in liquid phase) shall be installed in accordance with the technical requirements of UN/ECE Regulation No 67, part II; paragraph 17. The requirement regarding absorbing the forces of acceleration is also fulfilled if complying with EN 12979:2002, Annex B.

The filling unit of the LPG tank shall not be fitted within 500 mm of a ventilator for the habitable volume/living space, an opening part of a window or any flue outlet.

Pressure regulation systems shall comply with the requirements of EN 12864, Annex D or Annex M with a maximum flow rate of 1.5 kg/h and shall be installed after the service valve."

Replace the Figure 11 and the key by the following:

"



#### Key

- 1 LPG tank
- 2 excess flow valve
- 3 service valve
- 4 remote shut-off valve (alternative)
- 5 regulator
- 6 test point
- 7 rigid piping
- 8 manual change over device
- 9 regulator (cylinder side)

Figure 11 — possible LPG Tank and cylinder installation"

Add the following text after the figure 11:

"A warning label according to Figure 12 stating to turn off all LPG appliances before refilling shall be affixed at all fuel filling points."

Add the following figure at the end of the sub-clause 12.2:

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