Draft Indian Standard

ROAD VEHICLES — COMPRESSED NATURAL GAS (CNG) AND LIQUEFIED PETROLEUM GAS (LPG) FUEL SYSTEM COMPONENTS — CURRENT LIMITING DEVICES
(First Revision of IS 15723: 2006)

Last date for receipt of comments is : 20-06-2021

1 SCOPE:

1.1 This standard specifies definitions, test methods and requirements of current limiting devices (fuse), of CNG /Bio- CNG / LPG on board fuel system component intended for use on motor vehicles defined in IS 14272 (Part 1), two wheelers and construction equipment vehicles (CEV).

1.1.1 This standard is applicable to CNG/ Bio- CNG / LPG fuel system components intended to use on vehicles using compressed natural gas (mono-fuel or bi-fuel applications).

1.1.2 It is not applicable to the following:

a) Liquefied natural gas (LNG) fuel system components located upstream of, and including, the vaporizer;
b) Fuel containers;
c) Stationary gas engines; and
d) CNG/ Bio- CNG / LPG fuel systems components for the propulsion of marine craft.

2.0 REFERENCES:

The following standards contain provisions, which through reference in this text, constitute provisions of this standard. At the time of publication the editions indicated were valid. All standards are subject to revision and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below.

IS No.	Title
14272 (Part 1):1995	Automotive Vehicles – Types – Terminology : Part I Three and four wheelers
15710 :2006	Road vehicles - compressed natural gas (CNG) fuel system components – General requirements and definitions

3 DEFINITIONS

For the purpose of this standard definitions given in IS 15710 shall apply.

4 TYPE TEST (TYPE APPROVAL)

4.1 The current limiting devices or fuses used in the electrical systems of CNG/ Bio- CNG /LPG operated vehicles shall comply with the following requirements:

4.1.1 Current limiting device (fuse) shall not blow within 60 min when 110 percent of rated current of the circuit is supplied.

4.1.2 Current limiting device (fuse) shall blow within 60s when 135 percent of the rated current is supplied.

5 MARKING

5.1 Current limiting device or fuse shall be permanently marked with the following markings:

a) Manufacturers name, initial or trade-mark,
b) Rated current, and
c) Rated voltage.

5.1.1 Each package containing current limiting device shall be marked with:

Each current limiting device shall be legibly and indelibly marked with the following:

a) Manufacturer's name, initial or trade-mark, and
b) Rated current,

5.2 BIS Certification Marking

Each current limiting device or fuse may also be marked with the Standard Mark.

5.2.1 The use of the Standard Mark is governed by the provisions of the Bureau of Indian Standards Act, 1986 and the Rules and Regulations made thereunder.

The details of conditions under which the licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

6 TECHNICAL INFORMATION TO BE SUBMITTED BY THE COMPONENT MANUFACTURER

Technical information to be submitted by the component manufacturer for component type approval/ type test shall contain at least following information:

a) Name of the manufacturer;
b) Manufacturing plant address;
c) Part number;
d) Type of the current limiting device (for example, blade type or glass tube type, etc.);
e) Rated voltage of the current limiting device;
f) Rated current of the current limiting device; and
g) Drawings with relevant dimensions and materials.

7 NUMBER OF SAMPLES FOR TESTING

Minimum 4 numbers of current limiting devices (fuse) shall be submitted to the test agency for testing.

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