

DIN EN 30-1-1:2024-07 (E)

Domestic cooking appliances burning gas - Part 1-1: Safety - General (includes Amendment 1:2023)

| Contents | | Page |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| European foreword | | 5 |
| 1 | Scope | 7 |
| 2 | Normative references | 8 |
| 3 | Terms and definitions | 9 |
| 4 | Classification | 20 |
| 4.1 | Gases and appliance categories | 20 |
| 4.2 | Classes of appliances | 20 |
| 5 | Constructional requirements | 20 |
| 5.1 | General | 20 |
| 5.1.1 | Conversion to different gases | 20 |
| 5.1.2 | Materials | 22 |
| 5.1.3 | Ease of cleaning and maintenance | 23 |
| 5.1.4 | Strength | 24 |
| 5.1.5 | Soundness of the gas circuit assembly | 24 |
| 5.1.6 | Connections | 25 |
| 5.1.7 | Movable appliances | 26 |
| 5.1.8 | Fixing or stability of appliances | 26 |
| 5.1.9 | Additional components | 26 |
| 5.1.10 | Safety of operation in the event of fluctuation, interruption and restoration of the auxiliary energy | 27 |
| 5.1.11 | Electrical safety of appliances and immunity to electromagnetic phenomena | 27 |
| 5.2 | Special requirements | 27 |
| 5.2.1 | Taps | 27 |
| 5.2.2 | Knobs | 28 |
| 5.2.3 | Injectors and adjusters | 29 |
| 5.2.4 | Oven thermostats | 31 |
| 5.2.5 | Ignition systems | 31 |
| 5.2.6 | Flame supervision devices | 31 |
| 5.2.7 | Pressure regulators | 31 |
| 5.2.8 | Hobs | 32 |
| 5.2.9 | Ovens and grills | 34 |
| 5.2.10 | Cylinder compartment | 36 |
| 5.2.11 | Appliances with a cooling fan | 37 |
| 5.2.12 | Accumulation of un-burnt gas | 37 |
| 5.2.13 | Additional requirements for appliances incorporating one or more burners that enable the user to program the delayed start and the end of a cooking cycle | 38 |
| 5.2.14 | Multifunctional controls | 39 |
| 5.2.15 | Shut-off valves | 39 |
| 6 | Operational requirements | 39 |
| 6.1 | General | 39 |
| 6.1.1 | Soundness | 39 |
| 6.1.2 | Obtaining the input rates | 39 |
| 6.1.3 | Flame supervision devices | 39 |
| 6.1.4 | Safety of operation | 40 |
| 6.1.5 | Heating | 40 |

| | | |
|-----------------------|---------------------------------------------------------------------------------------------|-----|
| 6.1.6 | Temperature of the LPG cylinder and its compartment | 43 |
| 6.1.7 | Total input of the appliance | 44 |
| 6.1.8 | Pressure regulator performance | 44 |
| 6.1.9 | Blocking of the cooling fan and failure of the thermostat | 44 |
| 6.2 | Special requirements for hobs | 44 |
| 6.2.1 | Ignition, cross-lighting and flame stability | 44 |
| 6.2.2 | Combustion | 45 |
| 6.3 | Special requirements for ovens and grills | 45 |
| 6.3.1 | Ignition, cross-lighting and flame stability | 45 |
| 6.3.2 | Combustion | 46 |
| 7 | Test methods | 47 |
| 7.1 | General | 47 |
| 7.1.1 | Reference and test gases | 47 |
| 7.1.2 | Test pressures | 47 |
| 7.1.3 | Test procedures | 47 |
| 7.1.4 | Pans | 51 |
| 7.1.5 | Ovens and grill temperatures | 53 |
| 7.1.6 | Appliances having a mains electrical supply | 53 |
| 7.1.7 | Appliances having one or more multi-ring hob burners | 53 |
| 7.2 | Verification of construction characteristics | 53 |
| 7.2.1 | Strength | 53 |
| 7.2.2 | Strength, stability | 55 |
| 7.2.3 | Appliances with a glass lid having a device for shutting off the gas to the hob burners ... | 57 |
| 7.3 | Verification of operational characteristics | 57 |
| 7.3.1 | General tests | 57 |
| 7.3.2 | Specific tests for hobs | 70 |
| 7.3.3 | Specific tests for ovens and grills | 79 |
| 7.4 | Accuracy of measuring instruments | 85 |
| 8 | Marking and instructions | 85 |
| 8.1 | Marking | 85 |
| 8.1.1 | General | 85 |
| 8.1.2 | Marking and warnings on the appliance | 86 |
| 8.1.3 | Additional marking and warnings on the appliance | 86 |
| 8.1.4 | Marking and warning on the packaging | 87 |
| 8.1.5 | Additional marking on the packaging | 87 |
| 8.2 | Instructions general | 87 |
| 8.3 | Instructions for installation | 87 |
| 8.3.1 | General | 87 |
| 8.3.2 | Instructions for installation and adjustment | 87 |
| 8.3.3 | Additional instructions for installation | 89 |
| 8.4 | Instructions for use and maintenance | 90 |
| Annex A (informative) | National situations | 106 |
| A.1 | General | 106 |
| A.2 | Use in different countries of the categories listed in the text of the standard | 106 |
| A.3 | Supply pressures for the appliances (see 7.1.2) | 106 |
| A.4 | National or local gas categories | 106 |
| A.4.1 | National distribution | 106 |
| A.4.2 | Categories | 106 |
| A.4.3 | Permitted operations for changing gas | 106 |
| A.5 | Test gases corresponding to the particular categories given in A.4 | 106 |
| A.6 | Special conditions | 106 |
| A.7 | Connection requirements in force in various countries (see 5.1.6) | 107 |
| Annex B (informative) | Guidelines for extension to other categories | 111 |
| B.1 | General | 111 |
| Annex C (normative) | Characteristics of the pans required | 112 |

| | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------|
| C.1 | Pans required for testing on gas burners | 112 |
| C.2 | Characteristics of pans for testing on electric cooking plates | 114 |
| Annex D (normative) Surface temperature probe (7.3.1.5.3.2) | | 115 |
| D.1 | Design | 115 |
| D.2 | Validation test | 115 |
| D.2.1 | Principle | 115 |
| D.2.2 | Procedure | 115 |
| D.2.3 | Validation | 115 |
| Annex E (normative) Use of symbols on the appliance and packaging | | 117 |
| E.1 | Information having to appear on the appliance and packaging, in accordance with Clause 8 | 117 |
| E.1.1 | Electricity supply | 117 |
| E.1.2 | Type of gas | 117 |
| E.1.3 | Pressure | 118 |
| E.1.4 | Country | 118 |
| E.1.5 | Category | 118 |
| E.2 | Other optional information | 118 |
| E.2.1 | General | 118 |
| E.2.2 | Nominal heat input of a burner | 118 |
| E.2.3 | Nominal heat input of all appliance burners | 118 |
| E.3 | Information that shall be on the appliance and its packaging, in accordance with 8.1 and 8.2 | 118 |
| Annex F (normative) Fragmentation required for toughened soda-lime glass | | 121 |
| F.1 | Requirement | 121 |
| F.2 | Test method | 121 |
| Annex G (informative) Examples of types of multi-ring burners and their operating modes | | 123 |
| Annex ZA (informative) Relationship between this European Standard and the essential requirements of EU Regulation 2016/426/EU aimed to be covered | | 124 |
| Bibliography | | 127 |