

# DIN EN 484:2020-06 (E)

Specification for dedicated liquefied petroleum gas appliances - Independent stoves, including those incorporating a grill for outdoor use

---

<b>Contents</b>		<b>Page</b>
European foreword .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	7
4	Classification .....	12
4.1	Classification of gases used .....	12
4.2	Classification of appliances .....	13
5	Constructional characteristics .....	13
5.1	Operating with different gases .....	13
5.2	Materials .....	14
5.3	Ease of cleaning and maintenance .....	14
5.4	Manipulation of grills .....	14
5.4.1	Griddles .....	14
5.4.2	Radiant grills .....	14
5.5	Strength .....	14
5.6	Assembly .....	15
5.7	Stability .....	15
5.7.1	Stability of the appliance on a horizontal plane .....	15
5.7.2	Stability of the appliance placed on a slope .....	15
5.7.3	Vessel stability .....	15
5.8	Construction of the gas circuit assembly .....	15
5.9	Connections .....	16
5.10	Locking of wheels and castors .....	16
5.11	Taps .....	16
5.12	Control handles .....	17
5.12.1	Construction .....	17
5.12.2	Marking .....	17
5.13	Injectors .....	18
5.14	Ignition devices .....	18
5.15	Flame supervision devices .....	18
5.16	Burners .....	18
5.17	Appliance incorporating a gas container .....	19
5.18	Durability of markings .....	19
5.19	Auxiliary energy .....	19
5.20	Resistance to liquid spillage .....	19
6	Performance characteristics .....	20
6.1	Soundness .....	20
6.2	Verification of the nominal heat input .....	20
6.3	Flame supervision devices .....	20
6.4	Safety of operation .....	20
6.4.1	Ignition, crosslighting .....	20
6.4.2	Flame stability .....	20
6.4.3	Resistance to draught .....	20
6.4.4	Resistance to overheating .....	20
6.4.5	Soundness of burner parts .....	20

6.5	Temperatures .....	20
6.6	Overheating of the gas container .....	22
6.7	Combustion .....	22
6.8	Sooting .....	22
6.9	Rational use of energy: Performance of the burners .....	22
6.9.1	Open burners .....	22
6.9.2	Covered burners .....	22
6.10	Resistance to liquid spillage .....	22
7	Test methods .....	23
7.1	General .....	23
7.1.1	Test gases .....	23
7.1.2	Test pressures .....	24
7.1.3	Test procedures .....	24
7.2	Verification of the constructional characteristics .....	24
7.2.1	Conversion to different gases .....	24
7.2.2	Materials .....	24
7.2.3	Ease of cleaning and maintenance .....	24
7.2.4	Manipulation of grills .....	24
7.2.5	Strength .....	25
7.2.6	Assembly .....	25
7.2.7	Stability of the appliance .....	25
7.2.8	Soundness of the gas circuit assembly .....	26
7.2.9	Connections .....	26
7.2.10	Locking of wheels and castors .....	26
7.2.11	Taps .....	26
7.2.12	Control handles .....	26
7.2.13	Injectors .....	26
7.2.14	Ignition devices .....	26
7.2.15	Flame supervision devices .....	26
7.2.16	Burners .....	26
7.2.17	Appliances incorporating a gas container .....	26
7.3	Verification of the performance characteristics .....	26
7.3.1	Soundness .....	26
7.3.2	Verification of the nominal heat input .....	27
7.3.3	Flame supervision device .....	27
7.3.4	Safety of operation .....	27
7.3.5	Temperatures .....	29
7.3.6	Overheating of the gas container .....	30
7.3.7	Combustion .....	30
7.3.8	Sooting .....	31
7.3.9	Rational use of energy .....	31
7.3.10	Durability of the marking .....	34
8	Marking .....	34
8.1	Appliance marking .....	34
8.2	Packaging marking .....	34
8.3	Instructions for assembly, use and maintenance .....	35
Annex A (normative) National situations .....		41
A.1	General .....	41
A.2	Categories marketed in the various countries and corresponding pressures .....	41
A.3	Types of connection used in various countries .....	43
A.4	Connection of appliances .....	44
Annex B (normative) Method of calculation of the nominal heat input .....		48
B.1	Nominal heat input .....	48
B.2	Corrected mass rate .....	48
B.3	Use of a wet meter .....	49
B.4	Correction of the measured volume .....	50

<b>Annex C (normative) Composition of test gases .....</b>	<b>51</b>
<b>C.1      General .....</b>	<b>51</b>
<b>C.2      Wobbe index .....</b>	<b>51</b>
<b>C.3      Purity .....</b>	<b>51</b>
<b>Annex D (normative) Surface temperature probe .....</b>	<b>52</b>
<b>D.1      Design .....</b>	<b>52</b>
<b>D.2      Validation test .....</b>	<b>52</b>
<b>D.2.1    Principle .....</b>	<b>52</b>
<b>D.2.2    Procedure .....</b>	<b>52</b>
<b>D.2.3    Validation .....</b>	<b>52</b>
<b>Bibliography .....</b>	<b>54</b>