

# DIN EN 14543:2007-09 (E)

Specification for dedicated liquefied petroleum gas appliances - Parasol patio heaters - Flueless radiant heaters for outdoor or amply ventilated area use (includes Amendment A1:2007)

---

<b>Contents</b>		<b>Page</b>
<b>FOREWORD</b>		<b>4</b>
<b>1</b>	<b>SCOPE</b>	<b>5</b>
<b>2</b>	<b>NORMATIVE REFERENCES</b>	<b>5</b>
<b>3</b>	<b>TERMS AND DEFINITIONS</b>	<b>6</b>
<b>4</b>	<b>CLASSIFICATION AND DESIGNATION</b>	<b>9</b>
<b>5</b>	<b>DESIGN REQUIREMENTS</b>	<b>9</b>
5.1	General	9
5.2	Suitability for various gases	9
5.3	Materials	9
5.4	Assembly - Sturdiness	10
5.5	Stability of the appliance	10
5.6	Gas circuit	10
5.7	Burner	11
5.7.1	Burner design	11
5.7.2	Injector	11
5.7.3	Primary air admission	11
5.7.4	Ignition device	11
5.7.5	Operating visibility	12
5.7.6	Device for protection against accidental contact with the burner	12
5.8	Auxiliary devices	12
5.8.1	Valves	12
5.8.2	Flame failure device	13
5.8.3	Atmosphere sensing device	13
5.8.4	Electrical equipment	13
5.8.5	Thermostat	13
5.9	Gas cylinder housing	13
5.10	Protection against contact with reflector	14
5.10.1	General	14
5.10.2	Dimensions and location	14
5.10.3	Alternative protection device	14
<b>6</b>	<b>OPERATING REQUIREMENTS</b>	<b>14</b>
6.1	Soundness of gas circuit	14
6.2	Verification of the nominal heat input	14
6.3	Operating safety	14
6.3.1	Resistance of burner to overheating	14
6.3.2	Temperature rise	14
6.3.3	Ignition, cross-ignition, flame stability	16
6.3.4	Wind resistance	16
6.3.5	Rain resistance	16
6.3.6	Soot accumulation	16
6.3.7	Low-temperature ignition	16
6.3.8	Operation of the flame failure device	16
6.3.9	Atmosphere sensing device ( )	16

6.3.10	Electrical safety .....	17
6.4	Combustion .....	17
6.5	Performances .....	17
7	TEST METHODS .....	17
7.1	Test conditions .....	17
7.2	Verification of compliance with design requirements .....	17
7.2.1	Stability of the appliance .....	17
7.2.2	Protecting against accidental contact with the burner .....	17
7.3	Verification of compliance with operating requirements .....	18
7.3.1	Absence of leakage in the gas circuit .....	18
7.3.2	Heat input .....	19
7.3.3	Safety of operation .....	20
7.3.4	Combustion .....	26
7.3.5	Performances .....	26
8	MARKING, PACKAGING AND INSTRUCTIONS .....	27
8.1	General .....	27
8.2	Marking of the appliance .....	27
8.3	Marking of the packaging .....	28
8.4	Installation and operating instructions .....	28
	ANNEX A (NORMATIVE) SPECIAL NATIONAL CONDITIONS .....	31
	ANNEX B (INFORMATIVE) LPG CYLINDER FLOW RATE .....	35
	ANNEX C (INFORMATIVE) PERFORMANCE .....	36
	ANNEX ZA (INFORMATIVE) CLAUSES OF THIS EUROPEAN STANDARD ADDRESSING ESSENTIAL REQUIREMENTS OR OTHER PROVISIONS OF EU DIRECTIVES .....	38
	BIBLIOGRAPHY .....	40