TEST REPORT

BS EN 17476

Specifications for dedicated liquefied petroleum gas appliances — LPG vapour pressure appliances incorporating a horizontal cartridge in the chassis

Report Reference No.	:	TP240225JN01/S-0396
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Date of issue	:	2024.03.01

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Client:		
Applicant's name	:	YONGKANG JIANGNUO INDUSTRIAL AND TRADING Co.,Ltd
Address	:	3F, Building 1, No. 39 Chuangxin Avenue, Business incubator and innovation park for return of Zhejiang merchants, Longshan Town, Yongkang, Zhejiang,China
Manufacturer	:	YONGKANG JIANGNUO INDUSTRIAL AND TRADING Co.,Ltd
Address	:	3F, Building 1, No. 39 Chuangxin Avenue, Business incubator and innovation park for return of Zhejiang merchants, Longshan Town, Yongkang, Zhejiang,China
Test specification:		
Standard	:	BS EN 17476:2021+A1:2022
Test Date	:	2024.02.07-2024.03.01
Test item description:		
Name of product	:	PORTABLE GAS HEATER
Trade Mark	:	/
Model/Type reference	:	YC-808A,YC-808B,HH-808A,HH-808B,YC-8508A,YC-8508B
Ratings	:	See the marking plate
Test Verdict	:	All tests were performed in according with the above standards.

General remarks:

1. This report is invalid without "special seal for test report" or "official seal of test unit".
2. It is not allowed to copy this report without the written our consent of laboratory.
3. The report is invalid without the signature and seal of the main inspector, auditor and approving person.
4. The report is invalid if altered.
5. If you have any objection to this report, you should submit it to our laboratory in writing within 15 working days from the date of receiving the report.
6. The test conclusion of this report is only responsible for the sample.
7. In the test report, "P" meets the requirements;

   "N/A" means not applicable or Not detected.

   "F" means that it does not meet the requirements of the standard

Possible test case verdicts:

- test case does not apply to the test object or the requirement is not tested..... : N/A
- test object does meet the requirement..... : P(Pass)
- test object does not meet the requirement..... : F(Fail)

General remarks:

"(See Enclosure #)" refers to additional information appended to the report.

"(See appended table)" refers to a table appended to the report.

Throughout this report a ☒ comma / ☐ point is used as the decimal separator.

General product information:

This report contain the models: YC-808A、YC-808B、HH-808A、HH-808B、YC-8508A、YC-8508B.

The difference is only the model naming methods.

The full tests performed on the model YC-808A.

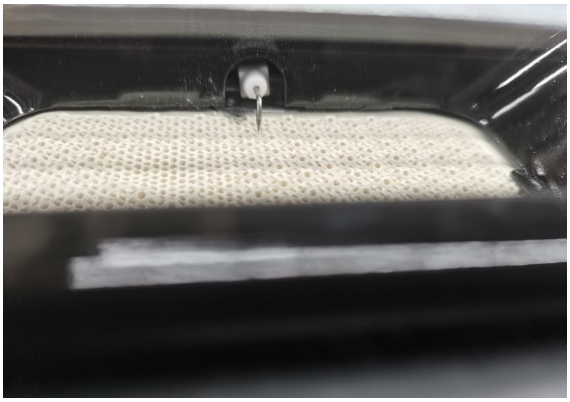
All the tests were performed according to BS EN 17476:2021+A1:2022.

Copy of marking plate:

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.

NAME	PORTABLE GAS HEATER
MODEL	YC-808A
FUEL	BUTANE GAS
IGNITION	IGNITION ELECTRONIC PIEZO
POWER	1.3kW
CONSUMPTION	90g/h
INJECTOR SIZE	Φ0.44mm
WEIGHT	2kg
SIZE	292×265×1190mm

Photos:




Turning the control knob
Pulling out the ring


RELEASE
OFF
MIN
UNLOCK
GAS
LOCK
LOCK

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Clause	Requirement + Test	Result - Remark	Verdict
4	**Classification of appliances**		**—**
	For the purpose of this document appliances are classified in two groups according to the gas pressures they are designed for:		—
	a) Butane appliances: Appliance using mixture of hydrocarbons containing mainly butanes and butenes having a maximum pressure of 8 bar gauge at 50℃; called"category direct pressure-butane";		P
	b) Butane-propane mixt appliances: Appliance using mixture of hydrocarbons containing mainly butanes, butenes, propane and propene having a pressure between 8 bar gauge and 12 bar gauge at 50℃; called "category direct pressure - butane-propane mixture".		N/A
5	**Safety requirements**		**—**
5.1	General		—
	The test methods and the means of verification are indicated in Clause 6.		—
	The design shall make it impossible to incorrectly fit or refit any user-removable or replaceable part(s) or component(s) that can have an adverse effect on combustion or cause CO emissions to exceed limits in 5.26.		P
5.2	Adjustment of the burner		—
	Not any adjustment of the burner shall be possible.		N/A
5.3	Materials		—
	Non-metallic materials used as radiant elements in appliances (for example ceramics) shall resist to all tests of this documents without alteration.		P
	The quality and thickness of materials used in the construction of appliances shall be such that the constructional and performance characteristics are not altered in use. In particular all the parts of the appliance shall withstand mechanical, chemical and thermal actions to which they may be submitted during use. In normal conditions of operation, of cleaning or of adjustment, they shall not be liable to any alterations which might impair their safety.		P
	Sheet-metal parts, not made of corrosion-resistant material, shall be effectively protected against corrosion. This requirement does not apply to cooking devices.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	Seals and joining compounds shall have characteristics suited to their use.		P
	Rubber based materials shall comply with EN 549:2019 class A2 minimum, and LPG resistant.		P
	Asbestos or asbestos based materials shall not be used.	No asbestos or asbestos based materials.	P
	With the exception of seals, membranes, parts in contact with gas shall be made of metallic materials.		P
	Material intended to be in contact with food shall be: — corrosion resistant; — non toxic.		P
	The materials shall: — not transfer undesirable odours, colours or taint to the food; — not contribute either to the contamination of food or have any adverse influence on the food. NOTE For information see EN 1672-2.		P
5.4	Assembly, cleaning and maintenance		—
5.4.1	Assembly		—
	The entire appliance gas circuit, including the injector shall be factory assembled. If clamps are used, they shall be of the machine formed type. Removable clamps are not permitted.		N/A
	Parts, whose assembly is carried out by the user, shall only be able to be assembled correctly by following the instructions given in the instructions.		P
	It shall not be possible to dismantle parts which are adjusted at the factory, which are not intended to be dismantled by the user and whose dismantling would affect safety, without using tools. If dismantling is possible using an open ended spanner or a screwdriver, direct access to such nuts and screw heads shall not be possible, unless they are sealed.		P
	For flat portable gas stoves, it shall not be possible to operate the appliance if the pan support is not in the cooking position.		P
	The appliance design shall prevent any accidental blockage of any safety device by contamination by ground materials. NOTE Contamination by ground materials could include		P

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	sand, grass, soil.		
5.4.2	Cleaning, maintenance		—
	All parts of the appliance requiring frequent cleaning by the user shall be easily accessible. It shall be possible to put these parts back correctly.		P
	There shall be no sharp corners and edges on the accessible parts of an appliance which could give rise to injury.	No sharp corners and edges	P
5.5	Strength and stability		—
5.5.1	Strength		—
5.5.1.1	General		—
	The construction of an appliance shall be such that, during normal conditions of use: — any displacement of parts; — any distortion; — any deterioration likely to impair safe operation will not occur.		P
5.5.1.2	Stove pan supports		—
	The application of a mass as described in 6.5.1.2 on the pan support shall not cause any breakage or permanent distortion of the pan support exceeding 1 mm.		P
5.5.2	Stability		—
	If the appliance is fitted with a foldable support, it shall be possible to lock this in the position of use.		N/A
	The stability of an appliance designed to rest on a table or on the ground shall allow safe use on level ground. In addition, the appliance shall not tilt or fall over when it is placed on a slope of 10° in any configuration.		P
	This requirement shall also be met when the appliance is fitted with any optional parts listed in the instructions.		P
	These requirements shall be met under the test conditions described in 6.5.2.		P
5.6	Soundness of the gas circuit assembly		—
	Holes for screws, pins, etc. intended for the assembly of components shall not open into the space reserved for the gas ways leading to the injector.		P
	The soundness of parts and assemblies connected to the gas circuit shall be ensured by means of metal-to-metal		P

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	joints or joints with seals (for example, flat-faced joints, O-rings or gaskets), i.e. excluding the use of any product which ensures soundness in the threads. For parts that do not require to be dismantled during normal maintenance, for example taps, the use of thread sealing compounds is permitted.		
	Removable components or the threaded parts of the gas pipework which may be dismantled during maintenance described in the instructions shall remain sound after five disconnections and re-connections in accordance with the instructions, if necessary after changing a gasket.		P
	Soft solder shall not be used to ensure the soundness of the gas circuit. However it is permitted for internal connections within the gas circuit when they do not involve soundness.		P
	Under the test conditions defined in 6.6.1, during each of the tests n 1 and 2, the leak shall not exceed 0,07 l/h (1013mbar, 20 ℃). This requirement shall also be met after all the tests on the appliance have been carried out, but before any dismantling of parts subjected to the soundness tests.		P
5.7	Connections		—
	When following the instructions, connection of the appliance to the gas cartridge shall be easy without gas leakage during more than 2 s.		P
5.8	Transport, fixing and mobility devices		—
	It shall not be possible to place any gas cartridge anywhere other than in the gas cartridge compartment even for the purposes of transport or storage.		P
5.9	Taps		—
	Each burner shall be controlled by a tap or device allowing the opening and closing of its supply.		P
	Taps shall incorporate two stops, one on the closed position and one at the end of travel.		P
	Taps shall be so placed in such a way that their strength, their operation, their manipulation and their accessibility undergo no change from actions to which they are subjected in normal use.		P
	Taps shall be mounted in such a way that no accidental movement relative to fixed gas supply pipework is possible.		P

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Clause	Requirement + Test	Result - Remark	Verdict
	It shall not be possible by unscrewing to remove the closing device from the tap when opening the tap.		P
	Taps shall comply with the requirements given in Annex B.		N/A
5.10	Pressure sensitive safety device		—
	Each appliance may be fitted with a pressure sensitive safety device.		P
	If any it shall not be possible to bypass accidentally the pressure sensitive safety device.		P
	After action of the device its reactivation shall only be possible by a specific action (different from normal installation of the cartridge).		P
	In case of a failure of the pressure sensitive safety device, if any, the appliance shall not operate unless the appliance is fitted with two independent pressure sensitive safety devices.		P
	Under the test condition of 6.10 the gas supply shall be stopped between 4 and 6 bar.		P
5.11	Control handles		—
5.11.1	Construction		—
	It shall be obvious which burner is controlled by each control handle.		P
	They shall be so arranged relative to one another that the movement of one handle does not cause inadvertent movement of an adjacent one.		P
	Control handles shall be so designed that they neither be fitted in the wrong position nor move by themselves.		P
	If control handles operate by turning, the closing direction shall be clockwise.		P
5.11.2	Marking		—
	The closed, open and, if applicable, reduced rate positions shall be marked in a visible, legible and durable fashion.		P
	The closed position shall be marked by a full disc or a circle at least 3 mm in diameter. It shall be the same for all the taps.		P
	Ignition position, if any shall be marked (e.g. with a stylised star).		P
	The identification of the closed position of each tap shall not give rise to any possibility of confusion with the identification		P

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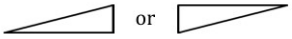
Clause	Requirement + Test	Result - Remark	Verdict
	of an open position.		
	For other positions, the following symbols may be used: Full rate position — Large flame Reduced rate position — Small flame Rate range — Triangle  or Scale — 1 2 3 4 or 4 3 2 1		P
	Other symbols, other than letters, are permitted provided that they give similar information clearly.		P
	Additional markings are permitted provided that they do not create confusion for the appliance user.		P
	The meaning of the symbols used shall be given in the instructions.		P
5.12	Injectors		—
	The gas rate shall be controlled by an injector of which the outlet orifice is fixed.		N/A
	Removable injectors shall carry an indelible marking allowing their identification, which shall be given in the instructions.		P
5.13	Ignition devices		—
	When an ignition device is fitted, it shall be designed and constructed in such a way that it provides rapid and safe ignition.		P
	The components of the ignition device shall be designed to avoid damage and displacement during use. The relative positions of the ignition device and the burner shall be sufficiently well defined to ensure safe operation of the assembly.		P
5.14	Flame supervision devices		—
	Any flame supervision device when existing shall comply with EN 125:2010+A1:2015.		N/A
	Heating appliances shall be fitted with a flame supervision device.		N/A
	When flame supervision devices are fitted, they shall be designed in such a way that, in the case of the failure of any of the components indispensable to their performance, the supply of the gas to the burner and to the pilot controlled by the device is cut off automatically and can only be restored by manual operation. They shall be so mounted as to ensure satisfactory performance.		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	The appliance shall not incorporate any device that allows the flame supervision device to be overridden. During the ignition period, a brief passage of unlit gas is permitted under the conditions given in 6.23.		N/A
	Under the test conditions described in 6.23, the ignition delay time shall not exceed 20 s and the extinction delay time shall be less than 60 s.		N/A
5.15	Burners and radiant elements		—
	Burners and radiant elements shall be designed in such a way that they cannot move inadvertently during use or movement of the appliance. The parts of a burner or a radiant element which require cleaning shall be removable and their cleaning shall be easy unless this is possible without dismantling.		P
	The parts of a burner or a radiant element which require cleaning shall be removable and their cleaning shall be easy unless this is possible without dismantling.		P
	It shall be possible to the user to check that the burners are alight.		P
	Crosslighting devices shall have a fixed position relative to the burners that they control and shall not distort in normal use.		P
	Under the test conditions defined in 6.6.2, there shall be no leak of gas in a flammable quantity at the joints of the assembly: — of burners made up of several parts; — of burners on the body of the appliance.		P
5.16	Grids		—
	Gaps in the area of the grid, shall not be more than 2 cm. The grid shall be capable of withstanding, without deterioration likely to impair its use, the load described in 6.16. Under this load, it shall remain stable on its supports.		P
5.17	Fireguards for heating appliances		—
	Heating appliances shall be fitted with a guard meeting the strength and dimensional requirements indicated in a) and b): a) strength of fireguards: 1) probe test. It shall not be possible to touch any burner radiant, catalytic		P

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Clause	Requirement + Test	Result - Remark	Verdict
	panel or a flame with any part of the test probe cone illustrated in Figure 5, even after the application of the test weight described in 6.17.1.1; 2) pull test. The guard shall not be removed, displaced or permanently distorted when tested as described in 6.17.1.2; b) dimensions. No opening in the guard or between the guard and the aperture to be protected, shall have dimensions exceeding: — length 150 mm;— width 35 mm;— diagonal 154 mm. Where a part of the fireguard comes within 3 mm of the aperture to be protected it shall be considered that the part reaches the edge of the aperture to be protected.		
	These dimensions are subject to the following exceptions: 1) where it is not possible to pass a 12 mm diameter probe having a hemispherical end through any opening between the guard and the aperture to be protected. The probe shall be applied with a force of 5 N to the guard, the weight of the probe being taken into account; 2) where the gap between any vertical rods does not exceed 5 mm.		P
5.18	Compartment for gas cartridge		—
	This compartment shall be designed in such a way that effective ventilation is provided by openings in its base.		P
	The total area of the openings at the base at least equal to 3 % of the base area of the compartment, each opening being at least 3 mm^2 .		P
	The openings shall not be blocked (for example by labels). Compartments for non-connected cartridge(s) are not allowed.		P
5.19	Heat input		—
	Under the test conditions defined in 6.19, each of the burner(s), shall be capable of giving the nominal heat input stated in the instructions with a tolerance as illustrated in Figure 6.	See appended table	P
5.20	Resistance to overheating		—
	No deterioration which could impair the safety of the appliance shall be evident after the test described in 6.20.		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.21	Temperature of various parts of the appliance and cartridge		—
	Under the test conditions defined in 6.21.2, the surface temperatures of the various parts of the appliance specified below shall not exceed the following limits: a) The surface temperature of the parts likely to be touched during normal use (for example: tap handles), measured only in the gripping area, shall not exceed the ambient temperature by more than: — 35 K for metals or equivalent materials; — 35 K for the body of the cartridge without exceeding 50 ℃; — 45 K for porcelain or equivalent materials; — 60 K for plastics, wood or equivalent materials. b) The surface temperature of fittings shall not exceed the maximum temperature stated in the technical documentation. c) Temperatures measured on accessible surfaces of the front and side panels of the appliance that can be accidentally touched shall not exceed the ambient temperature by more than: — metal and painted metal: 60 K;— enamelled metal: 65 K; — glass and porcelain: 80 K;— plastics and wood: 100 K. This last requirement (c) does not apply to heating appliances.	See appended table	P
5.22	Temperature of panels (floors, walls)		—
	The surface temperature of the appliance support shall not exceed the ambient temperature by more than 70 K and 50 K for walls. If the temperature rise of the support exceeds 50 K, the instructions shall indicate the conditions of use of the appliance, more particularly he shall specify the type of surface protection to be used.		P
5.23	Ignition, crosslighting and flame stability		—
	Under the test conditions defined in 6.23: — ignition, crosslighting and re-ignition shall occur smoothly within 5 s; — 60 s after ignition, flames shall be stable. A tendency to lift is permitted at maximum test pressures; — there shall be no extinction or light back.		P

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Clause	Requirement + Test	Result - Remark	Verdict
5.24	Resistance to draught		—
	Under the conditions defined in 6.24, neither burners nor pilots shall be extinguished unless the appliance is fitted with a flame supervision device.		P
5.25	Resistance to liquid spillage		—
	Under the conditions defined in 6.25, neither burners nor pilots shall be extinguished, unless this is caused by the action of a flame supervision device.		P
5.26	Combustion		—
	Under the conditions defined in 6.26, the quantity of CO in the air and water vapour free products of combustion shall not exceed 0,2 %.		P
5.27	Accumulation of un-burnt gas		—
	Any enclosure 1) containing at least one burner shall have one or several openings in its lower part allowing the discharge of un-burnt gas which might be released by the burners.		P
	These openings shall not be obstructed when the appliance is in the position of normal use (for example: appliances operating when they are placed on a surface).		P
5.28	Safety at high temperature		—
	During the test described in 6.28: — the pressure inside the gas cartridge shall not exceed the pressure of the gas contained at 50 ℃; — the maximum surface temperature of the cartridge shall not exceed 50℃. — any safety device shall not act.		P
	After this test: — there shall be no deterioration which could impair safe operation of the appliance; — the appliance shall meet the requirements of 5.6; — the ease of changing the gas cartridge and of manipulating the controls shall not have changed.		P
5.29	Sooting - condensation		—
	No deposit of soot likely to impair safe operation of the appliance shall be observed.		P
	During all the tests of this document, condensation shall not create phenomena likely to impair safe operation of		P

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Clause	Requirement + Test	Result - Remark	Verdict
	the appliance		
5.30	Rational use of energy of stove burners		—
	This requirement does not apply to stove burners whose nominal heat input is less than 1,16 kW.		P
	The efficiency determined under the conditions defined in 6.30 shall not be less than 50 %.		P
5.31	Durability of markings		—
	The durability of markings is considered satisfactory if, at the end of the tests in this document, markings are still visible and legible after the test described in 6.31.		P
5.32	Strength and endurance requirements		—
	After the components linked to the safety of the appliance having being submitted to the tests given in 6.32 the appliance shall fulfil, without any deformation affecting safety, the requirements of: a) 5.6 Soundness of the gas circuit assembly; b) 5.26 Combustion.		P
	This requirement does not apply to pressure sensitive safety devices, for which the requirement of 5.10 shall be checked after having carried out all the tests of this document.		P
5.33	Atmosphere sensing device		—
	Heating appliances shall be fitted with an atmosphere sensing device.		N/A
	When the appliance is tested in the hot condition in accordance with the method given in 6.33 the atmosphere sensing device shall cause shut off of the main gas supply when the CO 2 content of the atmosphere lies between 0,8 % (V/V) and 1,5 % (V/V).		N/A
	Where the pilot of an atmosphere sensing device is required to perform functions other than vitiation detection its performance shall also comply with the requirements of the relevant clauses of this document relating to these functions.		N/A
7	**Markings**		—
7.1	Appliance marking		—
	Any label shall not block the ventilation openings of the cartridge compartment.		P
	The appliance shall carry the following information, in a		N/A

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Clause	Requirement + Test	Result - Remark	Verdict
	visible (see 8.1 for readability) and durable fashion:		
	a) name of the manufacturer or his identifying symbol;		P
	b) postal address of the manufacturer. If not possible, on the packaging or in a document accompanying the appliance;		P
	c) appliance name;		P
	d) type of gas (butane; butane-propane mixture);		P
	e) “Category: direct pressure”;		P
	f) trade name or registered trade mark and type of the gas cartridge(s) intended to be used with the appliance,in the form: “This appliance shall only be used with the XYZ [2]) butane (cartridge)”;		P
	g) text “Use outdoors only” for barbecues or “Only use in well ventilated areas” for other types of appliances;		P
	h) text “Read the instructions before using the appliance”;		P
	i) for heating appliances and barbecues, the text “CAUTION: accessible parts could be very hot. Keep young children away from the appliance”;		P
	This information may be given on durable labels fixed onto the appliance.		P
7.2	Packaging marking		—
	The packaging of the appliance shall carry in a visible fashion the information in 7.1 d) to h).		N/A
	For appliances not being equipped with a flame supervision device, in addition the following information shall be visible on the front and the rear sides of the packaging with a minimum letter size of 3 mm height: “Not intended for a commercial use”.		P

Test Date Results:

Clause 5.19 Verification of heat inputs	
Model No.	
Measured heat input (kW)	1.26
Declared heat input (kW)	1.3
Deviation %	-3.1
Limit %	±15

Clause 5.21 Temperatures of various parts of the appliance				
Component/Area	Measured Temperature	Temperature Rise (K)	Limit (K)	Result
Handle	32.6	8.6	35	P
Panel	36.5	12.5	35	P
Gas can cover	35.4	11.4	35	P
Control knob	37.9	13.9	60	P
Orientation	33.7	9.7	60	P
Control box	44.8	20.8	60	P

--End of the report--