

POTTERTON

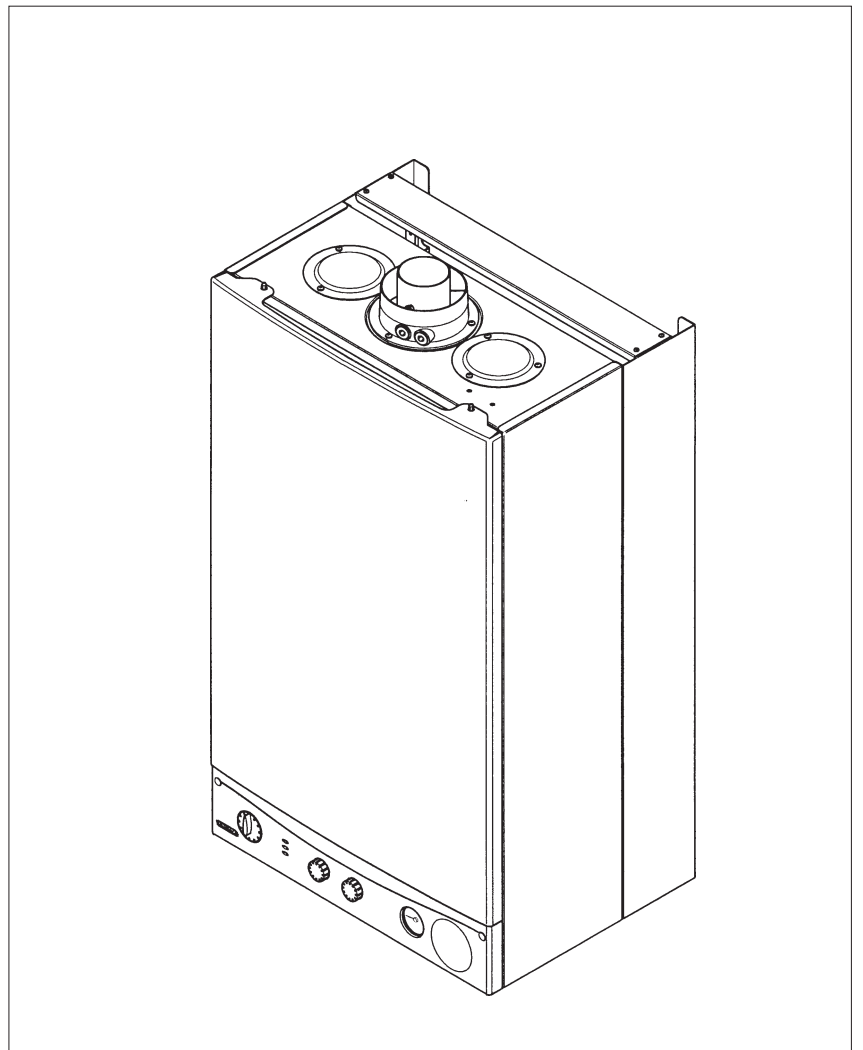
Performa 24

Gas Fired Wall Mounted Combination Boiler

组合式燃气壁挂炉

Installation and Servicing Instructions

安装及服务说明



Please leave these instructions with the user
请把这些说明留给用户

亲爱的用户：

我们将保证您的壁挂炉满足您的需求。

购买任何一款 **POTTERTON** 产品都能满足您的期望：优良的功能，简单易学的操作。

请您仔细阅读本说明手册，因为在本手册里您能发现非常有用的信息，指导您更加正确和有效地使用本壁挂炉。

请不要将产品的包装随意放在小孩能够拿到的地方，因为这些都会有潜在的危险。

POTTERTON 壁挂炉具有 CE 认证，

符合下列基本要求：

- 燃气方面 90/396/CEE
- 性能方面 92/42/CEE
- 电磁兼容方面 89/336/CEE
- 低电压方面 73/23/CEE

Dear Customer,

We are sure your new boiler will comply with all your requirements.

Purchasing one of the **POTTERTON** products satisfies your expectations: good functioning, simplicity and ease of use.

Do not dispose of this booklet without reading it: you can find here some very useful information, which will help you to run your boiler correctly and efficiently.

Do not leave any parts of the packaging (plastic bags, polystyrene, etc.) within children's reach as they are a potential source of danger.

POTTERTON attests that these models of boiler bear the CE mark in compliance with the basic requirements as laid down in the following Directives:

- Gas Directive 90/396/CEE
- Performance Directive 92/42/CEE
- Electromagnetic Compatibility Directive 89/336/CEE
- Low Voltage Directive 73/23/CEE



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安装前说明

此壁挂炉的出水温度设定为低于大气压下的沸点温度，它连接到符合其性能及出力范围的取暖系统和卫生热水系统中。

壁挂炉的安装必须由有资格的工程师完成，且应确保下列事项已被完成：

- a) 管道系统中的异物必须清理干净
- b) 必须仔细确认壁挂炉的气源是合适的，请查看包装箱上的提示及炉体上的标签
- c) 仔细检查烟囱安装是否合适，烟囱没有堵塞，及其它废气通过此烟囱排除，除非是此烟囱设计为其他壁挂炉共用烟囱，并符合当地法律和法规
- d) 当壁挂炉的烟囱被连接到以前用过的烟道时，必须仔细检查，以前烟道中燃烧产生的残留物应完全清理干净，以免由于烟道的堵塞而导致危险情况发生

启动前的说明



初次启动壁挂炉必须由有资格的人员进行，确保下列操作被完成：


- a) 壁挂炉所需的参数与所提供的（水，电，燃气）参数一致
- b) 壁挂炉的安装符合有关的规范
- c) 电源的连接及地线的连接符合要求

启动之前，揭去壁挂炉塑料保护套，不要使用任何工具或有腐蚀性的溶剂以免腐蚀壁挂炉表面的涂料

壁挂炉的运行

正常启动壁挂炉程序如下：

- 1) 接通壁挂炉电源
- 2) 打开燃气阀
- 3) 转动选择开关（1）设定壁挂炉在“夏季”位置或“冬季”位置
- 4) 转动取暖和卫生热水温度调节控制（5）和（6），启动燃烧器，

为了增加温度值，请顺时针转动，逆时针转动时温度减小，当壁挂炉在夏季状态时，主燃烧器和水泵只有当热水龙头打开时才工作。

Instructions prior to installation

This boiler is designed to heat water at a lower than boiling temperature at atmospheric pressure. The boiler must be connected to a central heating system and to a domestic hot water supply system in compliance with its performances and output power.

Have the boiler installed by a Qualified Service Engineer and ensure the following operations are accomplished:

- a) careful checking that the boiler is fit for operation with the type of gas available. For more details see the notice on the packaging and the label on the appliance itself.
- b) that the terminal is not obstructed and that no other appliance exhaust gases are expelled through the same flue duct, unless the flue is especially designed to collect the exhaust gas coming from more than one appliance, in conformity with the laws and regulations in force.
- c) careful checking that, in case the flue has been connected to pre-existing flue ducts, thorough cleaning has been carried out in that residual combustion products may come off during operation of the boiler and obstruct the flue duct thus engendering dangerous situations.

Instructions prior to commissioning



Initial lighting of the boiler must be carried out by a licensed technician. Ensure the following operations are carried out:

- a) compliance of boiler parameters with (electricity, water, gas) supply systems settings.
- b) compliance of installation with the laws and regulations in force.
- c) appropriate connection to the power supply and grounding of the appliance.


Failure to observe the above will render the guarantee null and void. Prior to commissioning remove the protective plastic coating from the unit. Do not use any tools or abrasive detergents as you may spoil the painted surfaces.

Commissioning of the boiler

To correctly light the burner proceed as follows:

- 1) provide power supply to the boiler;
- 2) open the gas cock;
- 3) turn the selector switch (1) to set the boiler on summertime () or wintertime () operation;
- 4) turn the central heating (5) and domestic hot water (6) adjusting controls in order to light the main burner.

To increase temperature values turn the control clockwise and anticlockwise to decrease it.

When on summertime operation () the main burner and the pump will start running only when there is a call for hot water.

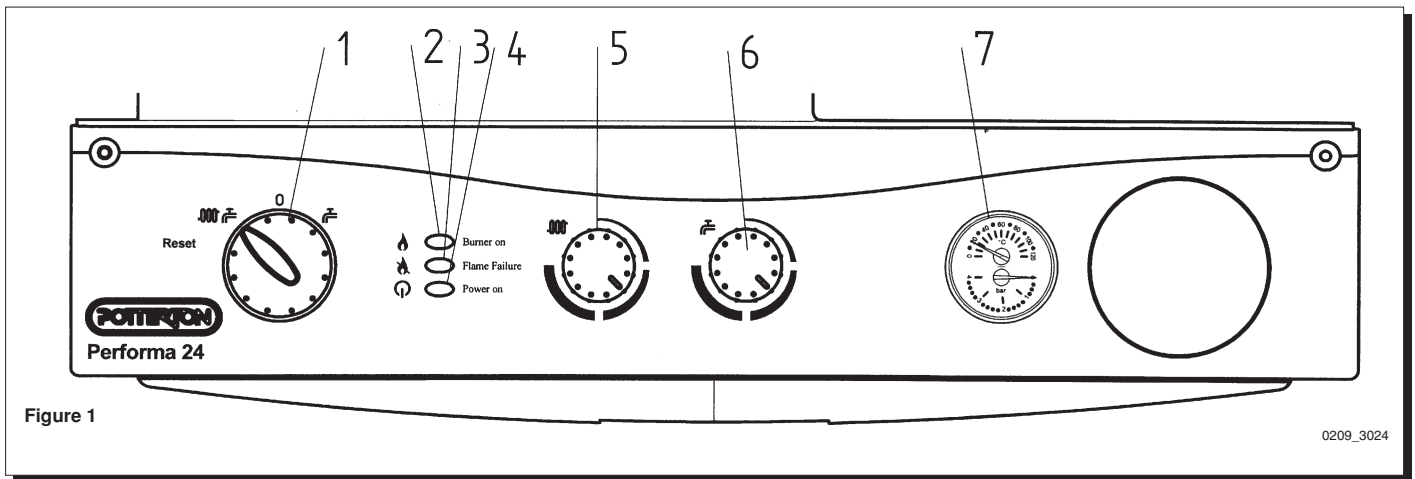


Figure 1

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警告：首次点火时，在煤气管内的空气如果不排出，燃烧器不会点火，锅炉暂停。在此情况下，建议重复点火步骤，直至燃气到达燃烧器，将选择钮(1)固定在位置(R)至少一秒(另请参阅图4)。

Warning: During initial lighting, until the air contained in the gas pipes is not released, the burner may fail to light immediately and that may cause a 'blockage' of the boiler. In this case we recommend you repeat the ignition procedure until gas is delivered to the burner, setting selector (1) to (R) for at least 1 second (see also figure 4).

室内温控调节

这种系统必须加装一个室内温控器（见相关调节）来控制房间温度，如果没有室内温控器，在初次启动壁挂炉时，可以通过转动控制开关（5）来控制室内温度。为提高温度值，需顺时针转动温控，逆时针则反之。火焰电子比调能根据负荷的需要通过调整壁挂炉燃气供应来达到设定的温度。

Room temperature adjustment

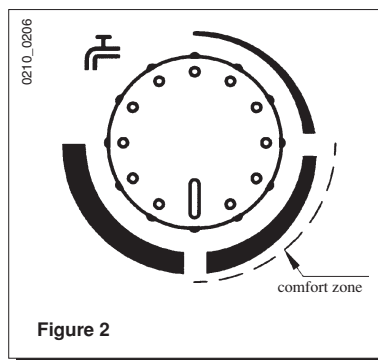
The system must be equipped with a room thermostat (see the relevant regulations) to control the temperature in the rooms. In case there is no room thermostat, during initial lighting it will be possible to control the room temperature by turning control (5). To increase temperature values turn the control clockwise and anticlockwise to decrease it. Electronic modulation of the flame will enable the boiler to reach the set temperature by adapting the gas supply to the burner to the actual heat exchange demand.

卫生热水温度调节

壁挂炉燃气阀是带有电子火焰比调功能，火焰大小（即出力大小）取决于卫生热水温度和出水量，可通过调节旋钮（6）来设定温度。这个装置是为了保证壁挂炉热水出水温度的稳定，即使出水量很小时也如此。为了使您的壁挂炉运行更节能和经济，我们建议您将旋钮（6）设置在“comfort”处（见图片2），在冬季可适当将温度设置高一点。

DHW temperature adjustment

The gas valve is provided with an electronic flame-modulating function, which operates depending on the DHW temperature adjusting control (6) settings and on the quantity of water drawn from the taps. This electronic device allows to keep the water coming out of the boiler at a constant temperature also when small quantities of water are drawn.



To ensure energy saving and economical management of your boiler, we recommend you place the switch adjusting the hot water temperature on "comfort" (see figure 2). In wintertime it will be necessary to increase the DHW temperature according to needs.

壁挂炉注水

重要：在壁挂炉不运行时，应定期检查水压（由压力表（7）指示）是否在 0.5 到 1bar 之间，一旦发现超压应立即打开排水阀。

如果水压过低对于 型应打开注水阀（图片 3）。

我们建议您应慢慢地打开注水阀，以免空气进入。如果水压经常频繁下降，请让有资格的工程师检查。壁挂炉带有水力压差传感器，当壁挂炉缺水或水泵堵卡时，壁挂炉不启动。

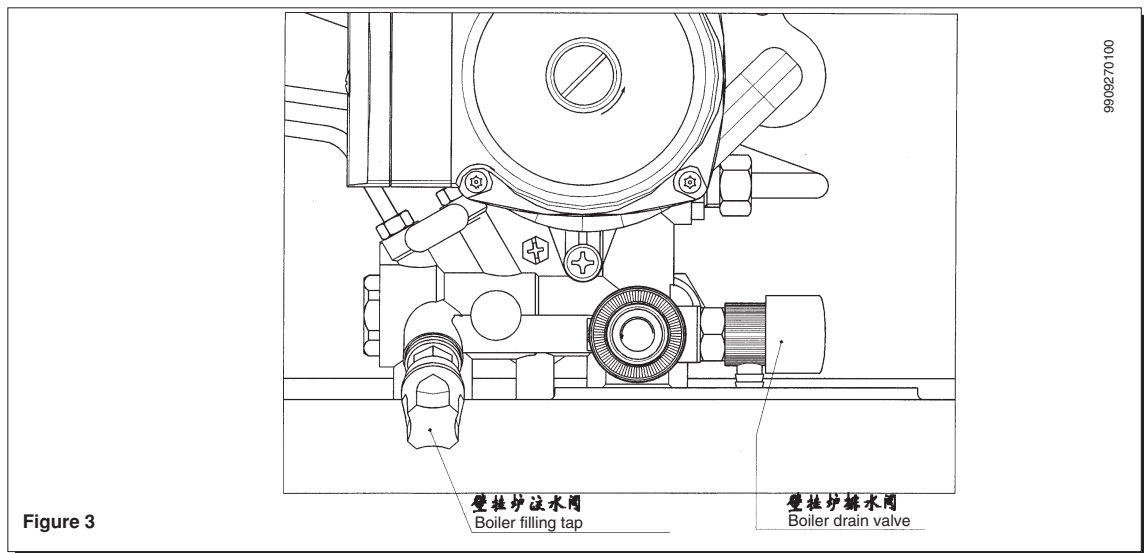
壁挂炉带水差压传感器，当壁挂炉缺水或水泵被堵住时，壁挂炉不启动。

Filling the boiler

Important: Regularly check that the pressure displayed by the pressure gauge (7) is 0.5 to 1 bar, with boiler not operating. In case of overpressure, open the boiler drain valve.

In case the pressure is lower open the boiler filling tap (figure 3). We recommend you open the tap very slowly in order to let off the air. In case pressure drops occur frequently have the boiler checked by a Qualified Service Engineer.

The boiler is supplied with a hydraulic differential pressure sensor, which blocks the boiler in case water is lacking or the pump is blocked.



关闭壁挂炉

如果想停止壁挂炉工作只需将选择开关（1）置于（0）位上,壁挂炉将被关闭。

长时间停机系统的防冻保护（中央供暖系统）

我们建议您避免系统内的渗漏，因为水的流失会引起壁挂炉内和换热装置结垢。

如果在冬天壁挂炉不运行时而产生的冻结危险，我们建议在系统中的水里添加一些特殊的防冻剂（例如丙烯乙二醇或除垢剂）

更换燃气种类

以天然气为燃料的壁挂炉可转换为以液化石油气 LPG 为燃料.更换任何一种燃气都应由有资格的工程师来按照更换组件袋内所带的说明文字进行操作。

Turning off the boiler

To turn off the boiler turn the selector switch (1) on (0); you will thus isolate the electrical supply to the boiler.

Prolonged standstill of the system. Frost protection (central heating system)

We recommend you avoid draining the whole system as water replacements engender purposeless and harmful limestone deposits inside the boiler and on the heating elements.

In case the boiler is not operated during wintertime and is therefore exposed to danger of frost we suggest you add some specific-purpose anti-freeze to the water contained in the system (e.g.: propylene glycole coupled with corrosion and scaling inhibitors).

Gas change

These boilers produced for natural gas can be converted to work with LPG.

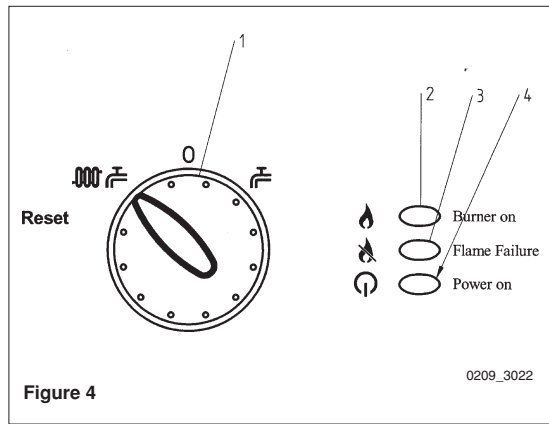
Any gas change must be effected by a Qualified Service Engineer.

安全装置信号指示及处理

- 1 “夏季 - 冬季 - 回零” 选择器
- 2 火焰指示
- 3 故障指示
- 4 电源指示

Safety device Indicators-activation

- 1 Summer-Winter-Reset selector
- 2 Flame indicator
- 3 Block indicator
- 4 Voltage presence indicator



故障 Trouble	信号指示 Indicator		恢复 Reset
	LED 2	LED 3	
燃气故障 Gas block	off	on	将选择钮(1)固定在位置(R)至少一秒。 Set selector 1 to position R for at least 1 second.
通风不良 No draught	off	快速闪烁 Fast flashing	请电话联络特约技术援助服务中心。 Call your Authorised Service Centre
供暖环路中缺水或水泵故障 No water in the heating circuit or pump jammed	off	慢速闪烁 Slow flashing	请参阅设备注水一章。 See circuit filling chapter
感温器故障 Probe broken	慢速闪烁 Slow flashing	慢速闪烁 Slow flashing	请电话联络特约技术援助服务中心。 Call your Authorised Service Centre
安全恒温器跳闸 Safety thermostat tripping	慢速闪烁 Slow flashing	on	将选择钮(1)固定在位置(R)至少一秒。 Set selector 1 to position R for at least 1 second.

备注*

慢速闪烁: 大约每两秒点火一次

快速闪烁: 大约每秒点火两次

如果这些安全装置反复介入作用, 请电话联络特约技术援助服务中心。

维护说明

为了使您的壁挂炉能高效安全地运行, 在运行结束时由有资格的工程师对它进行检查, 仔细的维护以确保系统高效地运行。不要有腐蚀性, 有害的或易燃的清洁剂(如: 汽油、酒精等)清洗外壳。在清理前要切断电源(参见6页上“关闭壁挂炉”的部分)。

NOTE*

Slow flashing: comes on approximately once every 2 seconds

Fast flashing: comes on approximately twice a second

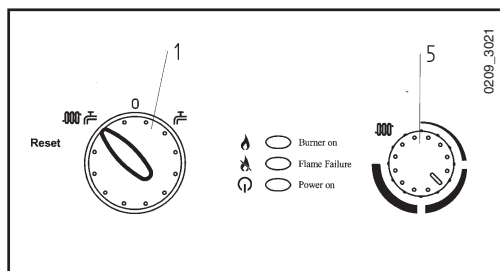
If safety device activation is repeated contact the authorised Technical Assistance Service.

Servicing instructions

To maintain efficient and safe operation of your boiler have it checked by a Qualified Service Engineer at the end of every operating period. Careful servicing will ensure economical operation of the system. Do not clean the outer casing of the appliance with abrasive, aggressive and/or easily flammable cleaners (i.e.: gasoline, alcohol, and so on). Always isolate the electrical supply to the appliance before cleaning it (see section Turning off the boiler on page 6).

基本要求

警告：当选择开关（1）设置在“冬天”位置时，中央供暖系统温控器每次调整时需要等几分钟。若要迅速点燃主燃烧器时将选择开关（1）设定在“0”位置，然后重新设定在“冬天”位置。如果壁挂炉处于卫生热水模式下就无需等待了。



Warning: When the selector switch (1) is set on Wintertime operation (冬天) it may be necessary to wait some minutes at each intervention of the central heating temperature adjusting control (5). To relight the main burner immediately place the selector switch (1) on (0) and then again on (冬天). No waiting is needed when the boiler is in the DHW mode on models with this option.

下面的说明和注意事项是写给维修工程师的，以便减少错误安装。关于点火和运行的说明是包含在前面的使用说明部分中的。请注意以下几点：

- * 壁挂炉可以与双路或单路供水管、散热片、散热器和加热装置相连。要根据 23 页提供的输出量与泵扬程的特性来对系统进行设计。
- * 不要把任何包装（如塑料袋、聚苯乙烯等）放在儿童能够拿到的地方，以免发生危险。
- * 第一次点火必须由有资格的工程师来进行。

上述指示无法观察和显示时会降低壁挂炉的安全保障功能。

安装前的说明

此壁挂炉是按照热水壁挂炉进行设计生产的（在标准大气压下）。在与供暖系统和卫生热水系统相连时，必须考虑壁挂炉的特性输出功率。

在连接壁挂炉之前要完成以下操作：

- a) 仔细检查壁挂炉是否与该种燃气相适应。可以在包装箱外的说明和随机标签得到更多的信息。
- b) 仔细检查烟囱接头是否合适，确认此弯头没有阻塞，并且没有其它排烟装置共用此烟道，除非此烟道是依据相应规则专门设计，用来排放多路烟气的。
- c) 如果烟囱是原来的烟囱，一定要彻底清除以前燃烧排放的产物，以防止阻塞烟道，产生危险情况。

General information

The following remarks and instructions are addressed to Service Engineers to help them carry out a faultless installation. Instructions regarding lighting and operation of the boiler are contained in the 'Instructions pertaining to the user' section.

Note that installation, maintenance and operation of the domestic gas appliances must be performed exclusively by qualified personnel in compliance with current standards.

Please note the following:

- * This boiler can be connected to any type of double- or single feeding pipe convector plates, radiators, thermoconvectors. Design the system sections as usual though taking into account the available output / pump head performances, as shown on page 23.
- * Do not leave any packaging components (plastic bags, polystyrene, etc.) within children's reach as they are a potential source of danger.
- * Initial lighting of the boiler must be effected by a Qualified Service Engineer.

Failure to observe the above will render the guarantee null and void.

Instructions prior to installation

This boiler is designed to heat water at a lower than boiling temperature at atmospheric pressure. The boiler must be connected to a central heating system and, on models with this option, to a domestic hot water supply system in compliance with its performances and output power.

Before connecting the boiler have the following operations effected:

- a) careful checking that the boiler is fit for operation with the type of gas available. For more details see the notice on the packaging and the label on the appliance itself.
- b) careful checking that the flue terminal draft is appropriate; that the terminal is not obstructed and that no other appliance exhaust gases are expelled through the same flue duct, unless the flue is especially designed to collect the exhaust gas coming from more than one appliance, in conformity with the laws and regulations in force
- c) careful checking that, in case the flue has been connected to pre-existing flue ducts, thorough cleaning has been carried out in that residual combustion products may come off during operation of the boiler and obstruct the flue duct thus engendering dangerous situations.

为确保设备正常工作，以免使保修失效，请遵守以下操作规程：

1. 热水电路：

如果水的硬度大于20 °F(1 °F = 每升水10毫克碳酸钙)，请安装根据目前的规程安装多磷酸盐系统或类似的处理系统。

2. 加热电路

2.1. 新系统：

在安装锅炉前，必须先使用合适的专用产品对系统进行彻底的清洁和冲洗，去除残留的金属切割屑、焊料和溶剂。

2.2. 现有系统：

在安装锅炉之前，必须先使用合适的专用产品对系统进行彻底的清洁和冲洗，去除淤泥和污物。

为避免损坏金属、塑料和橡胶零件，只能使用不含酸和碱的中性清洁剂，例如SENTINEL X400和X100，并严格遵照制造商的说明操作。

记住，加热系统中如有异物，有可能会影响锅炉的正常工作(如热交换器过热或发出噪音)。

To ensure correct operation of the appliance and avoid invalidating the guarantee, observe the following precautions

1. Hot water circuit:

if the water hardness is greater than 20 °F (1 °F = 10 mg calcium carbonate per litre of water) install a polyphosphate or comparable treatment system responding to current regulations.

2. Heating circuit

2.1. new system

Before proceeding with installation of the boiler, the system must be cleaned and flushed out thoroughly to eliminate residual thread-cutting swarf, solder and solvents if any, using suitable proprietary products.

2.2. existing system:

Before proceeding with installation of the boiler, the system must be cleaned and flushed out to remove sludge and contaminants, using suitable proprietary products.

To avoid damaging metal, plastic and rubber parts, use only neutral cleaners, i.e. non-acid and non-alkaline (e.g. SENTINEL X400 and X100), proceeding strictly in accordance with the maker's directions.

Remember that the presence of foreign matter in the heating system can adversely affect the operation of the boiler (e.g. overheating and noisy operation of the heat exchanger)

在墙上固定壁挂炉安装模板

选好位置，用墙钉和所提供的螺丝将模板固定在墙上。连接水路和气路，按模板预先设定的位置（详见模板上插图）

我们建议你在中央供暖系统中的出水和进水上安装两个 G3/4 截止阀（按要求提供）；这两个阀可以在整修系统时不排干系统中的水就可以进行重要的操作。

如果您把壁挂炉安装到原有的系统上或代替它，我们建议您在回水管路上安装一个沉淀箱，以便收集沉淀和锈皮，这些杂质是从循环系统中清理出来的。

当壁挂炉被固定在模板上后，应按照下面给出的指导说明来安装烟囱和通风管（由制造商提供的装置）。

The template to fix the boiler on the wall

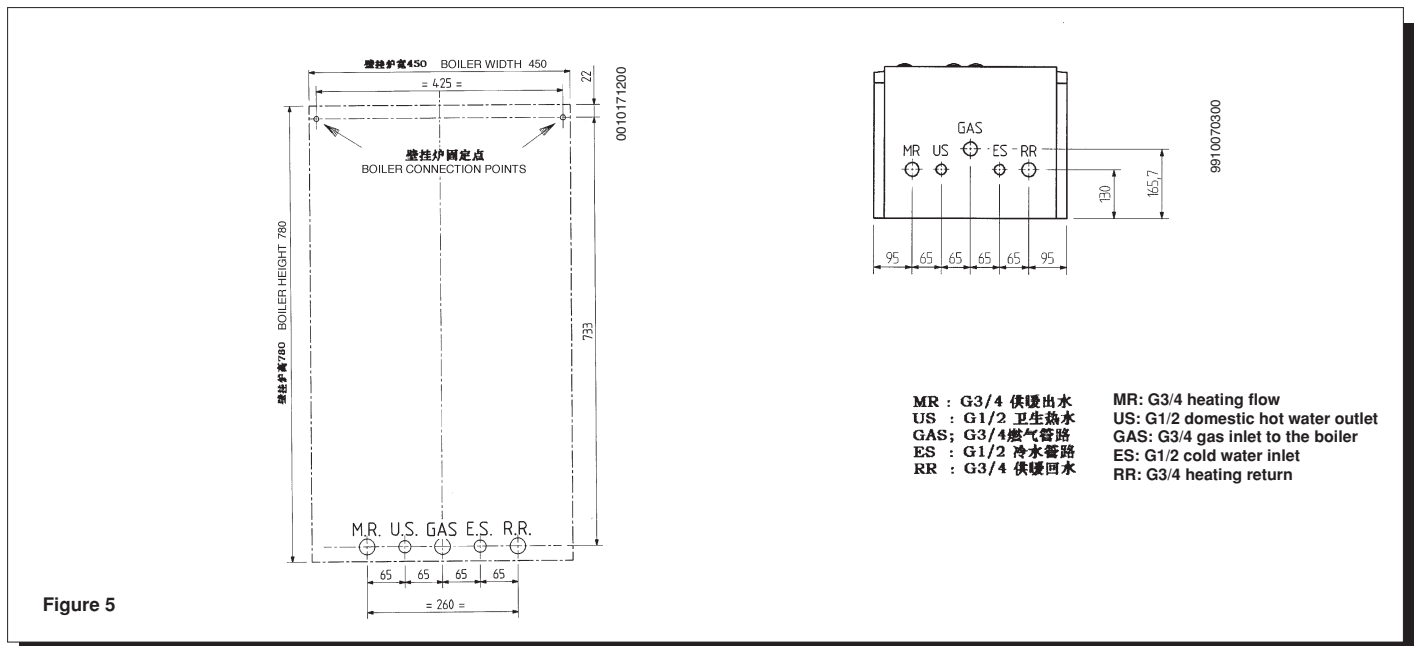
Decide upon the boiler location, then tape the template on the wall. Connect the pipework to the gas and water inlets prearranged on the template lower bar.

We suggest you fit two G3/4 stop cocks (available on demand) on the central heating system flow and return pipework; the cocks will allow to carry out important operations on the system without draining it completely.

If you are either installing the boiler on a pre-existent system or substituting it, we suggest you also fit settling tanks on the system return pipework and under the boiler to collect the deposits and scaling which may remain and be circulated in the system after the purge.

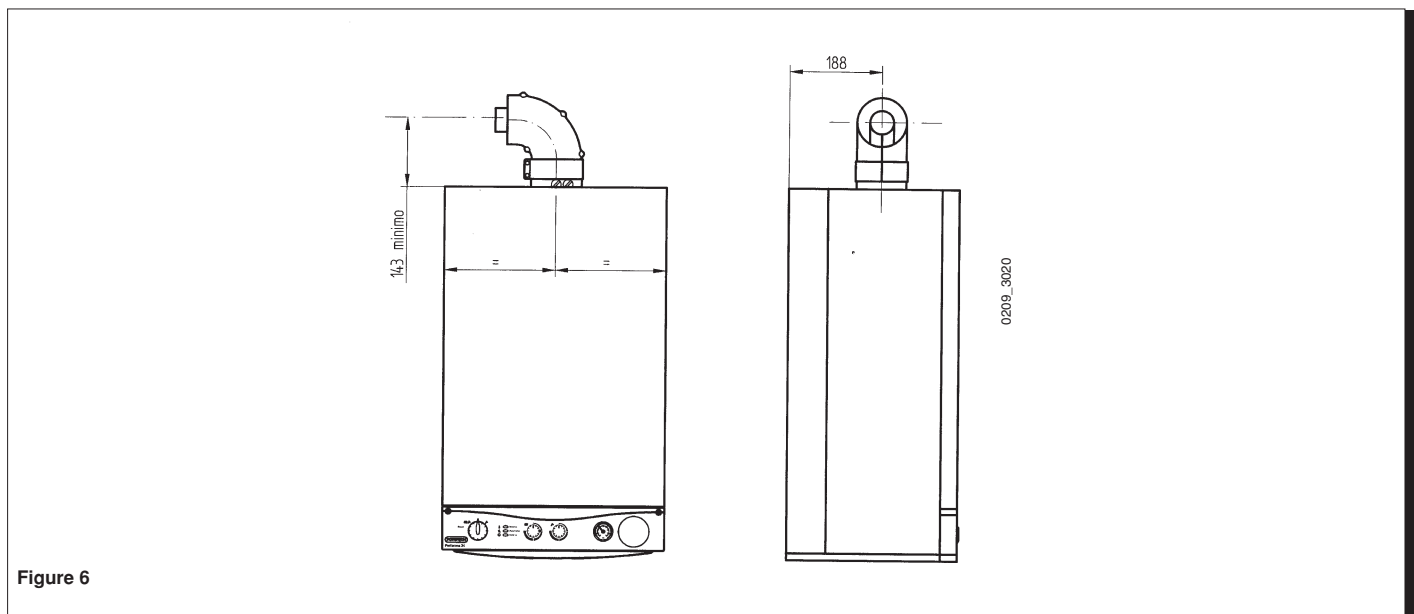
When the boiler is fixed on the template connect the flue and air ducts (fittings supplied by the manufacturer) according to the instructions given in the following sections.

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壁挂炉尺寸

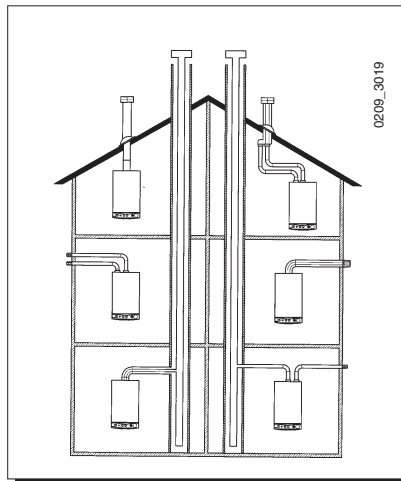
Boiler size



烟道和通风管的安装

我们确保欧仙强制排风壁挂炉可以方便灵活地安装。壁挂炉的烟道和通风管相连是经过特殊设计的，可以采用同轴的，垂直的或水平的烟囱。双烟囱系统可以通过分离组件同样的进行安装。

专用的安装装置可由制造商提供。



Installation of flue and air ducts

We guarantee ease and flexibility of installation for a gas-fired forced draft boiler thanks to the fittings and fixtures supplied (described below).

The boiler is especially designed for connection to an exhaust flue / air ducting, with either coaxial, vertical or horizontal terminal. By means of a splitting kit a two-pipe system may also be installed.

Exclusively install fittings supplied by the manufacturer.

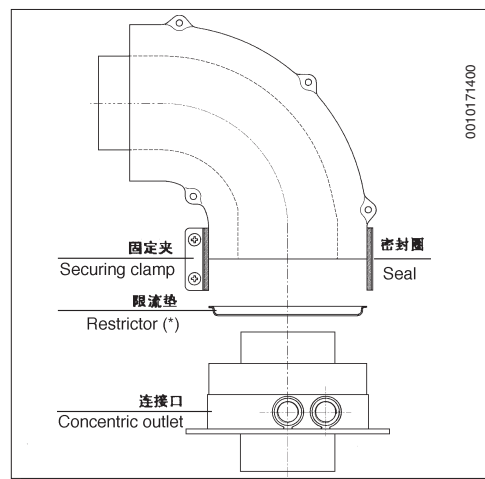
烟道端子	烟道最大长度	每 90°弯头相当于烟道的最大长度	每 45°弯头相当于烟道的最大长度	烟道端子直径	外管径
同心	5m	1m	0.5m	100mm	100mm
垂直双管	15m	0.5m	0.25m	133mm	80mm
水平双管	30m	0.5m	0.25m		80mm

Flue Duct Terminal	Max.LengthOf Flue Duct	Each 90° Bend Reduces The Duct Max.Length By	Each 45°Bend Reduces The Duct Max.Length By	Flue Terminal Diameter	Outer Duct Diameter
Coaxial	5m	1m	0.5m	100mm	100mm
Vertical two-pipe	15m	0.5m	0.25m	133mm	80mm
horizontal two-pipe	30m	0.5m	0.25m		80mm

同轴烟囱（同心的）

这种型号的烟囱可以从室外直接引风并把废气排到室外，且安装了LAS 烟囱。

这种 90°的弯头可使壁挂炉与同轴烟囱在任何方向上连接，因此它可以转 360°。它还可作为补充弯头，也可以连接同轴烟囱或 45°弯头。



...coaxial flue - air duct (concentric)

This type of duct allows to disengage exhaust gases and to draw combustion air both outside the building and in case a LAS flue is fitted.

The 90° coaxial bend allows to connect the boiler to a flue-air duct in any direction as it can rotate by 360°. It can moreover be used as a supplementary bend and be coupled with a coaxial duct or a 45° bend.

(*) 若烟囱长度超过 1.5m 时此限流垫可不用。

如果用这烟囱作为尾部，烟囱应至少伸出墙外 18cm，应用耐风化的材料固定并密封，避免漏水。如图示上端，烟道略有倾斜，至少应向下倾斜悬挂。烟道至少向下倾斜为 1 厘米 / 米（倾斜管要向外伸出，以便使冷凝水排放出去）。

一个 90°弯头减少 1 米烟道长度。

一个 45°弯头减少 0.5 米烟道长度。

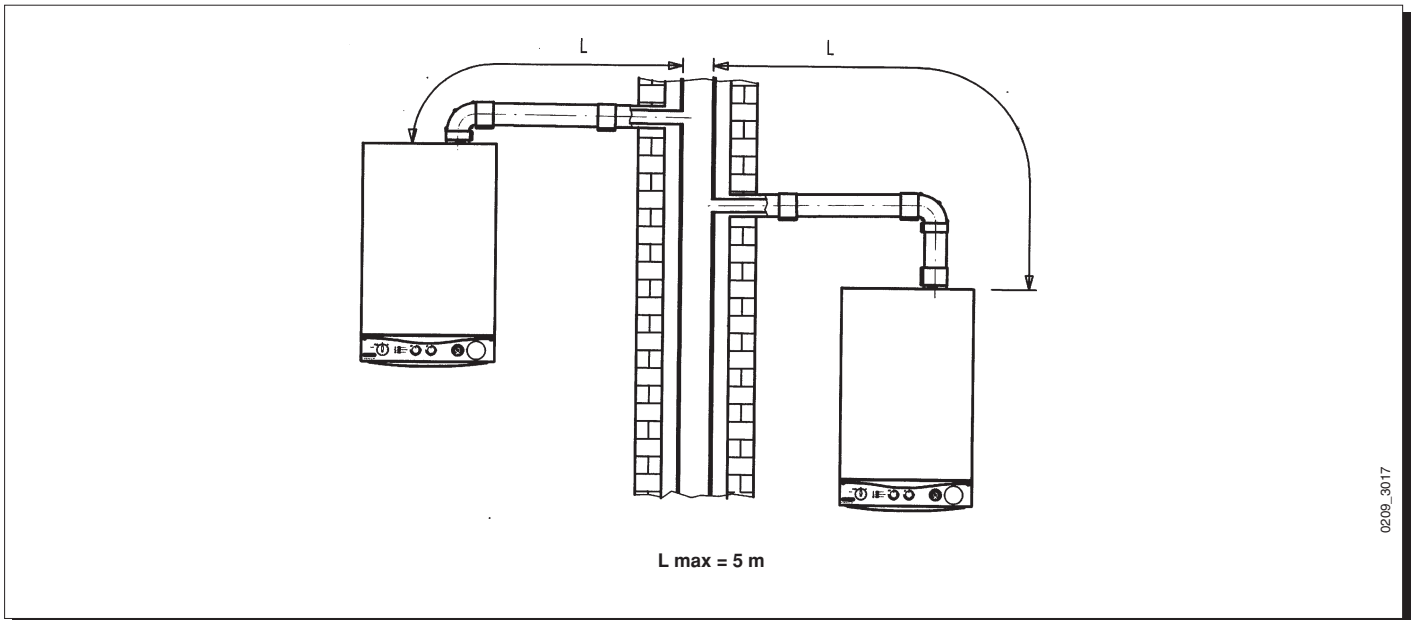
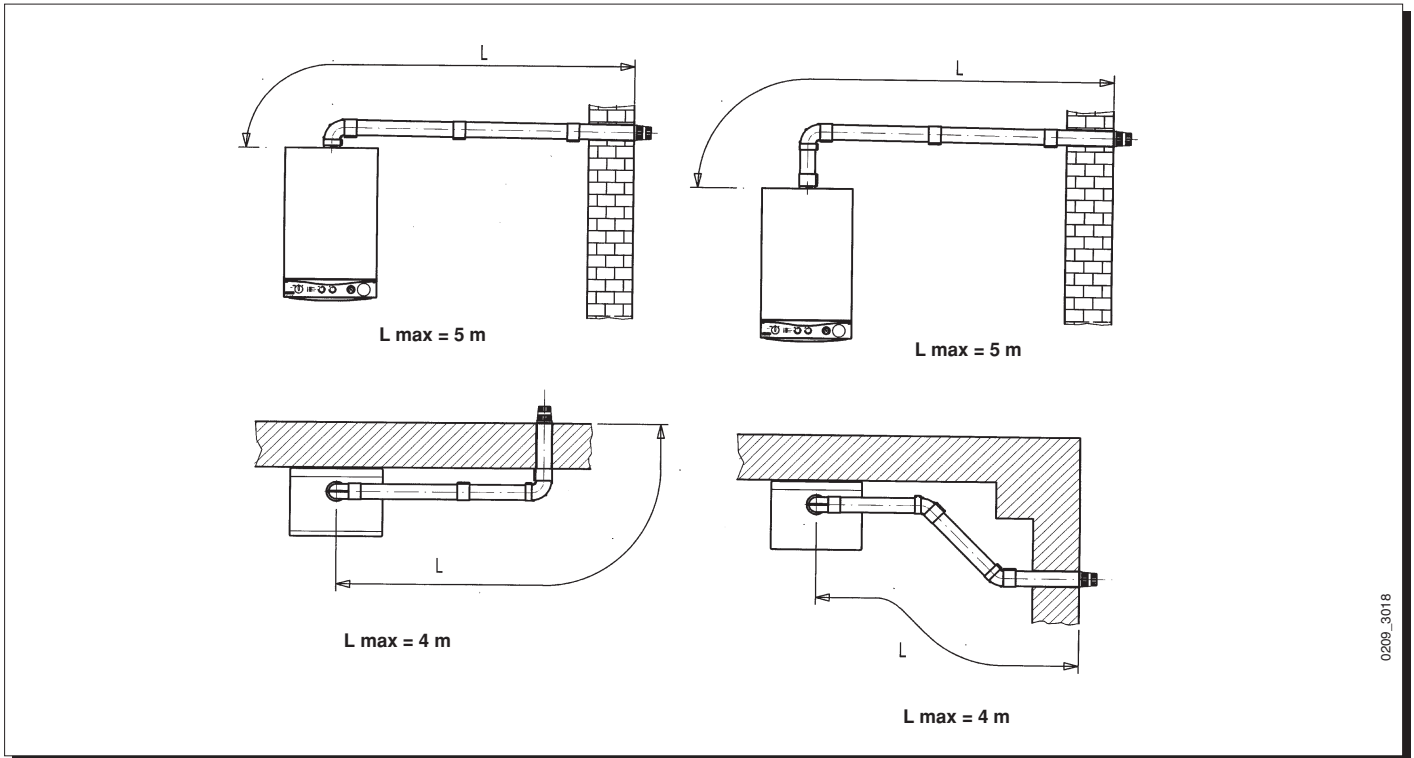
(*) The restrictor must be removed in case the flue duct length exceeds 1,5 m.

If the flue outlet is placed outside, the flue-air ducting must protrude at least 18mm out of the wall to allow aluminium weathering tile to be fitted and sealed to avoid water leakages.

Ensure a 1 cm downward slope per each metre of duct length.

A 90° bend reduces the total duct length by 1 metre.

A 45° bend reduces the total duct length by 0.5 metre.

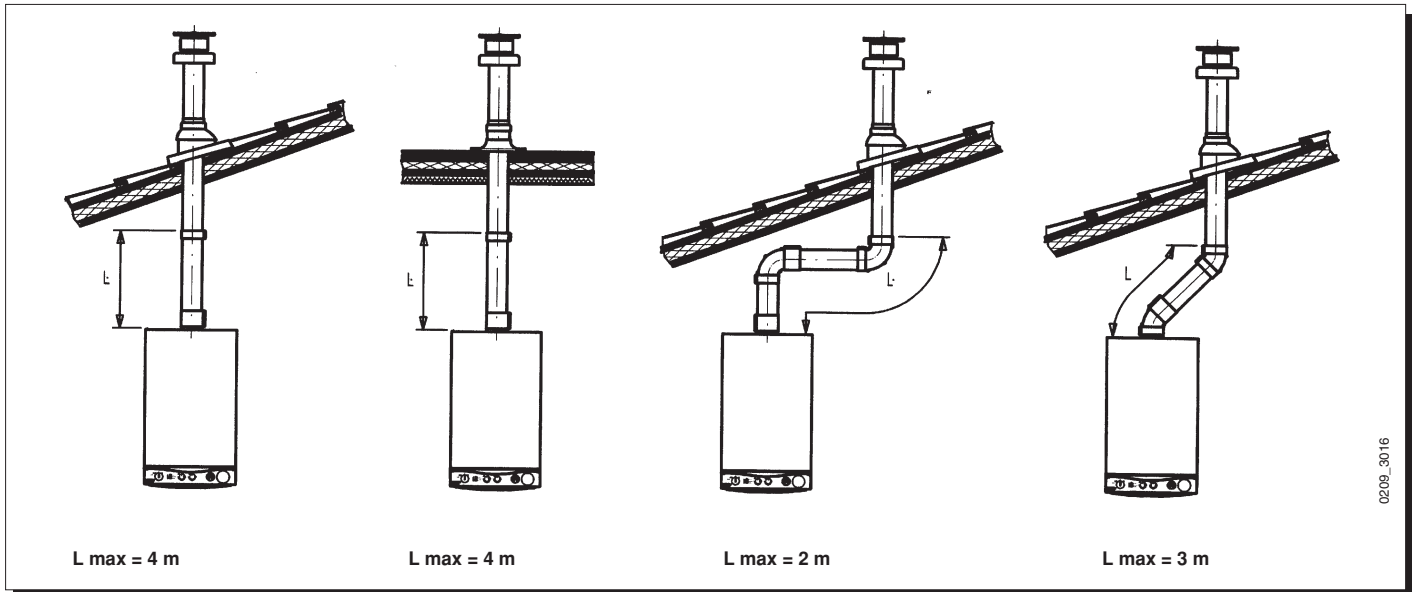


垂直烟道尾部安装

这种方式的安装适合于平房或安装在屋顶，在烟道尾部要安装专用的尾部，一个非常合适的防风防雨的配件和一个套筒（根据需要提供配件）

Vertical flue terminal installation options

This type of installation can be carried out both on a flat or pitched roof by fitting a terminal, an appropriate weathering tile and sleeve, (supplementary fittings supplied on demand).



关于更多的配件安装介绍请看跟随配件的技术数据。

分离的烟气—空气烟道

这种烟道允许将废气分别排放到屋外或单独排烟道。

燃烧所用空气可以从与烟道尾部不同的地方吸取。

全套组合件由一个烟气管接头（100/80）和一个空气管接头组成；后者可以按照安装要求放在烟道的左边或右边。

装有螺钉和密封圈的空气管接头可预先从盖上拆下。

如果要安装分离的烟气—空气尾部，必须拆除定位器。

For detailed instructions concerning the installation of fittings refer to the technical data accompanying the fittings.

... separated flue-air ducting

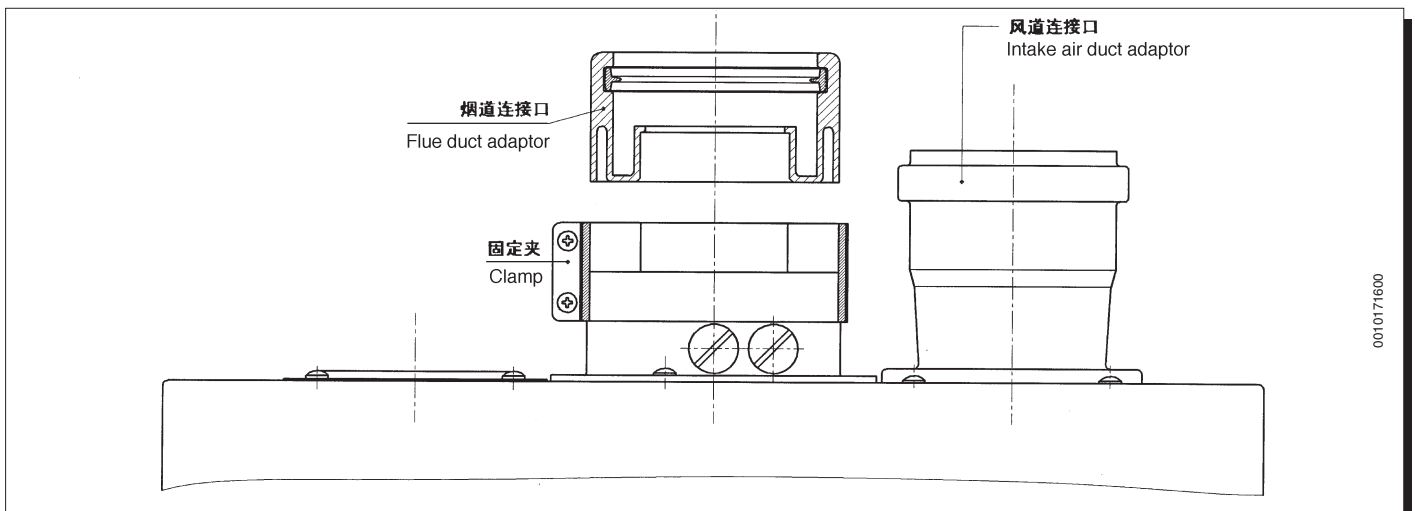
This type of ducting allows to disengage exhaust flue gases both outside the building both into single flue ducts.

Comburant air may be drawn in at a different site from where the flue terminal is located.

The splitting kit consists of a flue duct adaptor (100/80) and of an air duct adaptor; the latter may be placed either on the left or on the right of the flue terminal according to installation requirements.

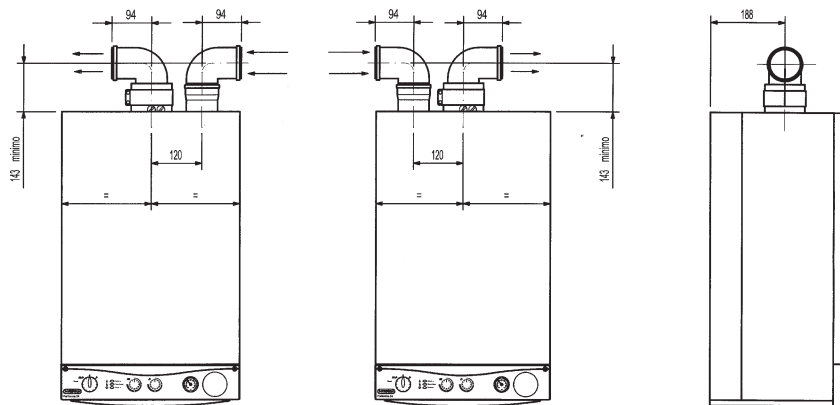
For the air duct adaptor fit the screws and seals previously removed from the cap.

The restrictor must be removed in case you install separated flue and air duct terminals.



在管道能够旋转 360°的情况下，90°弯头可以在任何方向连接在壁挂炉与烟气—空气管道上。并且，它可以用作一个备件，连接管子或一个 45°弯头。

The 90° bend allows to connect the boiler to flue-air ducting regardless of direction as it can be rotated by 360°. It can moreover be used as a supplementary bend to be coupled with the duct or with a 45° bend.



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一个 90°弯头减少 0.5 米烟道长度。
一个 45°弯头减少 0.25 米烟道长度。

A 90° bend reduces the total duct length by 0.5 metre.
A 45° bend reduces the total duct length by 0.25 metre.

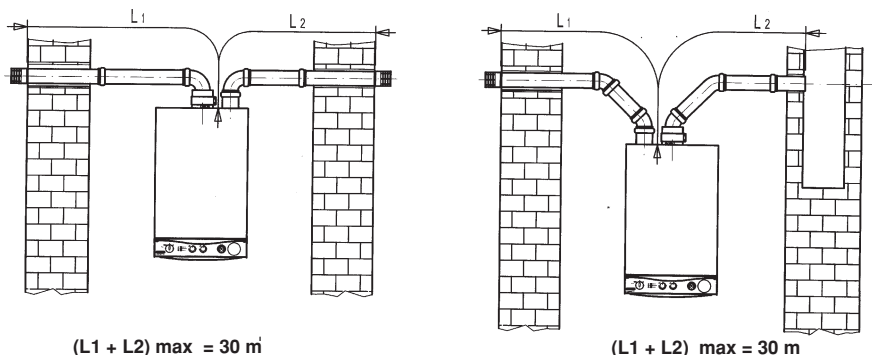
分离的水平烟道尾部安装方案

重要： 确保向屋外有一段倾斜管，最小倾斜度为 1cm/米管长。

如果要安装冷凝水接收件时，排烟管道的角度必须直接朝向壁挂炉。

Separated horizontal flue terminals installation options

IMPORTANT: Ensure a minimum downward slope of 1 cm toward the outside per each metre of duct length
In the event of installation of the condensate collection kit, the angle of the drain duct must be directed towards the boiler.



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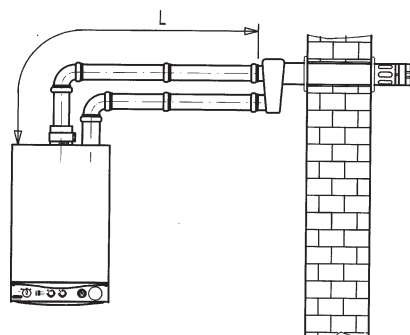
注意： 对于 C52 型号，其连接助燃空气的吸入管和排烟管的端部件绝对不能安装在面向建筑物的墙面上。

NB: For C52 types, terminal for combustion air suction and combustion product extraction must never be fitted on walls opposite the building.

最大的管道长度不能超过 10 米。

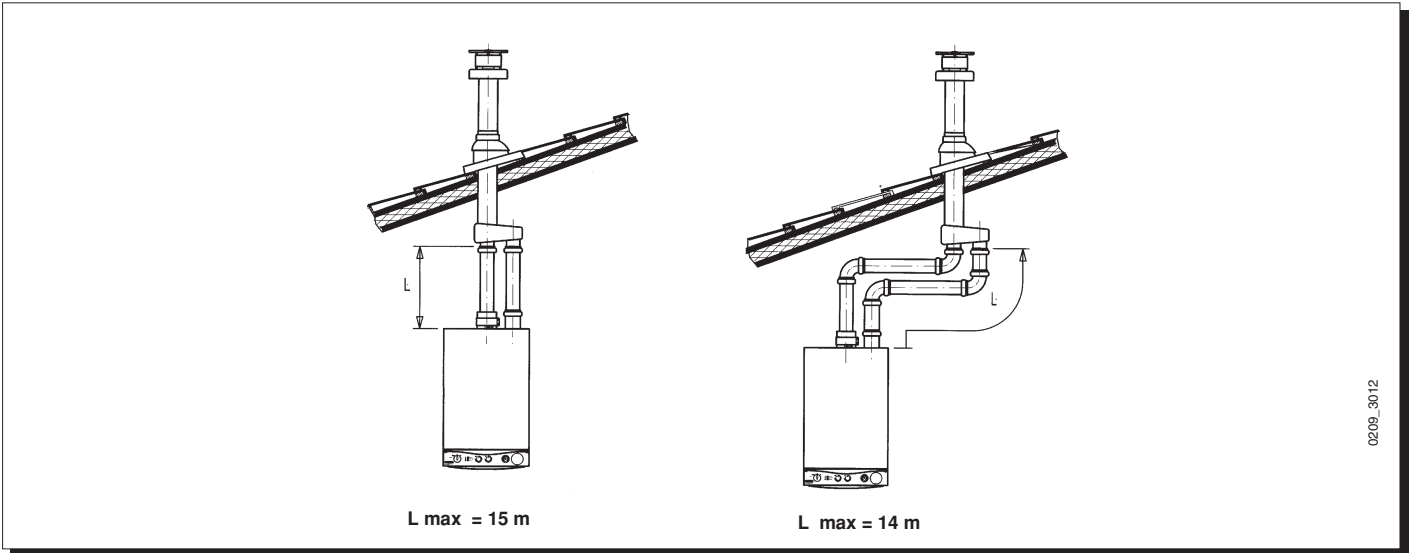
对于超过 6m 的烟道，其冷凝水接收件必须靠近壁挂炉安装。

The maximum length of the suction duct must be 10 metres.
If the flue duct exceeds 6 m, the condensate collection kit (supplied as an accessory) must be fitted in the vicinity of the boiler.



L max = 10 m

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重要：如果安装一个单独的排气管，无论烟管经过屋顶的什么地方都要确保它有满足要求的保温措施（比如玻璃纤维）。

关于配件更详细的介绍请看跟随配件的技术资料。

Important: if fitting a single exhaust flue duct, ensure it is adequately insulated (e.g.: with glass wool) wherever the duct passes through building walls.

For detailed instructions concerning the installation of fittings refer to the technical data accompanying the fittings.

分离烟气、空气控制装置的调节

当需要获得理想的燃烧特性及运行性能时，可调节此装置。此装置可安装在烟管的左面或右面，可根据烟管和空气管的长度旋转调整过剩空气量。顺时针转减少过剩空气量，逆时针转，增大过剩空气量。

为了达到理想的运行状态，可用烟气分析仪，测量在最大出力下 CO₂ 的含量，如测量分析的 CO₂ 含量较低，则调节空气量使 CO₂ 含量达到下表所示。

为更好的安装此装置，可参考相关的技术资料。

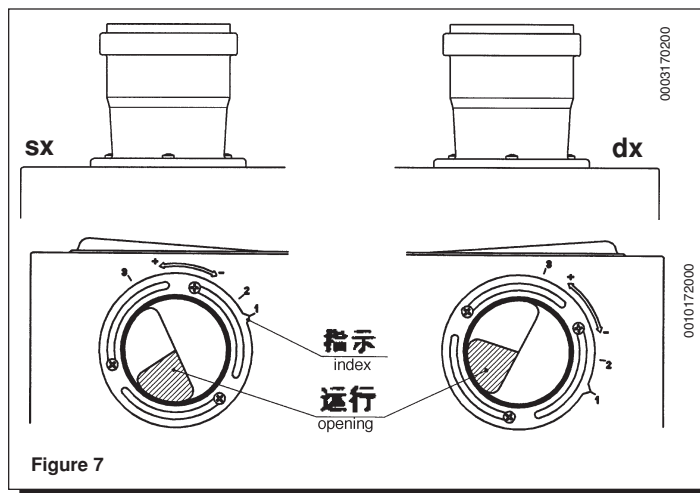
Split flue air control adjustment

The adjustment of this control is required to optimise performance and combustion parameters. The air suction coupling which may be mounted on the left or right of the flue duct can be rotated to adjust excess air according to the total length of the flue and intake ducts for the combustion air.

Turn this control clockwise to decrease excess combustion air and anti-clockwise to increase it.

To improve optimisation a combustion product analyser can be used to measure the CO₂ contents of the flue at maximum heat output, gradually adjusting air to obtain the CO₂ reading in the table below, if the analysis shows a lower value.

To properly install this device, also refer to the technical data accompanying the fitting.



(L1+L2) MAX	控制位置 CONTROL POSITION	CO ₂ %		
		G.20	G.30	G.31
0÷15	1	6	7	7
15÷30	2			
—	3			

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主电源的连接

电路的连接必须符合当地的法规，且必须安全接地。

供应电源为 220~230V 单相电源有地线，插头为三脚插头，并注意连接时零火线的级性。

在电源上连接一个单独的双级开关，两极之间至少 3mm 的距离

电缆线符合“HAR H05 VV-F”一般规格 $3 \times 0.75\text{mm}^2$ ，最大直径 8 mm

进入主电源接线端子区

*断开壁挂炉双极电源开关

*拧松固定在壁挂炉控制面板两边的螺钉

*旋转并翻下控制面板

*拧松固定在端部小盖上的螺钉，即可看到接线端子区（图片 8）一个 2 安培速熔保险管安装在电源端子盒内（通过拔出黑色的保险管架可以检查或更换保险管）。

(L) = 褐色（火线）

(N) = 蓝色（零线）

(\perp) = 黄绿色（地线）

(1) (2) = 室内温控器端子。

安装室内温控器

- 按照上一节的描述打开电源接线端子区（图 9）
- 拆掉端子 1 和 2 之间的短接线
- 插入双芯电缆并且将它们连接在两个端子上

时钟控制器的安装

*拆掉固定在控制面板上的螺钉，并让它旋转翻下。

*拆掉固定在控制面板盖后罩上的 2 个螺钉，并向上掀开它。

*连接可编程时钟的电机到主 PCB 的 M3 连接器上（端子 18 和 20）。

*连接可编程时钟的开关到 M3 连接器端子上（17 和 19）并拆掉跳接器。

你在安装电池型可编程时钟的时候，不要连接 M3 连接器的端子 18 和 20。

Connecting the mains supply

Electrical safety of the appliance is only guaranteed by correct grounding, in compliance with the applicable laws and regulations.

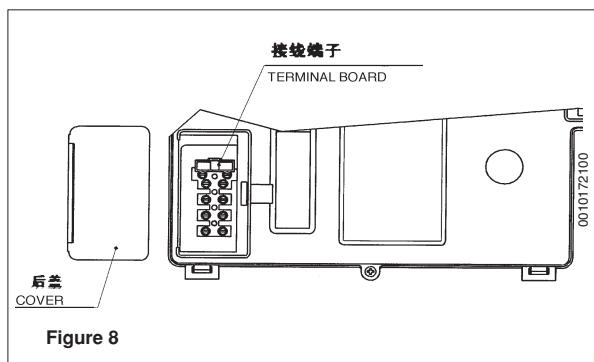
Connect the boiler to a 230V monophase + ground power supply by means of the three-pin cable supplied with it and make sure you connect polarities correctly.

Use a double-pole switch with a contact separation of at least 3mm in both poles.

In case you replace the power supply cable fit a HAR H05 VV-F $3 \times 0.75\text{mm}^2$ cable with an 8mm diameter max.

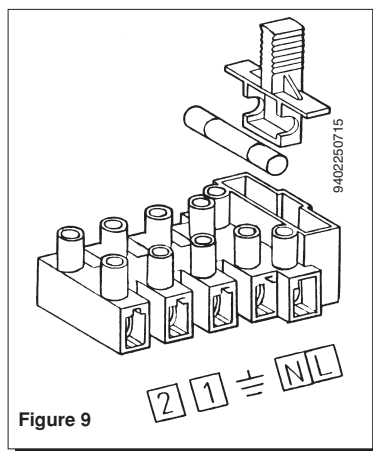
...access to the power supply terminal block

- isolate the electrical supply to the boiler by the double-pole switch;
- unscrew the two screws securing the control board to the boiler;
- rotate the control board;
- unscrew the screw securing the lid and gain access to the wiring (Figure 8).



A 2A fast-blowing fuse is incorporated in the power supply terminal block (to check or replace the fuse, pull out the black fuse carrier).

(L) = Live brown
(N) = Neutral blue
(\perp) = Ground yellow/green
(1) (2) = room thermostat terminal



Fitting a room thermostat

- gain access to the power supply terminal block (Figure 9) as described in the previous section;
- remove the jumper placed on terminals (1) and (2);
- insert the duplex cable through the core hitch and connect it to the two terminals.

Connecting a programming clock

- remove the two screws securing the control board to the boiler and hinge it downward;
- remove the 2 screws fixing the control board cover and hinge it upward;
- connect the programming clock motor to the main PCB M3 connector (terminals 18 and 20);
- connect the programming clock switch to the M3 connector terminals (17 and 19) and remove the jumper.

In case you are fitting a battery-operated programming clock do not connect the M3 connector terminals (18 and 20).

燃气种类更换

有资格的服务工程师可以将壁挂炉更换燃气种类，天然气（G20）或液化气（G30、G31）。

其压力的调节也是不同的，可执行以下步骤进行更换：

- A) 更换主燃烧器喷嘴
- B) 改变比调电压
- C) 重新设定最大、最小压力
- A) 更换主燃烧器喷嘴

*仔细小心地从燃烧器座上将燃烧器拔出
*更换主燃烧器喷嘴，并确保拧紧无泄漏，喷嘴大小可参见页表 2

B) 改变比调电压

*打开控制面板后罩
*根据燃气种类设置燃气更换跳接线或开关，细节可参照 21 页中的有关章节

C) 压力调节装置设定

将压差计的正压测点连接到燃气阀上的压力测点（Pb）（图10），对于密封型的燃烧室在压差计的负压测点上接一个“T”型接口，“T”型接口另两头，一头接燃烧室调节测压点，一头接燃气阀调节测压点（Pc）。（同效的测量方法是直接将燃烧室密封板打开，将压力计与测量点（Pb）连接）。当你用不同的方法测量燃烧器压力时，可能会得到不同的结果，这是由于在密封的燃烧室中风机的转动可能会引起压力的降低。

Gas change modalities

A Qualified Service Engineer may adapt this boiler to operate with natural gas (G. 20) or with liquid gas (G. 30, G. 31).

The procedure for calibrating the pressure regulator may vary according to the type of gas valve fitted (HONEYWELL or SIT; see figure 10).

Carry out the following operations in the given sequence:

- A) substitute the main burner injectors;
- B) change the modulator voltage;
- C) proceed with a new max. and min. setting of the pressure adjusting device.

A) Substitute the main burner injectors

- carefully pull the main burner off its seat;
- substitute the main burner injectors and make sure you tighten them fast to avoid leakage. The nozzle diameters are specified in table 2.

B) Change the modulator voltage

- remove the 2 screws securing the control board cover and hinge it upward;
- set the jumper or the switch, according to the type of gas used, as described in the chapter on page 21.

C) Pressure adjusting device setting

- connect the positive pressure test point of a differential (possibly water-operated) manometer to the gas valve pressure test point (Pb) (Figure 10); connect, for sealed chamber models only, the negative pressure test point of the manometer to a “T” fitting in order to join the boiler adjusting outlet, the gas valve adjusting outlet (Pc) and the manometer. (The same measurement can be carried out by connecting the manometer to the pressure test point (Pb) after removing the sealed chamber front panel);
If you measure the pressure of burners by different means you may obtain an altered result in that the low pressure created in the sealed chamber by the fan would not be taken into account.

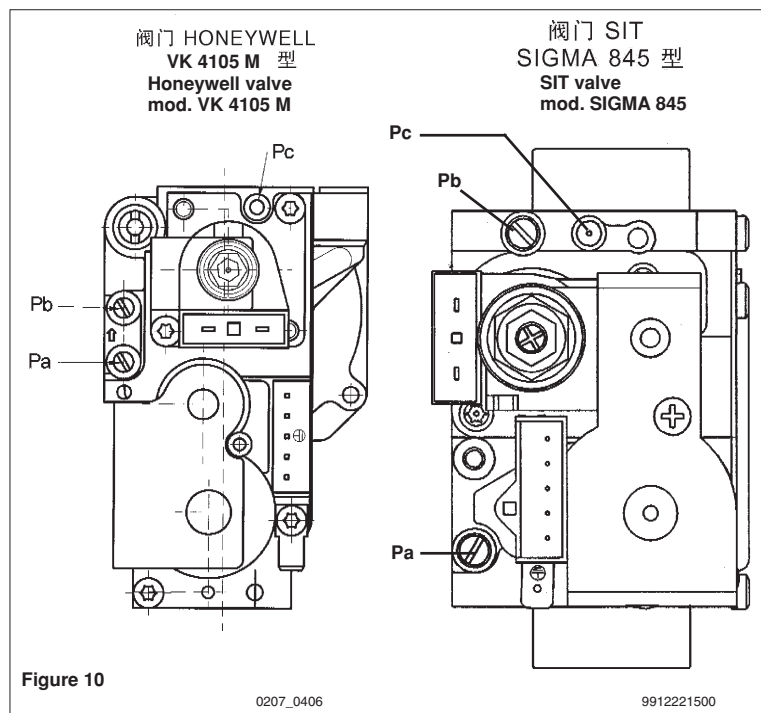


Figure 10

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C1) 调整额定输出：

- 打开气门，拧动旋钮(1)，设为冬天设置();
- 将热水龙头开至最小值10升/分钟流速，或者确保设置了最大的加热要求;
- 取下调节器盖;
- 将铜螺丝(图11的A)调整到如第 页表1中的压力设置;
- 检查锅炉进压是否为入口气阀压力测试点(帕)(见图10)(G.30是30毫巴，G.31是37毫巴，天然气是20毫巴)。

C2) 调节降低热输出(SIT阀门)：

- 取下调节器输入电缆，螺丝(图11的B)松开至与热输出对应的压力设置(页表1);
- 再连接好电缆;
- 盖上调节器盖，拧紧螺丝。

C3) 最后检查

- 应用其他的数据板，指定应用的气体类型和设置;

C1) Adjustment to rated output

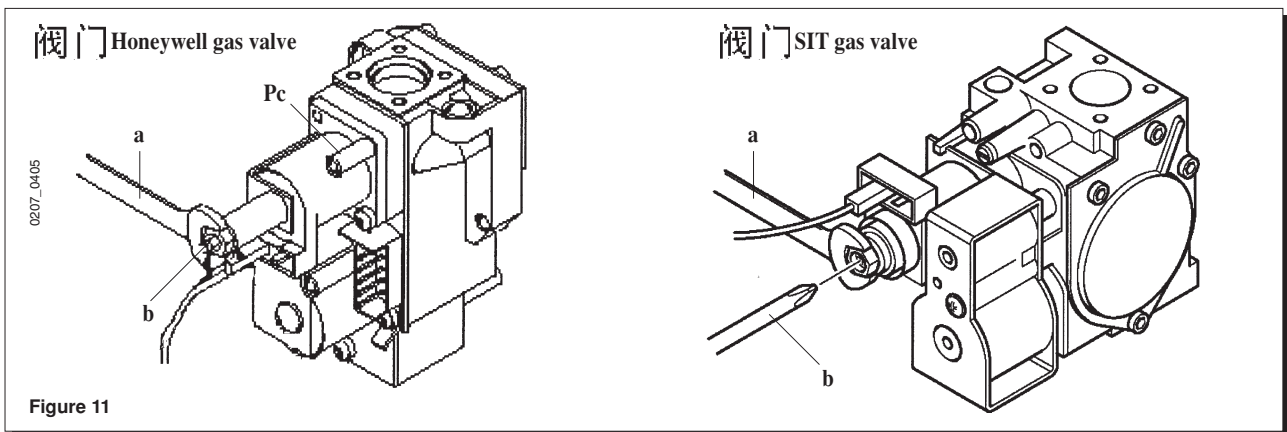
- open the gas tap and rotate knob (1) to set the boiler to the Winter setting (❄️);
- open a hot water tap to reach a minimum 10 l/minute flow rate or ensure that maximum heating requirements are set;
- remove the modulator cover;
- adjust the tube brass screw (A) Fig. 11 to obtain the pressure settings shown at table 1;
- check that boiler feeding dynamic pressure, as measured at the inlet gas valve pressure test point (Pa) (Figure 10) is correct (30 mbar for G.30, 37 mbar for G.31, 20 mbar for natural gas);

C2) Adjustment to reduced heat output

- detach the modulator feeding cable and unscrew the (B) Fig. 11 screw to reach the pressure setting corresponding to reduced heat output (see table 1);
- connect the cable again;
- fit the modulator cover and seal.

C3) Final checks

- apply the additional dataplate, specifying the type of gas and settings applied.



燃气压力-热出力表—Table of burner pressure—heat output

mbar G20	mbar G30	mbar G31	KW	Kcal/h	
2.5	5.3	6.4	9.3	8000	最小出力 Reduced heat output
2.8	5.8	7.2	10.5	9000	
3.2	6.7	8.5	11.6	10000	
3.7	8.1	10.3	12.8	11000	
4.1	9.6	12.3	14.0	12000	
4.9	11.3	14.4	15.1	13000	
5.6	13.1	16.7	16.3	14000	
6.5	15.0	19.2	17.4	15000	
7.4	17.1	21.8	18.6	16000	
8.3	19.3	24.7	19.8	17000	
9.3	21.6	27.6	20.9	18000	
10.4	24.1	30.8	22.1	19000	
11.5	26.7	34.1	23.3	20000	
12.2	28.3	36.2	24.0	20600	最大出力 Rated heat output

1mbar=10,197mmH₂O

表 1—Table 1

用量表—燃烧器喷嘴——Consumption table—burner injectors

所用燃气种类—Gas used	G20	G30	G31
主喷嘴直径—main injector diameter(mm)	1.28	0.77	0.77
喷嘴数量—no.of injectors	12	12	12

表 2—Table 2

15℃时消耗量—Consumption	G20	G30	G31
最大出力—Rated heat output	2.78 m ³ /h	2.1 kg/h	2.04kg/h
最小出力—Reduced heat output	1.13 m ³ /h	0.9 kg/h	0.8 kg/h
热值—p.c.i	34.02 MJ/m ³	45.6 MJ/kg	46.3MJ/kg

表 3—Table 3

控制和运行装置

壁挂炉专用配备的控制功能有：

• 中央供暖温度调节计

此调节计可设定中央供暖温度，温度可以从 30°C 到 85°C。

顺时针旋转旋钮（5）为增大，逆时针旋转旋钮（5）为减小。

• 卫生热水温度调节计

此调节计可设定卫生热水温度，根据水流量温度可以从 35°C 到 65°C。

顺时针旋转旋钮（6）为增大，逆时针旋转旋钮（6）为减小。

• 空气压力开关

此开关保证燃烧过程中排烟系统是否正常，当出现如下反常情况时：

- * 烟管端部堵塞
 - * 文丘里测压孔堵塞
 - * 风机不动
 - * 文丘里测压孔和空压开关的连接有错误
- 锅炉保持待机状态，指示灯3快速闪烁。

风机的电源在空气压力开关不允许的情况下在十分钟内恢复。

将选择钮(1)暂时转到位置(0)以恢复功能。

• 安全恒温器

此装置的传感器位于供暖上水管上，当主循环中的水超温时可中断燃气进入燃烧器。在此情况下，锅炉暂停(指示灯2慢速闪烁)，只有当故障原因排除后才可重新点火，将选择钮(1)转到位置(R)至少一秒。

严禁放弃使用此安全装置。

• 火焰电离检测器

检测电极位于燃烧器右方，当缺燃气或主燃烧器不完全间歇点火时可保证安全。在此情况下，锅炉暂停(指示灯3发亮)。必须将选择钮(1)转到位置(R)至少一秒以恢复正常工作条件。

缺燃气时，锅炉尝试进行燃烧器点火三次，每隔约25秒一次。燃烧器的三次点火尝试失败后，锅炉暂停(指示灯3发亮)。

Control and operation devices

The boiler has been designed in full compliance with European reference standards and in particular is equipped with the following:

• Central heating temperature adjustment potentiometer

This potentiometer sets the central heating flow max. temperature. Its temperature range goes from 30 °C min. to 85 °C max.

To increase the temperature turn knob (5) clockwise and anticlockwise to decrease it.

• Domestic hot water temperature adjusting potentiometer

This potentiometer sets the domestic hot water max. temperature. Its temperature range goes from 35 °C min. to 65 °C max according to the water inlet flow rate.

To increase the temperature turn knob (6) clockwise and anticlockwise to decrease it.

• Air pressure switch

This switch allows the main burner to switch on provided the exhaust flue duct efficiency is perfect.

In the event of one of the following faults:

- the flue terminal is obstructed
- the venturi is obstructed
- the fan is blocked
- the connection between the venturi and the air pressure switch is not active

the boiler will remain on standby and LED 3 will flash at high frequency.

The fan's electric power supply is cut off if the air pressure switch fails to provide a signal within a time of 10 minutes.

Momentarily move the selector (1) onto (0) to restore operation.

• Safety thermostat

This device, which is connected to a sensor on the central heating delivery line, cuts off the flow of gas to the burner if the water in the primary circuit overheats. In these conditions the boiler locks out (LED 2 flashes slowly) and can be relit, by turning selector (1) to position (R) for at least 1 second, only after the cause of the problem has been removed.

Disabling this safety device is forbidden

• Flame ionization detector

The flame sensing electrode, placed on the right of the burner, guarantees safety of operation in case of gas failure or incomplete interlighting of the main burner.

Under such conditions the boiler is blocked (LED 3 illuminated).

Turn selector (1) to position (R) for at least 1 second to restore normal operating conditions.

If there is no gas, the unit makes 3 attempts at igniting the burner with a 25-second pause between each attempt.

The unit shuts down if the burner fails to ignite after three attempts (LED 3 illuminated).

- 压差传感器

此压差传感器当水泵压头满足要求时可控制壁挂炉点火运行。当泵卡住或缺水时可保护主换热器(指示灯3慢速闪烁)。

- 卸压阀(中央供暖系统)

此卸压阀被设置为 3bar, 用于中央供暖系统。

我们建议将卸压阀连接到排水孔上。禁止将卸压阀作中央供暖系统的排水口。

- Hydraulic differential pressure sensor

This pressure sensor, fitted on the hydraulic assembly, allows the main burner to light provided the pump head is as required and protects the flue-water exchanger from possible lacks of water or blockings of the pump (LED 3 flashes slowly).

- Hydraulic safety valve (heating circuit)

This device is set to 3 bar and is used for the heating circuit.

The safety valve should be connected to a siphoned drain. Use a means of draining the heating circuit is strictly prohibited.

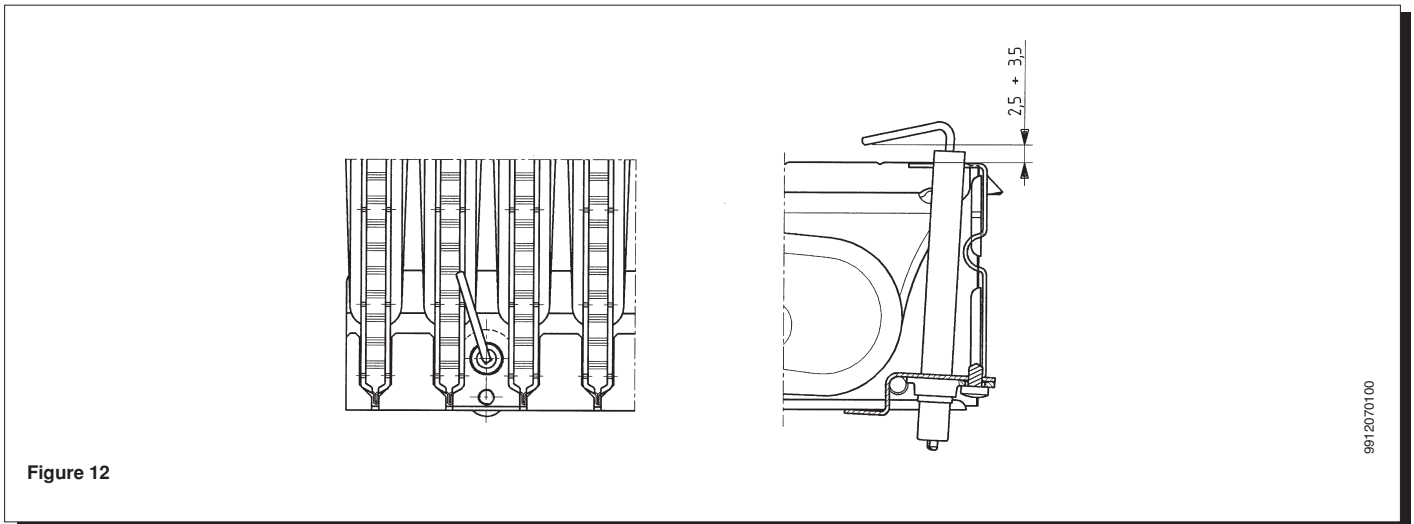


Figure 12

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电子板上执行的调节

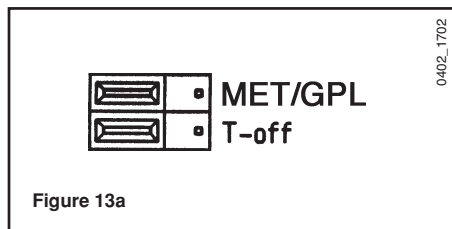
跨接线在此位置 (图 13a) 时:

- MET** 壁挂炉燃烧天然气
- T-off** 供暖系统的等待时间为 3 分钟

Electronic board calibration

When the jumper or the switch is in the (fig. 13a) position:

- MET** operation of system with NATURAL gas
- T-off** 3-minute heating stand-by time

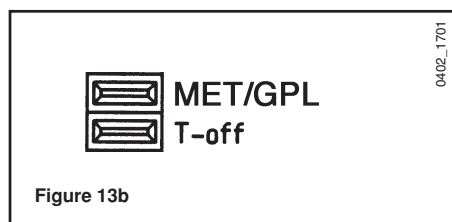


跨接线在此位置 (图 13b) 时:

- GPL** 壁挂炉燃烧液化石油气
- T-off** 供暖系统的等待时间为 10 秒

When the jumper or the switch is in the (fig. 13b) position:

- GPL** operation of system with LPG
- T-off** 10-seconds heating stand-by time



备注: 上述调节必须在关闭壁挂炉电源后进行。

NB Make sure that electrical power supply has been disconnected before making settings.

燃烧特性检查

对于强排式壁挂炉, 在壁挂炉烟道系统上有两个测量点, 可以在壁挂炉运行中测量燃烧出力和燃烧产物。其中一个测量点, 可以测量燃烧产物和燃烧效率。另一个测量点连接在空气管上, 可以检查同轴烟道燃烧产物循环情况。

在测量点上可以测量的项目有

- 排烟温度
- O₂ 或 CO₂ 的百分含量
- CO 的含量

在连接进风管的测量点上必须测量吸入的助燃空气的温度。

Check of combustion parameters

To measure combustion performance and hygiene levels of combustion products, the forced draught boiler models are equipped with two test points on the tapered coupling specifically designed for this purpose. One of the two test points is connected to the exhaust flue duct to allow measurements of the combustion products hygienic standards and combustion efficiency.

The second test point is connected to the comburant air inlet duct to check possible combustion products circulation in case of coaxial ducts. The exhaust flue duct test point allows measurements of the following:

- combustion products temperature;
- concentration of oxygen (O₂) or, alternatively, of carbon dioxide (CO₂);
- concentration of carbon monoxide (CO).

The comburant air temperature must be measured at the test point connected to the air inlet duct.

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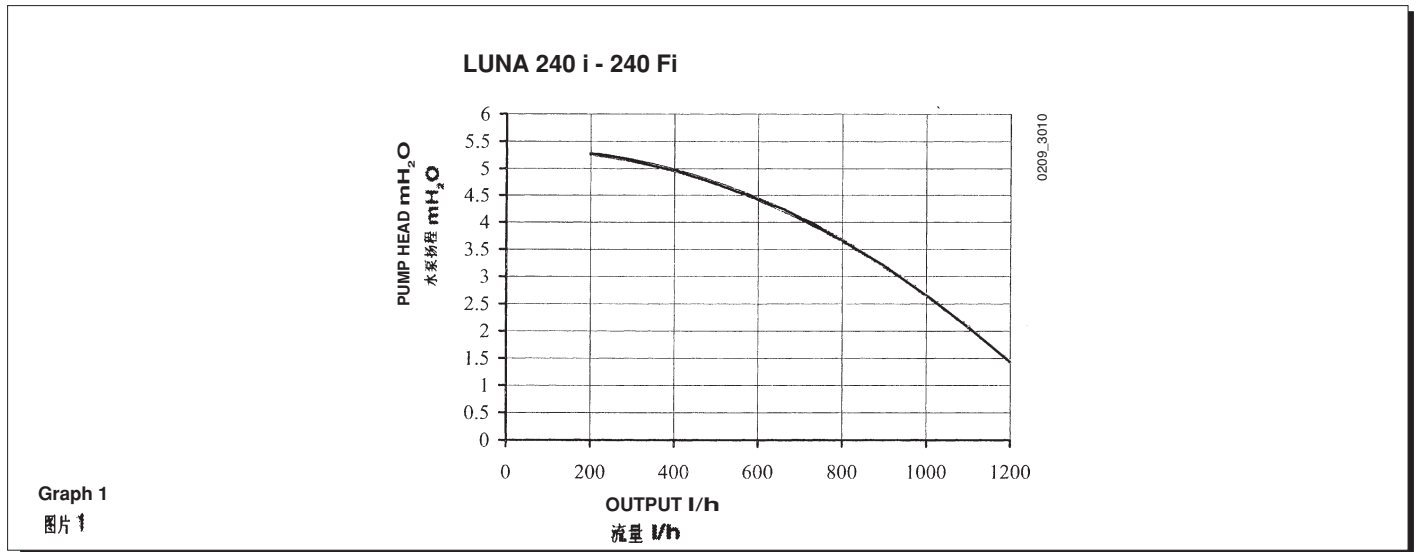
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流量 / 泵压头性能

泵压头适应任何一种单管或双管加热系统，泵上有一个独立的排气阀可快速排出供暖系统中的空气。

Output / pump head performances

This is a high static head pump fit for installation on any type of single or double-pipe heating systems. The air vent valve incorporated in the pump allows quick venting of the heating system.



如何清除卫生热水系统中的水垢

在清洗卫生热水系统时，如果在热水进出口处各有一个龙头开关（可按需求提供）时，不必将卫生热水系统中的换热器拆下。

清洗过程必须按如下进行：

- 关闭冷水进水管开关
- 打开热水开关将滞留在系统中的水排出
- 关闭热水管
- 拧下截止阀帽
- 取出过滤器清洗

若热水出口处无开关时，则必须将卫生热水系统中的换热器拆下，在外面进行清洗，我们也建议将卫生热水系统中的换热器座和 NTC 探头也清洗一下

How to purge the DHW system from limestone deposits

To clean the DHW system it is not necessary to remove the DHW heat exchanger if the assembly is equipped with the appropriate taps (supplied on demand) placed on the hot water outlet and inlet.

To carry out the purge it is necessary to:

- close the cold water inlet
- drain the DHW system from the water contained therein by means of a hot water tap
- close the DHW outlet
- unscrew the two stop cocks caps
- remove the filters.

In case the appropriate tap is not supplied it is necessary to disassemble the DHW heat exchanger, as described in the following section, and do the purge aside. We recommend you also purge from limestone deposits the DHW heat exchanger seat and the NTC sensor fitted on the DHW system.

如何卸下卫生热水系统中的板式换热器

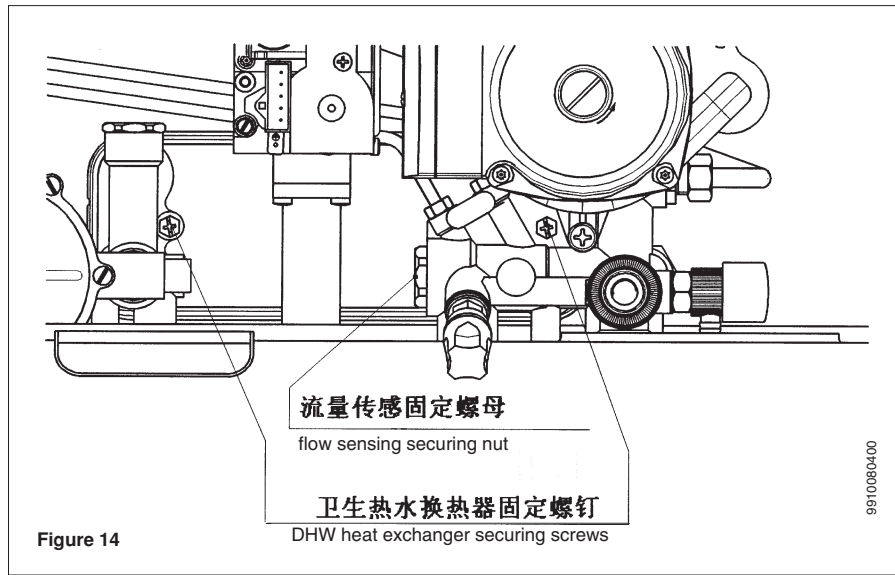
卫生热水系统中的不锈钢板式换热器只需用一个改锥就能拆卸下来，步骤如下：

- 排水。如果可能仅对锅炉系统，通过排水口排放；
- 将卫生热水系统中的水排掉；
- 拧下换热器座上的两颗螺丝将换热器从座上取出来（图片 14）。

How to disassemble the DHW heat exchanger

The stainless steel plate-type DHW heat exchanger is easily disassembled with a screwdriver by operating as described below:

- drain, if possible, only the boiler system, **through the drain tap**;
- drain the DHW system from water;
- remove the two screws (right in front of you) securing the DHW heat exchanger and pull it off its seat (Figure 14).



清洗冷水管过滤器

装配了冷水管过滤器的壁挂炉上，清洗过滤器按如下步骤进行：

- 排掉卫生热水系统中的水
- 拧下水流传感器的螺母（见图片 14）
- 取出水流传感装置和它的过滤器
- 清洗过滤器和排除杂质

重要：在出现需要更换或清洗水流组件里的 O 型圈时，不要用一般油或油脂作为润滑油，而只能专用 Molykote111。

Cleaning the cold water filter

The boiler is equipped with a cold water filter placed on the hydraulic assembly. To clean it do the following:

- drain the DHW system from water;
- unscrew the nut on the flow sensing assembly (Figure 14);
- pull out the flow sensing device and its filter;
- remove the impurities.

Important: in the event of replacements and/or cleaning of the O-rings on the hydraulic unit, do not use oil or grease as lubricant but exclusively Molykote 111.

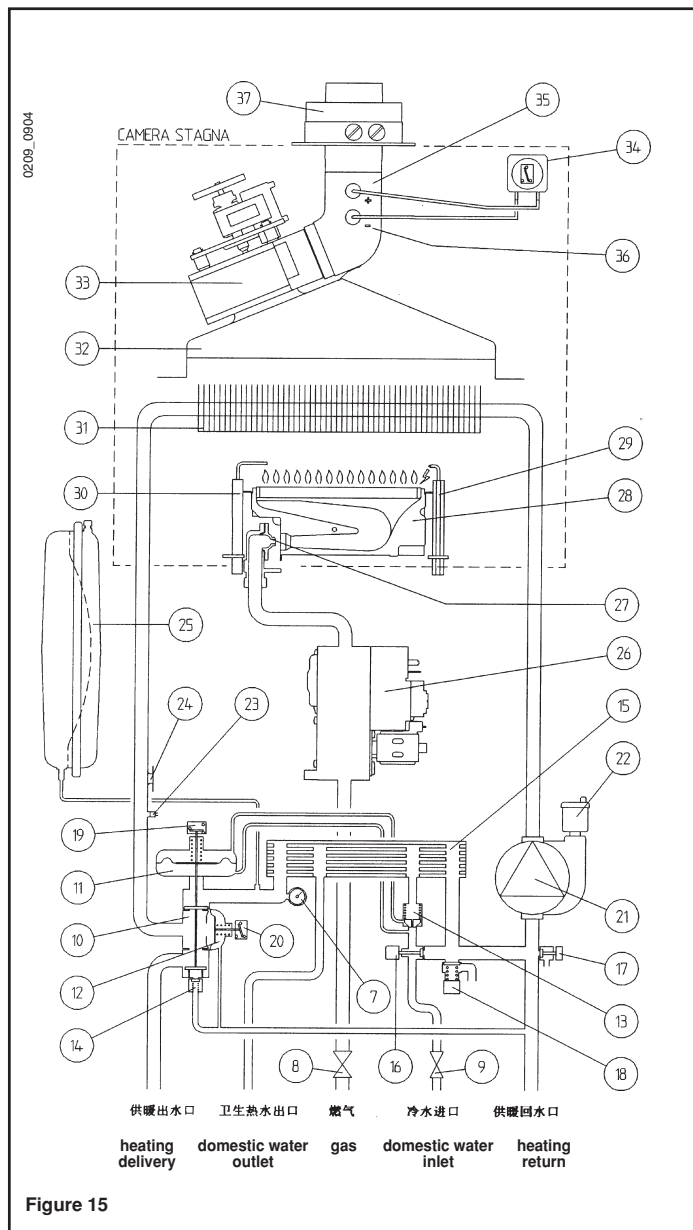


Figure 15

符号说明

- 7 压力表
- 8 燃气截止阀
- 9 冷水管开关和过滤器
- 10 分配阀
- 11 卫生热水优先组合装置
- 12 压差传感器
- 13 过滤器水流传感
- 14 自动旁通
- 15 卫生热水板式换热器
- 16 壁挂炉注水阀
- 17 壁挂炉排水阀
- 18 卸压阀 (安全阀)
- 19 卫生热水优先微开关
- 20 压差传感微开关
- 21 水泵
- 22 自动排气口
- 23 卫生热水 NTC 温度探头

- 24 过热传感器
- 25 膨胀水箱
- 26 燃气阀
- 27 燃烧器引射器
- 28 主燃烧器
- 29 点火电极
- 30 火焰传感探针
- 31 主换热器
- 32 排烟罩
- 33 风机
- 34 空气压力开关
- 35 正压测点
- 36 负压测点
- 37 烟道接头

Key:

- 7 pressure gauge
- 8 gas service cock
- 9 cold water inlet on/off valve and filter
- 10 diverter valve assembly
- 11 DHW flow priority assembly
- 12 hydraulic differential pressure sensor
- 13 flow sensor with filter
- 14 automatic by-pass
- 15 plate-type DHW heat exchanger
- 16 boiler filling tap
- 17 boiler drain point
- 18 pressure relief valve
- 19 DHW flow priority microswitch
- 20 hydraulic differential pressure sensor microswitch
- 21 pump and air separator
- 22 automatic air vent
- 23 DHW NTC sensor
- 24 overheat thermostat
- 25 expansion vessel
- 26 gas valve
- 27 burner injector
- 28 main burner
- 29 ignition electrode
- 30 flame sensing electrode
- 31 flue-water exchanger
- 32 flue hood
- 33 fan
- 34 air pressure switch
- 35 positive pressure point
- 36 negative pressure point
- 37 flue adaptor

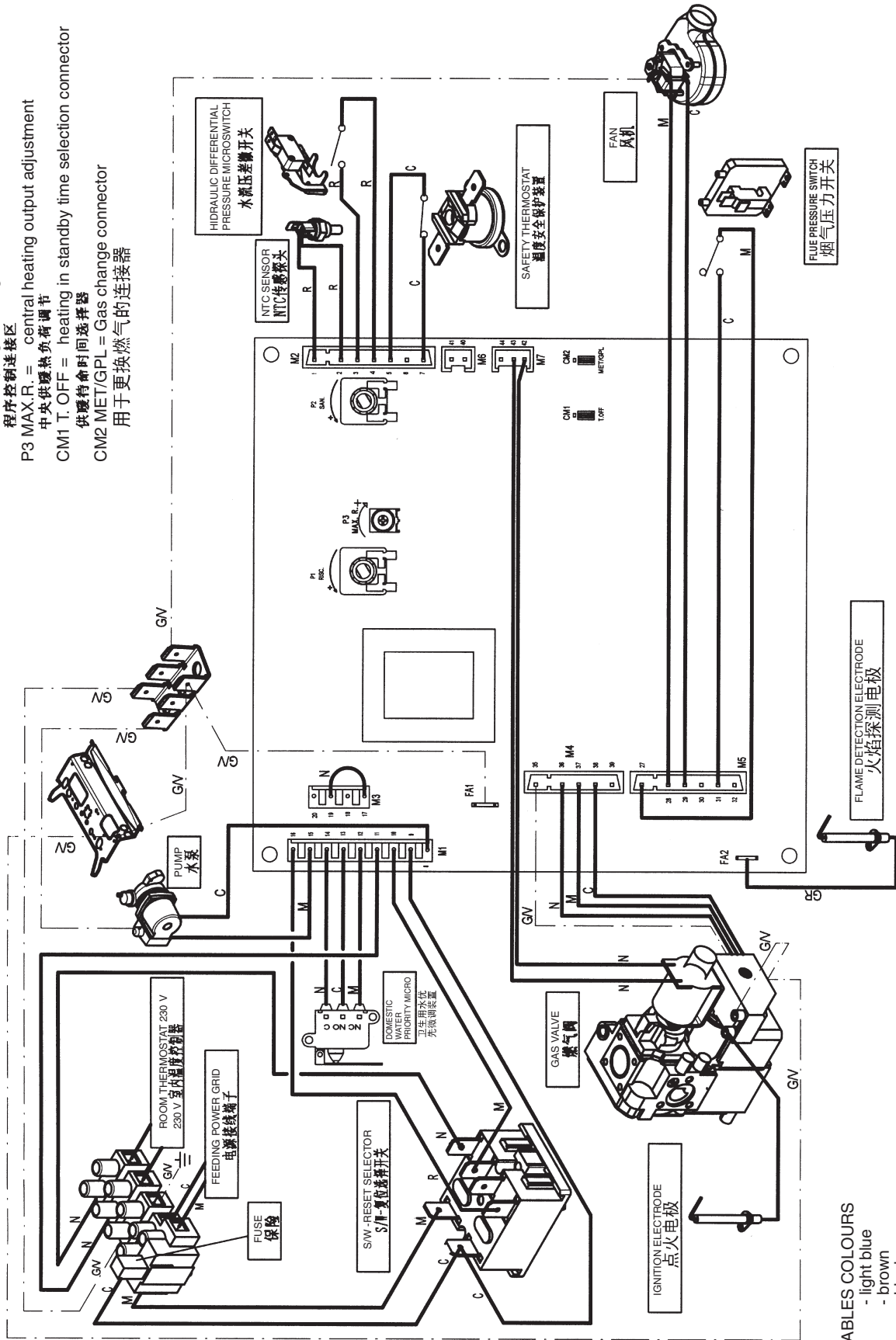
KEY
符号说明

M3 = programming control connector
程序控制连接区

P3 MAX.IR. = central heating output adjustment
中央供暖热负荷调节

CM1 T. OFF = heating in standby time selection connector
供暖待机时间选择器

CM2 MET/GPL = Gas change connector
用于更换燃气的连接器



- 电线的颜色 - CABLES COLOURS
- light blue 浅蓝色
 - brown 棕色
 - black 黑色
 - red 红色
 - yellow/green 黄色/绿色
 - grey 灰色
 - yellow 黄色
 - white 白色
- C = 浅蓝色
M = 棕色
N = 黑色
R = 红色
G/V = 黄色/绿色
G = 灰色
B = 白色

技术参数

Technical data

PERFORMA 24

最大输入功率	kw	26.3	Rated heat input	kw	26.3
最小输入功率	kw	10.6	Reduced heat input	kw	10.6
最大输出功率	kw	24	Rated heat output	kw	24
	(kcal/h)	(20600)		(kcal/h)	(20600)
最小输出功率	kw	9.3	Reduced heat output	kw	9.3
	(kcal/h)	(8000)		(kcal/h)	(8000)
热效率	%	90.3	Rated direct efficiency	%	90.3
最大出力的30%的输出功率时的热效率	%	88	Direct efficiency at 30% of output	%	88
中央供暖系统中的最大压力	bar	3	Central heating system max. pressure	bar	3
膨胀水箱容量	l	8	Expansion vessel capacity	l	8
膨胀水箱压力	bar	0.5	Expansion vessel pressure	bar	0.5

卫生热水最大压力	bar	8	DHW system max. pressure	bar	8
卫生热水最小压力	bar	0.2	DHW system min. dynamic pressure	bar	0.2
卫生热水最小出力量	l/min	2.5	DHW system min. output	l/min	2.5
温差 $\Delta T=25^{\circ}\text{C}$ 时, 出水量	l/min	13.7	DHW production at $\Delta T=25^{\circ}\text{C}$	l/min	13.7
温差 $\Delta T=35^{\circ}\text{C}$ 时, 出水量	l/min	9.8	DHW production at $\Delta T=35^{\circ}\text{C}$	l/min	9.8
特殊出水量 (*)	l/min	10.5	Specific output	l/min	10.5

同心烟管直径	mm	60	Concentric flue duct diameter	mm	60
同心空气管直径	mm	100	Concentric air duct diameter	mm	100
分离烟管直径	mm	80	2-pipe flue duct diameter	mm	80
分离空气管直径	mm	80	2-pipe air duct diameter	mm	80
最大水流量	kg/s	0.020	Max. flue mass flow rate	kg/s	0.020
最小水流量	kg/s	0.017	Min. flue mass flow rate	kg/s	0.017
最高烟气温度	$^{\circ}\text{C}$	146	Max. flue temperature	$^{\circ}\text{C}$	146
最低烟气温度	$^{\circ}\text{C}$	106	Min. flue temperature	$^{\circ}\text{C}$	106

燃气种类	天然气或者液化气		Type of gas used	natural gas or LPG	
天然气进气压力	mbar	20	Natural gas feeding pressure	mbar	20
丁烷进气压力	mbar	30	Butane gas feeding pressure	mbar	30
丙烷进气压力	mbar	37	Propane gas feeding pressure	mbar	37

电源电压	V	230	Power supply voltage	V	230
电压频率	Hz	50	Power supply frequency	Hz	50
功率	W	170	Rated power supply	W	170
净重	kg	38.5	Net weight	kg	38.5

外型尺寸			Dimensions		
高	mm	763	height	mm	763
宽	mm	450	width	mm	450
厚	mm	345	depth	mm	345

防护等级 (根据欧盟标准 60529)	IP X4D		Protection limit against humidity and water leakages	IP X4D	
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(*) 根据欧盟标准 625

(*) according to EN625

DECLARATION OF CONFORMITY

POTTERTON declares that this wall hung gas boiler is made in compliance to the following European Standards:

EN 435
EN 483
EN 625
EN 60 335-1
EN 50165
EN 60529
EN 61000
EN 55014

POTTERTON also declares that this appliance is tested:

- in heating and sanitary mode working with gas;
- with a pressure of 12 bar on the hydraulic sanitary circuit;
- with a pressure of 4,5 bar on the hydraulic heating circuit;
- with an electrical safety control in compliance to the European Standards EN 60 335-1.

声明

POTTERTON 声明本壁挂式燃气采暖炉遵照下列欧洲标准生产:

EN435
EN483
EN625
EN60335-1
EN50165
EN60529
EN61000
EN55014

POTTERTON 同时声明本壁挂式燃气采暖炉已经过以下测试:

- 应用燃气进行供暖和卫生热水系统工作测试
- 在 12 bar 压力下卫生热水循环测试
- 在 4.5bar 压力下供暖循环测试
- 根据欧洲 EN60335-1 标准进行电器安全性能控制测试

中华人民共和国国家质量技术监督局
进口锅炉压力容器安全质量许可证书
**SAFETY QUALITY LICENSE FOR
IMPORT BOILER AND PRESSURE VESSEL**

兹证明/This is to certify that

BAXI S.p.A.

Via Trozzetti, 20, 36061 Bassano del Grappa

ITALY

已获中华人民共和国国家质量技术监督局锅炉压力容器安全质量许可证书
has been granted the Safety Quality Licensing Certificate for Import Boiler
& Pressure Vessel of China State Bureau of Quality and Technical Supervision of the
People's Republic of China

许可方式/Forms of Licensing

工厂许可/Manufacturer Approval

许可范围/Licensing Scope

锅炉(热水锅炉) / Boilers (Hot Water Boilers)

许可登记号

Certificate No: 00528M

许可有效期: 2004年8月15日

Certificate Expiry: AUGUST 15, 2004



国家质量技术监督局局长授权签署
For the Director-General
of China State Bureau of Quality and Technical Supervision

2000年8月15日

AUGUST 15, 2000

签署日期/Date of issue



安全质量许可证管理机构: 国家质量技术监督局锅炉压力容器安全监察局
Safety Quality License Administration Organization: Boiler & Pressure Vessel Safety Administration(BPA),
China State Bureau of Quality and Technical Supervision of the People's Republic of China

POTTERTON

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