VICTRIX 90
VICTRIX 115
Wall-hung condensing boilers for high power
VICTRIX 90 is the new wall-hung condensing boiler for room heating only, set-up for independent functioning and for that in cascade mode (up to 3 appliances), with the advantage of guaranteeing particularly high total performance and reduced running costs. Condensation technology allows to obtain high performance. The high potentiality of VICTRIX 90 is ideal for heating large residential heating systems (e.g. condominiums) and for commercial and industrial applications. In the case of installation of an individual boiler, and external 3-way valve can be connected for coupling to a separate storage tank unit for the production of DHW. A hydraulic manifold can also be connected in order to increase the circulation in the system with consequent flexibility and speed of installation. When functioning in cascade mode, appropriate distribution manifolds can be connected via threaded systems. The special ecological burner guarantees particularly reduced polluting emissions (the boiler belongs to the most environment-friendly class envisioned by European Standards - class 5).

Condensing wall-hung open chamber fan assisted premix boiler with high efficiency and forced circulation, 90kW (77,400 kcal/h). Type-approved for installation in heating control unit and outside the building, it can be used in two configurations: **Open chamber and fan assisted** (the boiler is supplied as per standard in configuration B2); **Sealed chamber and fan-assisted (appliance type C)**, only if installed using vertical or horizontal concentric kits.

The boiler is made up from:
- total premix combustion system with metal fibre multigas burner, complete with ignition electrode and detection electrode;
- pneumatic gas valve with double shutter;
- primary gas/water heat exchanger with stainless steel double coil, composed of 16 elements (10+6 flue side);
- combustion chamber in stainless steel internally isolated using ceramic panels;
- fan with electronically variable speed;
- circuit for disposal of condensate including trap and flexible discharge pipe;
- hydraulic unit comprising primary circuit pressure switch, circulation pump and automatic air vent valve;
- 4 bar safety valve (ISPESL type-approved) and draining funnel as per standard, heating system manometer;
- over-temperature safety thermostat;
- flue probe;
- control panel supplied with P.C.B. with microprocessor with continuous flame modulation on heating with P.I.D. control, modulation field from 90 to 22.5 kW (from 77,400 to 19,350 kcal/h);
- system flow regulation probe;
- system return regulation probe;
- adjustable central heating flow temperature with factory setting from 25 to 85°C;
- ignition delay device in central heating phase, anti-freeze protection, pump anti-blocking function, chimney sweep function;
- setting and regulation of the boiler functioning parameters using keys with display of status and operating mode by means of a 4-digit display;
- self-diagnosis system with digital display of the temperature, functioning status and error codes;
- IPX5D electrical insulation level, with possibility of installation outside without any additional protection (in the open);
- anti-freeze protection to -5 °C as per standard (-15 °C with relevant kit optional);
- set-up for the connection of the cascade and zone regulator and of the external probe;
- set-up for connection to an external 3-way valve, for coupling to a separate storage tank unit for the production of DHW;
- set-up for functioning in cascade mode (up to 3 boilers with a unique ISPESL safety devices kit);
- set-up for the installation of the ISPESL-approved safety stub pipes, both in single and set configuration (up to 3 boilers).

Supplied complete with sample points for combustion analysis and gas interception cocks.

Category II 2H3P appliance, functions with natural gas and L.P.G. CE marking.

is available in the model:
- **VICTRIX 90** code 3.020425

**NOTA BENE:** for correct installation of the boiler the Immergas “Green Range” air intake/fumes exhaust kit must be used and however, dedicated for the VICTRIX 90 boiler, whether in single or cascade configuration (set).
VICTRIX 90 - 115

VICTRIX 115 is the new wall-hung condensing boiler for room heating only, set-up for independent functioning and for that in cascade mode (up to 3 appliances), with the advantage of guaranteeing particularly high total performance and reduced running costs. Condensation technology allows to obtain particularly high performance. The high potentiality of VICTRIX 115 is ideal for heating large residential heating systems (e.g. condominiums) and for commercial and industrial applications. In the case of installation of an individual boiler, and external 3-way valve can be connected for coupling to a separate storage tank unit for the production of DHW. A hydraulic manifold can also be connected in order to increase the circulation in the system with consequent flexibility and speed of installation. When functioning in cascade mode, appropriate distribution manifolds can be connected via threaded systems. The special ecological burner guarantees particularly reduced polluting emissions (the boiler belongs to the most environment-friendly class envisioned by European Standards - class 5).

VICTRIX 115 FEATURES

Condensing wall-hung open chamber fan assisted premix boiler with high efficiency and forced circulation, 111 kW (95,460 kcal/h). Type-approved for installation in heating control unit and outside the building, it can be used in two configurations:

- **Open chamber and fan assisted** (the boiler is supplied as per standard in configuration B₁);
- **Sealed chamber and fan-assisted (appliance type C)**, only if installed using vertical or horizontal concentric kits.

The boiler is made up from:
- total premix combustion system with metallifbre multigas burner, complete with ignition electrode and detection electrode;
- gas valve with double shutter;
- primary gas/water heat exchanger with stainless steel double coil, composed of 18 elements (12+6 flue side);
- combustion chamber in stainless steel internally isolated using ceramic panels;
- fan with electronically variable speed;
- circuit for disposal of condensate including trap and flexible discharge pipe;
- hydraulic unit composed of primary circuit pressure switch, circulation pump and automatic air vent valve;
- 4 bar safety valve (ISPESL type-approved) and draining funnel as per standard, heating system manometer;
- over-temperature safety thermostat;
- flue probe;
- control panel supplied with P.C.B. with microprocessor with continuous flame modulation on heating with P.I.D. control, modulation field from 111 to 29.5 kW (from 95,460 to 23,370 kcal/h);
- system flow regulation probe;
- system return regulation probe;
- adjustable central heating flow temperature with factory setting from 25 to 85°C;
- ignition delay device in central heating phase, anti-freeze protection, pump anti-blocking function, chimney sweep function;
- setting and regulation of the boiler functioning parameters using keys with display of status and operating mode by means of a 4-digit display;
- self-diagnosis system with digital display of the temperature, functioning mode and error codes by means of the display, always available;
- IPX5D electrical insulation level, with possibility of installation outside without any additional protection (in the open);
- anti-freeze protection to -5 °C as per standard (-15 °C with relevant kit optional);
- set-up for the connection of the cascade and zone regulator and of the external probe;
- set-up for connection to an external 3-way valve, for coupling to a separate storage tank unit for the production of DHW;
- set-up for functioning in cascade mode (up to 3 boilers with a unique ISPESL safety devices kit);
- set-up for the installation of the ISPESL-approved safety stub pipes, both in single and set configuration (up to 3 boilers).

Supplied complete with sample points for combustion analysis and gas interception cocks.

Category II appliance, functions with natural gas and L.P.G. CE marking.

is available in the model:
- **VICTRIX 115**

**NOTA BENE:** for correct installation of the boiler the Immergas “Green Range” air intake/fumes exhaust kit must be used and however, dedicated for the VICTRIX 115 boiler, whether in single or cascade configuration (set).
Both in the case of single installation or in sets, the set-up for coupling with a separate storage tank unit are supplied with relevant kits, available in the 200, 300, 500, 1000, 1500 and 2000 litre versions. The Storage Tank units are equipped with double coil for heat exchange. They are designed for coupling to Immergas solar solutions for the production of hot water in large houses or condominiums, as well as sport structures and hotels.
KEY:
1  - Draining funnel
2  - Burner
3  - Flue probe
4  - Flue hood
5  - Condensation module
6  - Air intake pipe
7  - Ignition electrode
8  - System flow regulation NTC probe
9  - System return regulation NTC probe
10 - Sleeve with seats for Venturi
11 - Venturi
12 - Gas nozzle
13 - Air fan
14 - Current transformer
15 - Condensate drain trap
16 - Absolute pressure switch
17 - 4 bar safety valve
18 - P.C.B.
19 - Condensate drain pipe
20 - Sample points (air A) - (flue gases F)
21 - Air vent valve
22 - Condensation module cover
23 - Over-heating safety thermostat
24 - Detection electrode
25 - Pump
26 - Gas valve
KEY:
1 - Draining funnel
2 - Burner
3 - Flue probe
4 - Flue hood
5 - Condensation module
6 - Air intake pipe
7 - Ignition electrode
8 - System flow regulation NTC probe
9 - System return regulation NTC probe
10 - Sleeve with seats for Venturi
11 - Venturi
12 - Gas nozzle
13 - Air fan
14 - Current transformer
15 - Condensate drain trap
16 - Absolute pressure switch
17 - 4 bar safety valve
18 - P.C.B.
19 - Condensate drain pipe
20 - Sample points (air A) - (flue gases F)
21 - Air vent valve
22 - Condensation module cover
23 - Over-heating safety thermostat
24 - Detection electrode
25 - Pump
26 - Gas valve
6 MAIN DIMENSIONS

<table>
<thead>
<tr>
<th>Model</th>
<th>Height mm</th>
<th>Width mm</th>
<th>Depth mm</th>
</tr>
</thead>
<tbody>
<tr>
<td>VICTRIX 90 - 115</td>
<td>1010</td>
<td>600</td>
<td>610</td>
</tr>
</tbody>
</table>

6.1 CONNECTIONS

**Model**
- VICTRIX 90
- VICTRIX 115

**System /f_l ow**
- M 1" 1/2
- R 1" 1/2

**System return**
- G 3/4"
- G 1"

**Gas Supply**

---

**SC** = Condensate drain Ø 25 mm

Distance between casing upper line and drain bend Ø 80 **160 mm**

Distance between casing upper line and concentric intake-exhaust bend Ø 80/125 **190 mm**
N.B.: In the case of installation outside, the ISPESL safety devices kit must be protected using the IPX4D protection box kit for ISPESL individual boiler safety devices, code 3.019175. Immergas S.p.a. declines all liability whenever the installer does not use the devices and Immergas ISPESL-approved original kits or uses them improperly.

The sensitive elements of the automatic regulation and block circuit breaker switches and of the thermometer (not supplied as standard with the boiler) must be set-up as described in the installation instructions in compliance with the provisions of the “R” collection.

Regarding ISPESL design, when installing the Immergas safety kits, the following ISPESL approved devices are already present:

- Manometer-holder cock, manometer, thermometer, manual rearm thermostat and manual rearm pressure switch, (the boiler is already equipped as per standard with ISPESL approved 2 bar safety valve and draining funnel).
- The connection for the expansion vessel is set-up on the system return.
N.B.: In the case of installation outside, the ISPESL safety devices kit must be protected using the IPX4D protection box kit for ISPESL set configuration boiler safety devices, code 3.019185.
Immergas S.p.a. declines all liability whenever the installer does not use the devices and Immergas ISPESL-approved original kits or uses them improperly.
The sensitive elements of the automatic regulation and block circuit breaker switches and of the thermometer (not supplied as standard with the boiler) must be set-up as described in the installation instructions in compliance with the provisions of the "R" collection.
Regarding ISPESL design, when installing the Immergas safety kits, the following ISPESL approved devices are already present:
Manometer-holder cock, manometer, thermometer, manual rearm thermostat and manual rearm pressure switch, (the boiler is already equipped as per standard with ISPESL approved 2 bar safety valve and draining funnel).
The connection for the expansion vessel is set-up on the system return.
The modular boilers, i.e. installed in cascade (battery) with an Immergas original hydraulic manifold kit, must be considered a unique appliance, which assumes the serial number (factory number) of the boiler nearest to the ISPESL safety devices. It is therefore possible to flank up to 3 modules, with a unique ISPESL safety kit.
The hydraulic manifolds (optional) are equipped with non-return valve positioned on the return pipe and with system interception cocks positioned on the flow and return pipes of every boiler (2-way on flow and 3-way on return).
N.B.: In the case of installation outside, the ISPESL safety devices kit must be protected using the IPX4D protection box kit for ISPESL set configuration boiler safety devices, code 3.019185.

Immergas S.p.a. declines all liability whenever the installer does not use the devices and Immergas ISPESL-approved original kits or uses them improperly.

The sensitive elements of the automatic regulation and block circuit breaker switches and of the thermometer (not supplied as standard with the boiler) must be set-up as described in the installation instructions in compliance with the provisions of the “R” collection.

Regarding ISPESL design, when installing the Immergas safety kits, the following ISPESL approved devices are already present:
Manometer-holder cock, manometer, thermometer, manual rearm thermostat and manual rearm pressure switch, (the boiler is already equipped as per standard with ISPESL approved 2 bar safety valve and draining funnel).

The connection for the expansion vessel is set-up on the system return.

The modular boilers, i.e. installed in cascade (battery) with an Immergas original hydraulic manifold kit, must be considered a unique appliance, which assumes the serial number (factory number) of the boiler nearest to the ISPESL safety devices. It is therefore possible to flank up to 3 modules, with a unique ISPESL safety kit.

The hydraulic manifolds (optional) are equipped with non-return valve positioned on the return pipe and with system interception cocks positioned on the flow and return pipes of every boiler (2-way on flow and 3-way on return).
The VICTRIX 90 boilers are supplied with a built-in circulation pump with 3-position electric speed control. The pump is the single-phase type (230 V - 50 Hz) and is already equipped with condenser. To ensure optimal boiler operation, in the case of new systems (single pipe and module) it is recommended to use the pump at maximum speed.

**A** = Head available to the system on the individual boiler maximum speed

**B** = Head available to the system on the individual boiler second speed

**C** = Head available to the system on maximum speed with the non-return valve for boilers in cascade (set)

**D** = Head available to the system on second speed with the non-return valve for boilers in cascade (set)
The VICTRIX 115 boilers are supplied with a built-in circulation pump with 3-position electric speed control. The pump is the single-phase type (230 V - 50 Hz) and is already equipped with condenser. To ensure optimal boiler operation, in the case of new systems (single pipe and module) it is recommended to use the pump at maximum speed.

A = Head available to the system on the individual boiler maximum speed
B = Head available to the system on the individual boiler second speed
C = Head available to the system on maximum speed with the non-return valve for boilers in cascade (set)
D = Head available to the system on second speed with the non-return valve for boilers in cascade (set)
System heating.
Individual modular boilers or installed in cascade configuration, require a suitable heat regulation system able to communicate simply with the boiler, in order to satisfy the most varied system requirements.
For this reason it is possible to couple a series of accessories to VICTRIX 90 and 115 boilers with the purpose of optimising the climatic regulation of the heating system.
In synthesis VICTRIX 90 and 115 can be installed with two types of plant:
- **In cascade** (with the system divided into one or more zones), use the cascade regulator coupling the zone manager or the modulating room thermostat for the heat adjustment of the individual zones.
- **Individually** (with the system divided into zones), use the cascade regulator coupling the zone manager or the modulating room thermostat for the heat adjustment of the individual zones. In the case of individual zone or three-way valve kit coupling, an ON-OFF room chrono-thermostat must be used.

Production of Domestic Hot Water.
Both in the case of single installation or in sets, the set-ups for coupling with a separate storage tank unit are supplied with relevant kits, available in the 200, 300, 500, 1000, 1500 and 2000 litre versions. The Storage Tank units are equipped with double coil for heat exchange. They are designed for coupling to Immergas solar solutions for the production of hot water in large houses or condominiums, as well as sport structures and hotels.
With VICTRIX 90 and 115 it is possible to select two different coupling systems of the separate storage tank unit:
- **Three-way valve kit for coupling the separate storage tank unit (in the case of installation of individual boiler).** The connection to the separate storage tank takes place simply by positioning the 3-way valve and replacing the NTC probe, present as per standard on the storage tank, with the probe contained in the 3-way valve kit. In this case, the heating system and the DHW system are managed by the boiler electronics; the cascade and zone regulator kit does not have to be envisioned.
- **Cascade and zone regulator kit.** Here, the storage tank unit is managed as zone via an external pump. This is possible with individual configuration and also with boilers in set configuration. In this case, the storage tank unit is controlled by the separate storage tank probe, which replaces the NTC temperature probe, present as per standard on the unit itself.
The cascade and zones regulator allows to manage, control and program the functioning sequence of the connected boilers. It can be set and programmed via parameters that allow to guarantee ideal temperature conditions at all times of the day and night for each individual day of the week, both for the CH system and the DHW system (VICTRIX 90 - 115 coupled to a storage tank unit). The cascade regulator can be inserted inside the electric control board present in the cabinet or recessed inside a support that allows fixing to the wall.

N.B.: with installation of the cascade regulator it is recommended to install the external probe to be connected to just one module.

13.1 FEATURES

The electrical connection is made with 2 wires powered at 230V (diameter 1.5 mm²). The connection to the boiler takes place with 2 BUS data cables with maximum length of 50 metres and allows to:
- manage a maximum of three zones (of which 2 may be mixed) and a zone for the separate DHW storage tank. Given that a maximum of 5 cascade regulators can be coupled (of which one, the so-called Master, will be connected to the boiler P.C.B.), a total of up to 15 zone systems can be served (of which 10 eventually mixed) and 5 separate storage tank units;
- set two room temperature values, one for day (comfort temperature) and one for night (reduced temperature);
- manage the temperature of the DHW (with a storage tank unit managed as zone with a pump);
- select the functioning mode for CH and DHW for each individual hydraulic circuit:
  - comfort temperature functioning,
  - reduced temperature functioning,
  - adjustable anti-freeze temperature functioning;
- manage the boiler flow temperature depending on the external temperature with setting of the climatic curve;
- obtain information regarding the system:
  - system temperature,
  - functioning mode,
  - counter data,
  - timer program,
  - pumps functioning state,
  - functioning and values of the variable inputs;
- setting the functioning parameters:
  - functioning times,
  - system mode,
  - DHW,
  - direct circuit, mixed 1, mixed 2,
  - date and time;
- show on the display, via self-diagnosis system, any functioning anomalies with error codes;
- show the date, time, day of the week and the boiler temperature on the display;
- the regulator has a specific section for setting the solar system parameters.
In addition to the functions described for the cascade heat adjuster, the cascade regulator allows to control all the important information regarding operation of the appliance and the heating system with the opportunity of easily intervening on the previously set parameters without having to go to the place where the cascade regulator is installed. The climate chrono-thermostat incorporated into the remote panel enables the system flow temperature to be adjusted to the actual needs of the room being heated, in order to obtain the desired room temperature with extreme precision and therefore with evident saving in running costs. Also allows to display the room temperature and the effective external temperature. The zone manager is powered directly by the cascade regulator via 2 BUS data cables.

14.1 FEATURES

The connection to the cascade regulator takes place with 2 BUS data cables with maximum length of 50 metres and allows to:

- manage a zone to maximum;
- set two room temperature values, one for day (comfort temperature) and one for night (reduced temperature);
- manage the temperature of the DHW (with a storage tank unit managed as zone);
- select the functioning mode for CH and DHW for each individual hydraulic circuit:
  - comfort temperature functioning,
  - reduced temperature functioning,
  - adjustable anti-freeze temperature functioning;
- manage the boiler flow temperature depending on the external temperature and the room temperature with setting of the climatic curve;
- obtain information regarding the system:
  - system temperature,
  - functioning mode,
  - counter data,
- timer program,
- pumps functioning state,
- functioning and values of the variable inputs;
- setting the functioning parameters:
  - functioning times,
  - system mode,
  - DHW,
  - direct circuit, mixed 1, mixed 2,
  - date and time;
- show on the display, via self-diagnosis system, any functioning anomalies with error codes;
- show the date, time, day of the week and the boiler temperature on the display.
15 MODULATING ROOM THERMOSTAT (CODE 3.015245)

The modulating room thermostats (not traditional On/Off) functions only when coupled with the cascade regulator and allows regulation of the room temperature of one of the zones into which the plant is divided (both in individual and cascade installation).

The zone room temperature regulation curve can be regulated by acting directly on the cascade regulator.

The modulating room thermostat is powered directly by the cascade regulator via 2 BUS data cables.

15.1 FEATURES

The connection to the cascade regulator takes place with 2 BUS data cables with maximum length of 50 metres and allows to:

- manage a zone to maximum;
- vary the room temperature of the zone;
- select the functioning mode for heating the zone:
  - fixed comfort temperature functioning,
  - fixed reduced temperature functioning,
  - functioning with timer program.

16 EXTERNAL PROBE (CODE 3.015266)

The external probe allows to decrease or increase the max. flow temperature to the system when the external temperature increases or decreases, in order to adjust the heat supplied to the system according to the change in external temperature.

The probe is connected via two wires directly to the boiler terminal board. Once connected, it always acts without heat regulation kit.

In the case of boilers installed in set configuration (several boilers), the external probe must be connected to just one boiler.
KEY:

1 - VICTRIX 90-115 boiler
2 - Cascade and zone regulator
3 - Zone manager
4 - Modulating room thermostat
5 - External probe
6 - Zone 1 temperature probe (CMI-1)
7 - Zone 2 temperature probe (CMI-2)
8 - Common flow probe
9 - Storage tank unit temperature probe
10 - Zone 1 mixing valve (CMI-1)
11 - Zone 2 mixing valve (CMI-2)
12 - Zone 1 central heating circuit pump (CMI-1)
13 - Zone 2 central heating circuit pump (CMI-2)
14 - Zone 3 direct circuit pump (CD)
15 - Storage tank unit feeding pump
16 - Zone 1 safety thermostat (CMI-1)
17 - Zone 2 safety thermostat (CMI-2)
18 - Fuel shut-off valve bulb
19 - ISPESL type-approved manometer-holder cock
20 - ISPESL type-approved thermometer
21 - ISPESL type-approved manual rearm thermostat
22 - ISPESL type-approved manual rearm pressure switch
23 - Attachment for expansion vessel
24 - Expansion vessel
25 - Manifold/mixer
26 - External storage tank unit
27 - Fuel shut-off valve
28 - Non return valve
29 - Shurry collection system filter
30 - Manometer pocket
31 - Damper coil
32 - ISPESL type-approved manometer
KEY:
1 - VICTRIX 90-115 boiler
2 - Cascade and zone regulator
3 - Zone manager
4 - Modulating room thermostat
5 - External probe
6 - Zone 1 temperature probe (CMI-1)
7 - Zone 2 temperature probe (CMI-2)
8 - Common flow probe
9 - Storage tank unit temperature probe
10 - Zone 1 mixing valve (CMI-1)
11 - Zone 2 mixing valve (CMI-2)
12 - Zone 1 central heating circuit pump (CMI-1)
13 - Zone 2 central heating circuit pump (CMI-2)
14 - Zone 3 direct circuit pump (CD)
15 - Storage tank unit feeding pump
16 - Zone 1 safety thermostat (CMI-1)
17 - Zone 2 safety thermostat (CMI-2)
18 - Fuel shut-off valve bulb
19 - ISPESL type-approved manometer-holder cock
20 - ISPESL type-approved thermometer
21 - ISPESL type-approved manual rearm pressure switch
22 - ISPESL type-approved manual rearm thermostat
23 - Attachment for expansion vessel
24 - Expansion vessel
25 - Manifold/mixer
26 - External storage tank unit
27 - Fuel shut-off valve
28 - Non return valve
29 - Shurry collection system filter
30 - Manometer pocket
31 - Flue circuit flue adjusting device
32 - Stub pipe drain trap
33 - System shut-off valve
34 - Damper coil
35 - ISPESL type-approved manometer

VICTRIX 90 - 115 VICTRIX BOILERS IN CASCADE CONFIGURATION
OPTIONAL ELECTRIC CONNECTIONS.
The connection of clamps M and O of the Bus are used to for the connection of the cascade and zone regulator. The room thermostat (S20) is connected to clamps F and E eliminating jumper X40.

The external probe (B4) is connected to clamps G and J. The DHW probe (B2) is connected to clamps R and H. The 3-way valve (M30) is connected to clamps T, S and K. The summer switch (S16) is connected to clamps V and U.

KEY:
B1 - Flow probe
B2 - DHW probe (optional)
B4 - External temperature probe (optional)
B5 - Return probe
B10 - Flue probe
E1 - Ignition electrode
E2 - Detection electrode
E4 - Safety thermostat
M1 - Boiler pump
M20 - Fan
M30 - 3-way valve (optional)
S1 - Main switch
S5 - System pressure switch micro switch
S16 - Summer switch (not supplied by Immergas)
S20 - ON/OFF room thermostat (optional)
T10 - Low voltage transformer
X40 - Room thermostat jumper
Y1 - Gas valve (24 Vrac)
HYDRAULIC DIAGRAM

KEY:
1 - Draining funnel on view
2 - ISPESL type-approved 4 bar safety valve
3 - Boiler draining valve
4 - Absolute pressure switch
5 - Gas valve
6 - Air fan
7 - Gas nozzle
8 - Air intake pipe
9 - Ignition electrode
10 - Condensation module cover
11 - Condensation module
12 - Flue hood
13 - Air sample point
14 - Flue sample point
15 - Automatic air vent valve
16 - System flow regulation probe
17 - System return regulation probe
18 - Over-heating safety thermostat
19 - Flue probe
20 - Burner
21 - Detection electrode
22 - Air/gas Venturi manifold
23 - Venturi positive sign (P1)
24 - Boiler pump
25 - Condensate trap siphon
"GREEN RANGE" INTAKE/EXHAUST KIT MUST BE USED FOR VICTRIX 90-115

TYPE OF INSTALLATION

The VICTRIX 90-115 boilers are type-approved for installation outside or inside the heating control unit. The “Victrix 90 -115” boilers leave the factory in "B23" configuration (open chamber and fan assisted), to change the configuration of the boiler to type "C" (sealed chamber and fan assisted), disassemble the Ø 80 adapter, the bracket and the gasket present on the boiler cover, in this way the relevant Ø 80/125 kits can be used.

For correct installation of the boiler, the particular Immergas “Green” range air intake/fumes exhaust kits must be used as the materials, components and accessories are specific for this type of appliances.

The flue exhaust pipes are made in plastic, in a way to guarantee high resistance to corrosion and noteworthy rapidity and functionality in installation, also thanks to the push-fitting system and the sealing gaskets.

By varying the type of installation the classification of the boiler also varies:

**Type C configuration, sealed chamber and fan assisted.**
Installation takes place using the relevant Ø 80/125 concentric kits after having removed the Ø 80 adapter, the bracket and the gasket present on the boiler cover. Air intake and flue exhaust takes place in this way directly to the outside of the building.

The following can be used as concentric intake/exhaust kit:
Ø 80/125 horizontal concentric kit **Code 3.015242**;
Ø 80/125 vertical concentric kit **Code 3.015243**.

**Configuration type B23, open chamber and forced draught.**
Installation takes place using the Ø 80 adapter, as per standard, with the boiler to which the relevant Ø 80 flue exhaust kit is connected.
Air intake takes place directly from the environment in which the boiler is installed and flue exhaust into the flue or directly to the outside. It is therefore necessary to couple only one of the following flue exhaust kits:
Ø 80 horizontal terminal kit for wall flue exhaust **Code 3.015255**;
Horizontal kit Ø 80 for exhaust in flue **Code 3.015254**;
Ø 80 vertical terminal kit for direct discharge **Code 3.015256**.

Installed individually, always in "B23" configuration, VICTRIX 90-115 can also be coupled with the Ø 80 flexible ducting system for condensing boilers.
This system is particularly suitable for chimneys or flues (or technical slots) that are not perfectly straight, where a rigid ducting system could, in some cases, face difficulty during installation.

Installed in cascade configuration inside the heating control units or technical rooms, it is possible to use the relevant exhaust manifolds in the flue equipped with non-return devices (flue adjusting devices), in order to prevent the functioning boiler combustion products from interfering with the combustion circuit of other boilers that are off.
THE KIT INCLUDES:
1 - N° 1 Adapter Ø 80/125
2 - N° 1 Gasket
Detail (3) is as per standard with the boiler
4 - N° 1 Ø 80/125 concentric bend at 87°
5 - N° 1 concentric intake-exhaust terminal Ø 80/125
6 - N° 1 Internal wall sealing plate
7 - N° 1 External wall sealing plate

Ø 80/125 HORIZONTAL KIT MAXIMUM LENGTH
ACCEPTED

<table>
<thead>
<tr>
<th>Horizontal metres</th>
<th>VICTRIX 90</th>
<th>VICTRIX 115</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>10 + the first 90° bend</td>
<td>7 + the first 90° bend</td>
</tr>
</tbody>
</table>
**THE KIT INCLUDES:**

1. N° 1 Adapter Ø 80/125
2. N° 1 Gasket
   Detail (3) is as per standard with the boiler
3. N° 1 Wall sealing plate
4. N° 1 - Aluminium tile
5. N° 1 - Fixed half-shell
6. N° 1 Mobile half-shell
7. N° 1 concentric intake-exhaust terminal Ø 80/125
THE KIT INCLUDES:
1 - N° 1 Wall sealing plate
2 - N° 1 Ø 80 Drain terminal

Ø 80 VERTICAL KIT (CODE 3.015256)

Ø 80 VERTICAL KIT MAXIMUM LENGTH ACCEPTED

<table>
<thead>
<tr>
<th>Vertical metres</th>
<th>VICTRIX 90</th>
<th>VICTRIX 115</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td>14,5</td>
</tr>
</tbody>
</table>
VICTRIX 90 - 115

25 Ø 80 HORIZONTAL TERMINAL KIT FOR WALL FLUE EXHAUST (CODE 3.015255)

25.1 Ø 80 HORIZONTAL TERMINAL KIT FOR FLUE EXHAUST (CODE 3.015254)

THE KIT INCLUDES:
1 - N° 1 Bend 90° Ø 80
2 - N° 1 Ø 80 Drain pipe
3 - N° 1 Internal wall sealing plate

THE KIT INCLUDES:
1 - N° 1 Bend 90° Ø 80
2 - N° 1 Ø 80 Drain pipe
3 - N° 1 Internal wall sealing plate
4 - N° 1 External wall sealing plate

Ø 80 HORIZONTAL KIT MAXIMUM LENGTH ACCEPTED

<table>
<thead>
<tr>
<th>Horizontal metres</th>
<th>VICTRIX 90</th>
<th>VICTRIX 115</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17</td>
<td>14.5</td>
</tr>
</tbody>
</table>
FLUE EXHAUST MANIFOLD KIT Ø 160 WITH TWO VICTRIX 90 BOILERS IN CASCADE CONFIGURATION (CODE 3.020476)

THE KIT INCLUDES:
1 - N° 1 Stub pipe with flue adjusting device
2 - N° 1 Short inspectionable bend
3 - N° 1 Long inspectionable bend
4 - N° 1 Inspectionable bend
5 - N° 1 Condensate drain cap
6 - N° 1 Short pipe
7 - N° 1 Long pipe
9 - N° 1 Condensate drain trap

FLUE EXHAUST MANIFOLD KIT Ø 160 WITH ADDITIONAL VICTRIX 90 BOILER IN CASCADE CONFIGURATION (CODE 3.020701)

THE KIT INCLUDES:
1 - N° 1 Stub pipe with flue adjusting device
4 - N° 1 Inspectionable bend
7 - Pipes already present
8 - N° 1 Long pipe
27 FLUE EXHAUST MANIFOLD KIT Ø 160 WITH TWO VICTRIX 115 BOILERS IN CASCADE CONFIGURATION (CODE 3.020476)

THE KIT INCLUDES:
1 - N° 1 Stub pipe with flue adjusting device
2 - N° 1 Short inspectionable bend
3 - N° 1 Long inspectionable bend
5 - N° 1 Condensate drain cap
6 - N° 1 Short pipe
7 - N° 1 Long pipe
9 - N° 1 Condensate drain trap

27.1 FLUE EXHAUST MANIFOLD KIT Ø 200 WITH ADDITIONAL VICTRIX 115 BOILER IN CASCADE CONFIGURATION (CODE 3.020954)

THE KIT INCLUDES:
1 - N° 1 Stub pipe with flue adjusting device
4 - N° 1 Inspectionable bend
8 - N° 1 Long pipe
11 - N° 1 Eccentric reduction
The Immergas Ø 80 mm system for flexible ducting of existing chimneys is made up from a series of components, identified as individual kits, which can be assembled depending on the specific installation requirements. This system is supplied in a configuration that envisions an ascending 87° input bend, then continuing vertically with the Ø 80 flexible tube and the exhaust terminal. The ducted tube is inspected at the mouth of the boiler, via the relevant hatch.

The kit is made up from a 12 m flexible tube. If the tube is too short it can be joined to other pieces via the relevant adapters. A centring spacer must however be inserted every now and again, which via extendable fins, allows the tube to stay in the centre of the flue.

The maximum length that can be run with this ducting system is equal to 17 m (approx.) for VICTRIX 90 and 14.5 m (approx.) for VICTRIX 115.

This length is obtained by considering:
- 1 Ø 80 mm 90° bend for connection to the boiler (exhaust);
- 1 m of Ø 80 tube for exhaust;
- two direction changes in the vertical tract;
- the Ø 80 mm support bend;
- the vertical terminal kit for ducting Ø 80/125.

It is important to highlight that:
- in all cases it is a system to which a unique appliance can be coupled;
- the system can only be coupled with condensing appliances.
### VICTRIX 90 - 115

#### VICTRIX 90 TECHNICAL DATA

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum nominal heat input</td>
<td>kW (kcal/h)</td>
<td>92.3 (79,417)</td>
</tr>
<tr>
<td>Maximum useful heat output</td>
<td>kW (kcal/h)</td>
<td>90.0 (77,400)</td>
</tr>
<tr>
<td>Minimum nominal heat input</td>
<td>kW (kcal/h)</td>
<td>23.0 (19,777)</td>
</tr>
<tr>
<td>Minimum nominal heat output</td>
<td>kW (kcal/h)</td>
<td>22.5 (19,350)</td>
</tr>
<tr>
<td>Efficiency at 100% Pn (80/60°C)</td>
<td>%</td>
<td>97.5</td>
</tr>
<tr>
<td>Efficiency at 30% of the load (80/60°C)</td>
<td>%</td>
<td>100.6</td>
</tr>
<tr>
<td>Efficiency at 100% Pn (50/30°C)</td>
<td>%</td>
<td>106.0</td>
</tr>
<tr>
<td>Efficiency at 30% of the load (50/30°C)</td>
<td>%</td>
<td>108.3</td>
</tr>
<tr>
<td>Efficiency at 100% Pn (40/30°C)</td>
<td>%</td>
<td>108.7</td>
</tr>
<tr>
<td>Efficiency at 30% of the load (40/30°C)</td>
<td>%</td>
<td>108.3</td>
</tr>
</tbody>
</table>

#### Central heating circuit

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>System adjustable central heating temperature</td>
<td>°C</td>
<td>25-85</td>
</tr>
<tr>
<td>System max. working temperature</td>
<td>°C</td>
<td>90</td>
</tr>
<tr>
<td>System max. working pressure</td>
<td>bar</td>
<td>4.4</td>
</tr>
<tr>
<td>Total head available with 1000 l/h flow rate</td>
<td>kPa (m H₂O)</td>
<td>87.76 (8.95)</td>
</tr>
</tbody>
</table>

#### Gas supply

<table>
<thead>
<tr>
<th>Parameter</th>
<th>MIN - MAX</th>
<th>N° revs</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>METHANE fan speed (G20)</td>
<td></td>
<td></td>
<td>1750 - 5900</td>
</tr>
<tr>
<td>LPG fan speed (G31)</td>
<td></td>
<td></td>
<td>1750 - 5900</td>
</tr>
<tr>
<td>Gas flow rate at METHANE burner (G20)</td>
<td>MIN - MAX</td>
<td>m³/h</td>
<td>2.43 - 9.77</td>
</tr>
<tr>
<td>Gas flow rate at LPG burner (G31)</td>
<td>MIN - MAX</td>
<td>kg/h</td>
<td>1.79 - 7.17</td>
</tr>
<tr>
<td>Electric power supply</td>
<td>V/Hz</td>
<td></td>
<td>230 - 50</td>
</tr>
<tr>
<td>Power input</td>
<td>A</td>
<td></td>
<td>1.69</td>
</tr>
<tr>
<td>Installed electric power</td>
<td>W</td>
<td></td>
<td>370</td>
</tr>
<tr>
<td>Fan consumption</td>
<td>W</td>
<td></td>
<td>102.6</td>
</tr>
<tr>
<td>Pump consumption</td>
<td>W</td>
<td></td>
<td>238.7</td>
</tr>
<tr>
<td>Electric insulation rating</td>
<td>IP</td>
<td></td>
<td>X5D</td>
</tr>
<tr>
<td>Boiler water content</td>
<td>litres</td>
<td></td>
<td>10.1</td>
</tr>
<tr>
<td>Weight of empty boiler</td>
<td>kg</td>
<td></td>
<td>97.5</td>
</tr>
<tr>
<td>Useful efficiency at 100% output</td>
<td></td>
<td></td>
<td>&gt;93+2·log Pn</td>
</tr>
<tr>
<td>(Legislative Decree 192/05 and successive amendments)</td>
<td></td>
<td></td>
<td>(Pn = 90.0 kW)</td>
</tr>
<tr>
<td>Specification</td>
<td>Unit 1</td>
<td>Unit 2</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>--------</td>
<td>--------</td>
<td></td>
</tr>
<tr>
<td>Maximum nominal heat input</td>
<td>kW (kcal/h)</td>
<td>112.8 (96,986)</td>
<td></td>
</tr>
<tr>
<td>Maximum useful heat output</td>
<td>kW (kcal/h)</td>
<td>111.0 (95,460)</td>
<td></td>
</tr>
<tr>
<td>Minimum nominal heat input</td>
<td>kW (kcal/h)</td>
<td>30.1 (25,896)</td>
<td></td>
</tr>
<tr>
<td>Minimum nominal heat output</td>
<td>kW (kcal/h)</td>
<td>29.5 (25,370)</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 100% Pn (80/60°C)</td>
<td>%</td>
<td>98.4</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 30% of the load (80/60°C)</td>
<td>%</td>
<td>100.3</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 100% Pn (50/30°C)</td>
<td>%</td>
<td>106.8</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 30% of the load (50/30°C)</td>
<td>%</td>
<td>106.4</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 100% Pn (40/30°C)</td>
<td>%</td>
<td>108.7</td>
<td></td>
</tr>
<tr>
<td>Efficiency at 30% of the load (40/30°C)</td>
<td>%</td>
<td>108.8</td>
<td></td>
</tr>
<tr>
<td><strong>Central heating circuit</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System adjustable central heating temperature</td>
<td>°C</td>
<td>25-85</td>
<td></td>
</tr>
<tr>
<td>System max. working temperature</td>
<td>°C</td>
<td>90</td>
<td></td>
</tr>
<tr>
<td>System max. working pressure</td>
<td>bar</td>
<td>4.4</td>
<td></td>
</tr>
<tr>
<td>Total head available with 1000 l/h flow rate</td>
<td>kPa (m H₂O)</td>
<td>92.18 (9.40)</td>
<td></td>
</tr>
<tr>
<td><strong>Gas supply</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>METHANE fan speed (G20)</td>
<td>MIN - MAX</td>
<td>N° revs</td>
<td>1750 - 5900</td>
</tr>
<tr>
<td>LPG fan speed (G31)</td>
<td>MIN - MAX</td>
<td>N° revs</td>
<td>1750 - 5700</td>
</tr>
<tr>
<td>Gas flow rate at METHANE burner (G20)</td>
<td>MIN - MAX</td>
<td>m³/h</td>
<td>3.19 - 11.94</td>
</tr>
<tr>
<td>Gas flow rate at LPG burner (G31)</td>
<td>MIN - MAX</td>
<td>kg/h</td>
<td>2.34 - 8.76</td>
</tr>
<tr>
<td>Electric power supply</td>
<td>V/Hz</td>
<td>230 - 50</td>
<td></td>
</tr>
<tr>
<td>Power input</td>
<td>A</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Installed electric power</td>
<td>W</td>
<td>390</td>
<td></td>
</tr>
<tr>
<td>Fan consumption</td>
<td>W</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>Pump consumption</td>
<td>W</td>
<td>242.4</td>
<td></td>
</tr>
<tr>
<td>Electric insulation rating</td>
<td>IP</td>
<td>X5D</td>
<td></td>
</tr>
<tr>
<td>Boiler water content</td>
<td>litres</td>
<td>11.7</td>
<td></td>
</tr>
<tr>
<td>Weight of empty boiler</td>
<td>kg</td>
<td>10,5,5</td>
<td></td>
</tr>
<tr>
<td>Useful efficiency at 100% output</td>
<td></td>
<td>&gt;93+2·log Pn (Pn = 111.0 kW)</td>
<td></td>
</tr>
</tbody>
</table>
Gas flow rates refer to the NHV at the temperature of 15° C and pressure of 1013 mbar. 
Flue temperature values refer to an air inlet temperature of 15°C and flow temperature of 50°C.
**Combustion Features**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Methane (G20)</th>
<th>LPG (G31)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Combustion efficiency 100% Pn (80/60°C) %</td>
<td>98.2</td>
<td>98.2</td>
</tr>
<tr>
<td>Combustion efficiency P min (80/60°C) %</td>
<td>98.5</td>
<td>98.5</td>
</tr>
<tr>
<td>Useful efficiency at 100% Pn (80/60°C) %</td>
<td>98.4</td>
<td>98.4</td>
</tr>
<tr>
<td>Useful efficiency P min (80/60°C) %</td>
<td>98.0</td>
<td>98.0</td>
</tr>
<tr>
<td>Useful efficiency at 100% Pn (50/30°C) %</td>
<td>106.8</td>
<td>106.8</td>
</tr>
<tr>
<td>Useful efficiency P min (50/30°C) %</td>
<td>108.2</td>
<td>108.2</td>
</tr>
<tr>
<td>Useful efficiency at 100% Pn (40/30°C) %</td>
<td>108.7</td>
<td>108.7</td>
</tr>
<tr>
<td>Useful efficiency P min (40/30°C) %</td>
<td>109.6</td>
<td>109.6</td>
</tr>
<tr>
<td>Chimney losses with burner on (100% Pn) (80/60°C) %</td>
<td>1.80</td>
<td>1.80</td>
</tr>
<tr>
<td>Chimney losses with burner on (P min) (80/60°C) %</td>
<td>1.50</td>
<td>1.50</td>
</tr>
<tr>
<td>Chimney losses with burner off</td>
<td>0.01</td>
<td>0.01</td>
</tr>
<tr>
<td>Casing losses with burner off</td>
<td>0.28</td>
<td>0.28</td>
</tr>
<tr>
<td>Casing losses with burner on (100% Pn) (80/60°C) %</td>
<td>0.20</td>
<td>0.20</td>
</tr>
<tr>
<td>Casing losses with burner on (P min) (80/60°C) %</td>
<td>0.50</td>
<td>0.50</td>
</tr>
<tr>
<td>Flue temperature Maximum Heat Input °C</td>
<td>52</td>
<td>53</td>
</tr>
<tr>
<td>Flue temperature Minimum Heat Input °C</td>
<td>44</td>
<td>46</td>
</tr>
<tr>
<td>Flue flow rate at Maximum Heat Input kg/h</td>
<td>179</td>
<td>179</td>
</tr>
<tr>
<td>Flue flow rate at Minimum Heat Input kg/h</td>
<td>50</td>
<td>49</td>
</tr>
<tr>
<td>CO₂ at the Maximum Heat Input %</td>
<td>9.4</td>
<td>10.7</td>
</tr>
<tr>
<td>CO₂ at the Minimum Heat Input %</td>
<td>8.9</td>
<td>10.3</td>
</tr>
<tr>
<td>CO at Maximum Heat Input mg/kWh</td>
<td>230</td>
<td>253</td>
</tr>
<tr>
<td>CO at Minimum Heat Input mg/kWh</td>
<td>11</td>
<td>12</td>
</tr>
<tr>
<td>NOₓ at the Maximum Heat Input mg/kWh</td>
<td>50</td>
<td>65</td>
</tr>
<tr>
<td>NOₓ at the Minimum Heat Input mg/kWh</td>
<td>25</td>
<td>35</td>
</tr>
<tr>
<td>Weighted CO mg/kWh</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Weighted NOₓ mg/kWh</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>NOₓ class</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Head available at fan (B₂₃) (Min. - Max.) Pa</td>
<td>6 - 235</td>
<td></td>
</tr>
<tr>
<td>Head available at fan (C₁₃) (Min. - Max.) Pa</td>
<td>215 - 430</td>
<td></td>
</tr>
</tbody>
</table>

Gas flow rates refer to the NHV at the temperature of 15°C and pressure of 1013 mbar.
Flue temperature values refer to an air inlet temperature of 15°C and flow temperature of 50°C.
### Optional Components

<table>
<thead>
<tr>
<th>Cascade and zone regulator kit</th>
<th>Support kit for fixing the regulator to the wall</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015244</td>
<td>code 3.015265</td>
</tr>
<tr>
<td><img src="image1.jpg" alt="Cascade and zone regulator" /></td>
<td><img src="image2.jpg" alt="Support kit for fixing" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Zone manager kit</th>
<th>External probe kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015264</td>
<td>code 3.015266</td>
</tr>
<tr>
<td><img src="image3.jpg" alt="Zone manager kit" /></td>
<td><img src="image4.jpg" alt="External probe kit" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Modulating room thermostat kit</th>
<th>System flow probe kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015245</td>
<td>code 3.015267</td>
</tr>
<tr>
<td><img src="image5.jpg" alt="Modulating room thermostat" /></td>
<td><img src="image6.jpg" alt="System flow probe" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DHW probe kit for separate storage tank (for storage tank unit managed as zone)</th>
<th>Anti-freeze electric resistances kit (-15 °C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015268</td>
<td>code 3.015361</td>
</tr>
<tr>
<td><img src="image7.jpg" alt="DHW probe kit" /></td>
<td><img src="image8.jpg" alt="Anti-freeze electric resistances" /></td>
</tr>
<tr>
<td>Individual boiler ISPESL safety devices stub pipes kit</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>code 3.015222</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boilers in cascade ISPESL safety devices stub pipes kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015227</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual boiler ISPESL safety devices IPX4D protection box kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.019175</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiler in set configuration ISPESL safety devices IPX4D protection box kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.019185</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hydraulic manifold connection kit with two boilers in cascade configuration</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015225</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Additional boiler in cascade hydraulic manifold kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015226</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual boiler hydraulic manifold kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.015224</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Three-way valve kit for coupling Separate storage tank unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>(including storage rank probe) (must not be coupled to cascade regulator)</td>
</tr>
<tr>
<td>code 3.015223</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Individual boiler condensate passivator kit (including granulate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.019857</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiler in cascade configuration condensate passivator kit (including granulate)</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.019464</td>
</tr>
</tbody>
</table>
**VICTRIX 90 - 115**

<table>
<thead>
<tr>
<th>Granulate reload kit for condensate passivator</th>
</tr>
</thead>
<tbody>
<tr>
<td>code 3.019865</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Flue exhaust manifold kit Ø 160 with flue adjusting device with 2 VICTRIX 90 boilers or 2 115 boilers in cascade configuration</td>
</tr>
<tr>
<td>code 3.020476</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Flue exhaust manifold kit Ø 160 with flue adjusting devices with additional VICTRIX 90 boiler in cascade configuration</td>
</tr>
<tr>
<td>code 3.020701</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Flue exhaust manifold kit Ø 200 with flue adjusting devices with additional VICTRIX 115 boiler in cascade configuration</td>
</tr>
<tr>
<td>code 3.020954</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Solar collector temperature probe kit (to be coupled with cascade regulator)</td>
</tr>
<tr>
<td>code 3.019374</td>
</tr>
</tbody>
</table>
CERTIFICATO DI ESAME CE DI TIPO
EC type examination Certificate
No. 51BO2448

VISTO L'ESITO DELLE VERIFICHE CONDOTTE IN CONFORMITÀ ALL'ALLEGATO II, PUNTO 1, DEL DPR 15/11/96, N. 661, ATTUAZIONE DELLA DIRECTIVA 90/396/CEE,
SI DICHIARA CHE I SEGUENTI PRODOTTI (MODELLO/TYPE):

Caldaie murali
Wall mounted boilers

Mod. VICTRIX 50..., VICTRIX 75..., VICTRIX 90..., VICTRIX 100..., VICTRIX 115..., VICTRIX 150...

(Further information see attached)

FABRICANTE:
Manufacturer:

IMMERSGAS SPA
VIA CISA LIGURE 95
42041 BRESCELLO RE

SODDISFANO LE DISPOSIZIONI DEL DECRETO SUDDETTO.
Meet the requirements of the aforementioned national legislation.

QUESTO CERTIFICATO DI ESAME CE DI TIPO È RILASCIA DI DA IMQ quale ORGANISMO NOTIFICATO
PER LA DIRECTIVA 90/396/CEE.
IL NUMERO IDENTIFICATIVO DELL'IMQ quale ORGANISMO NOTIFICATO È: 0051
This EC Type Examination Certificate is issued by IMQ as Notified Body for the Directive 90/396/EEC.
Notified Body notified to European Commission under number: 0051

QUESTO CERTIFICATO DI ESAME CE DI TIPO CONSENT L'IMPOSTAZIONE DELLA MARCUTURA CE SUI PRODOTTI IN QUESTO ECONSEGUENZA CHE SI DODISPIA UNA DELLE PROCEDURE DI VALUATION DELLA CONFORMITÀ DI CUI ALL'ART. 6, COMMA 1, LETTERA b) DEL DPR 15/11/96, N. 661.
This EC Type Examination Certificate allows the affixing of CE marking on the above products if it is satisfied one of the procedures of evaluation conformity of article 6 (comma Letter b) of Legislative Decree of 1996.11.15 n.661

2009-11-24

DATA DATE

IMQ
VIA QUINTERIO 41 - 20121 MILANO

IL PRESENTE CERTIFICATO ANnulla E SOSTITUISCE IL PRECEDENTE DEL

2009-08-04
During the useful life of the products, performance is affected by external factors, e.g. the hardness of the DHW, atmospheric agents, deposits in the system and so on. The data declared refer to new products that are correctly installed and used with respect to the Standards in force.

N.B.: correct periodical maintenance is highly recommended.

CALOR SRL
Str. Progresului nr. 30-40, sector 5, Bucuresti
tel: 021.411.44.44, fax: 021.411.36.14
www.calorserv.ro  -  www.calor.ro