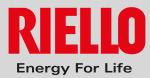
### RESIDENCE PRO COMPACT, RELIABLE PERFORMANCE





# THE **RESIDENCE PRO**

## **DOD**

#### HIGH EFFICIENCY - 95% AFUE

RESIDENCE PRO delivers optimal comfort and minimum consumption for both heating and domestic hot water. The boiler's innovative condensing DHW plate heat exchanger optimizes efficiency, temperature stability and stand-by time.



#### LEAD-FREE

Combi models are certified to NSF/ANSI 372-2016 (low-lead content certification program - plumbing products) and conform to the requirements for "lead-free" plumbing products.



#### SYSTEM MANAGEMENT

The RESIDENCE PRO is equipped with two BUS communication protocols to enable interaction with the hybrid control panel, seamless integration into a multi-energy system, and connectivity with the RiCLOUD.



#### ACTIVE COMBUSTION CONTROL

The advanced electronic combustion control system electronically monitors combustion continuously to ensure optimal fuel use.



#### QUICK INSTALLATION

Contractors value the RESIDENCE PRO's quick and simple installation and servicing, featuring easy access to all components.



#### HIGH ALTITUDE

Certified and tested at high altitude (up to 10,000 ft) as per CSA standard. No hardware modification is required.

#### INNOVATIVE HEAT EXCHANGER The stainless steel coil primary heat exchanger.

Transfers heat efficiently.



#### INTUITIVE CONTROL

The graphic display provides ongoing information about the operational status of the boiler. Navigating functions and settings has never been so easy, thanks to the icon and text-based interface.



#### LOW EMISSIONS - SOUTH COAST AQMD CERTIFICATE As part of our ongoing commitment to reduce emissions, the FAMILY PRO has achieved low NOx performance which meet the criteria for SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT.

NOTE: RESIDENCE PRO are certified to the ANSI Z21.13-2017 • CSA 4.9-2017 – Gas-fired low pressure steam and hot water boilers and ANSI Z21.10.3-2017 • Gas-fired water heaters, volume III, storage water heaters with ratings above 75,000 btu per hour, circulating and instantaneous.



### CHOOSING RESIDENCE PRO

#### MEANS CHOOSING THE BEST

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HIGH EFFICIENCY

2.38 US GAL (9 LITER) EXPANSION TANK

FLUE GAS CHECK VALVE

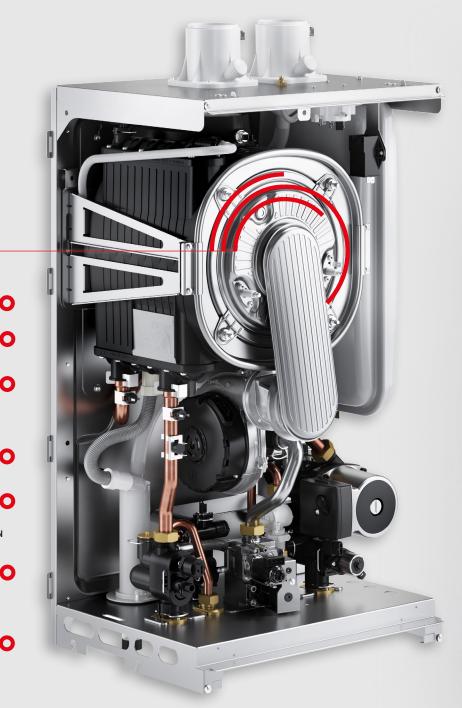
A NEW DESIGN WITH CLEAN, ELEGANT LINES

DHW HEAT EXCHANGER FOR EXCEPTIONAL PERFORMANCE AND COMFORT

ACTIVE COMBUSTION CONTROL ACC

BUS CONNECTIVITY SUPPORTING INTEGRATION INTO MULTI-ENERGY SYSTEMS

THE COLOR DISPLAY FACILITATES CONTROL AND MANAGEMENT OPERATIONS



#### RESIDENCE PRO IS AVAILABLE IN A 'COMBI' VERSION

#### **RESIDENCE PRO 32 KIS**

The RESIDENCE PRO fuel type can be adjusted without changing components. The RESIDENCE PRO's features and its compact size make it an ideal solution for closet installations. Please refer to the Riello RESIDENCE PRO installation and operation manual for additional information.



### EMISSIONS UNDER CONTROL

#### ADAPTIVE COMBUSTION CONTROL

The RESIDENCE PRO'S Active Combustion Control (ACC) system, designed and developed by Riello, allows for functionality, efficiency and low emissions under any Conditions. The ACC system uses a flame (ionization) sensor signal to regulate combustion.

The system maintains a continuous and optimal air/ gas mixture throughout modulation (allowing the CO<sub>2</sub> readings to remain steady). RESIDENCE PRO's sophisticated control system provides the <u>auto-regulation of the</u> combustion so there is no need for an initial calibration.

The ACC system is able to adapt the boiler to



operate with different gas compositions. The ACC system can also perform an autodiagnostic operation that locks out the burner before the permitted upper emission limit is exceeded.

#### ACC advantages:

Auto-adaptability of the system to the type and composition of the gas eliminates the need for gas conversion kits. No mechanical calibration

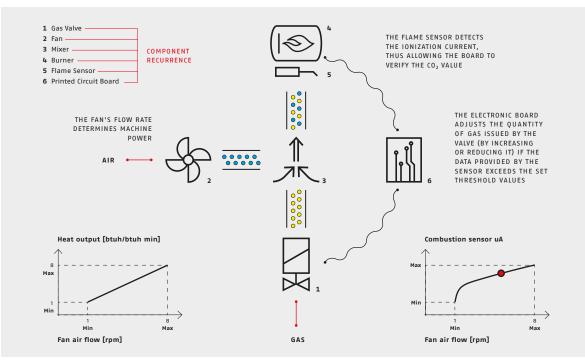
or manual adjustments for combustion are required on the boiler.

fuel value is maintained throughout boiler operation. Continuous emission control is in compliance with prevailing standards. Substantial gas savings compared to traditional systems.

Efficiency and reliability are assured for the life of the boiler. The ACC system enables the boiler to change based on data received from parameters that take in consideration both deterioration of components and data acquired over time.

RESIDENCE PRO PROMISES PEACE OF MIND AND **RESPECT FOR THE** ENVIRONMENT

#### RESIDENCE PRO'S COMBUSTION SEQUENCE



(\*) The quantitative relationship among substances as they participate in chemical reactions.



**RIELLO** 

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### BUILT-IN FLUE GAS CHECK VALVE

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The Residence PRO is equipped with a flue gas check valve.

GAS VALVE WITH MODULATION

PRINTED CIRCUIT BOARD

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HALL EFFECT FAN

BURNER WITH FLAME SENSOR





#### A WINNING COMBINATION!



### **C O N T R O L P A N E L** A N D F U N C T I O N S





# RICLOUD

#### COMFORT AT YOUR FINGERTIPS

The RiCLOUD <mark>smart remote</mark>

**control** enables you to manage the comfort of your home in an easy, intuitive way, even when you are away.

The dedicated app allows you to monitor the status of the heating, cooling and fan system. It also enables timeswitch programming directly from your smartphone or tablet. Riello boilers are also compatible with OTbus connection for a full remote control of the boiler using the RiCLOUD and its app. The RiCLOUD WiFi box can manage up to 8 different zones, each controlled by its dedicated RiCLOUD thermostat. The RiCLOUD can also be installed in a 100% wireless mode through the use of a radio receiver, available as an option, eliminating the need to run unnecessary wires through walls.

THE WORLD OF RESIDENCE PRO BECOMES EVEN BIGGER WITH RICLOUD

### **RESIDENCE PRO**

TECHNICAL SPECIFICATIONS

BOILER MODEL	UNITS	COMBI (KIS)
(0-2000 ft / 0-610 m)		
MAX CSA INPUT CH/DHW	Btu/hr	85,000/120,000
	kW	24.91 / 35.17
MIN CSA INPUT CH/DHW	<u>    Btu/hr   </u>	17,000
	kW	4.98
<u>(2001–5000 ft / 610–1524 m)</u>		
MAX CSA OUTPUT CH/DHW	Btu/hr	80,750/114,000
	<u>kW</u>	23.66/33.41
MIN CSA OUTPUT CH/DHW	<u>Btu/hr</u> kW	<u> </u>
A.F.U.E.	<u> </u>	95.0
Gas connection NPT-male	 in	3/4
Heating connections NPT – male	in	3/4
D.H.W. connections NPT – male	in	1/2
Flue connection	in	2
Air inlet connection	in	2
	lb	89.3
Weight	io	40.5
Electrical Rate Voltage	V-Hz	120-60
Sealed Combustion Chamber		Yes
Ignition		Electronic
Freeze Protection Safety Device		Yes
Maximum Heating Circuit Pressure	psi	30
Maximum Heating Temperature	<u>P31</u> °F	180
Setpoint	 °C	82
Minimum Heating Temperature	•F	104
Setpoint	<u>، ا</u>	40
Gas Type	<u>_</u>	NG/LPG
D.H.W. PERFORMANCES		
Continuous D.H.W. Flow Rate	l/min	12.5
@ 72°F Rise	US GPM	3.3
VENTING SYSTEM*		
<b>Max</b> horizontal twin flue termination length 2" ø (intake)+(exhaust)	ft	(33)+(33)
<b>Max</b> vertical twin flue termination length 2" Ø (intake)+(exhaust)	ft	(38)+(38)
Max horizontal twin flue termination length 3" Ø (intake)+(exhaust)	ft	(88)+(88)
Max vertical twin flue termination length 3" Ø (intake)+(exhaust)	ft	(94)+(94)

\*Vent lengths may vary dependant on location, diameter and type of termination. Please consult the Riello Residence PR0 32 KIS Installation & Operation Manual for Contractors for more information.



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RTIE





energy

ENERGY STAR

As Riello continuously strives to improve our products, we reserve the right to make changes without prior notification.



#### STAINLESS STEEL PRIMARY HEAT EXCHANGER

INNOVATIVE HIGH-EFFICIENCY DHW HEAT EXCHANGER

#### ACC

ACTIVE COMBUSTION CONTROL

LOW NOX EMISSIONS

CONDENSATE CHECK VALVE INCLUDED

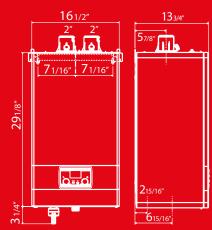
INTUITIVE DISPLAY

OPTIONAL ACCESSORIES AND SYSTEM SOLUTIONS

#### QUICK INSTALLATION

VERSATILE VENTING OPTIONS (REFER TO THE INSTALLATION MANUAL)

BUILT-IN FLUE GAS CHECK VALVE



NOTE: Please, for all the technical data refer to instruction manual Residence PR0 are certified to the ANSI 22.13:3-2017 6 GSA.4.9-2017 - Gas-fired low pressure steam and hot water boilers. Residence PR0 are certified to the ANSI 22.10.3-2017 6 GSA.4.3-2017 - Gas-fired Water heaters, volume III, storage water heaters with ratings above 75,000 btu per hour, circulating and instantaneous.

#### **ABOUT RIELLO**

Founded in 1922, Riello is a leading manufacturer of products and services for heating, air-conditioning and energy efficiency. Headquartered in Legnago (Verona), Italy, Riello operates in over 120 countries. Riello is a part of UTC Climate, Controls & Security, a unit of United Technologies Corp., a leading provider to the aerospace and building systems industries worldwide. For more information, visit

#### www.riello.com



The Company is constantly working to perfect all of its production processes, therefore the aesthetics and size, technical data, equipment and accessories of the products may be subject to change.