# PERFORMANCE ALSO WITH LIGHT OIL

The European regulations referring to the energy saving require the sale of appliances with a minimum efficiency value and the corresponding Energy Label. The Riello experience, the calculator-assisted design and the long laboratory session tests have made it possible to reach the Class B (INSIEME EVOe and GITRE') and the Class A (INSIEME EVO COND) without compromising the proverbial relaiability both of the cast iron and stainless steel thermal units working with light oil.

	CAST IRON CLASS B	CLASS B	STEEL CLASS A
HEATING ONLY	GITRE' LN GITRE' 4 LN (25,0 kW) GITRE' 5 LN (32,0 kW) GITRE' 6 LN (40,0 kW)	INSIEME EVOE LN INSIEME EVOE 25 LN (26,5 kW) (*)(**) INSIEME EVOE 32 V LN (33.9 kW) (*)	INSIEME EVO COND  INSIEME EVO COND 20 V LN (20 kW) (*) (**) INSIEME EVO COND 25 V LN (25 kW) (*) (**) INSIEME EVO COND 35 V LN (35 kW) (*) (**) INSIEME EVO COND 45 LN (45 kW) INSIEME EVO COND 55 LN (55 kW) INSIEME EVO COND 70 LN (70 kW)
HEATING AND INSTANTANEOUS DHW		INSIEME EVOE K LN INSIEME EVOE 25 K LN (28,1 kW) (*) INSIEME EVOE 32 K LN (36,0 kW) (*)	
HEATING AND DHW WITH INTEGRATED TANK	GITRE' B LN GITRE' 5 B/100 LN (32,0 kW)	INSIEME EVOe B LN INSIEME EVOe 25 B/70 LN (26,5 kW) (*) INSIEME EVOE 32 B/110 LN (33,9 kW) (*)	INSIEME EVO COND B INSIEME EVO COND 25 B/130 LN (25 kW) (*)(**) INSIEME EVO COND 35 B/130 LN (35 kW) (*)(**)

<sup>(\*)</sup> All models can be converted into the "sealed chamber" with specific accessories.

(\*\*) Models with integrated 3-way valve

## TECHNICAL DATA

BOILER MODEL		Heat input at furnace (1)	Useful heat output Pn (1)	Efficiency at Pn (2)	Useful efficiency at 30% Pn (3)	DHW production (4)	Storage tank capacity	Efficiency class in central heating mode	Efficienct class in domestic hot water mode	Dimensions (HxLxP)	Net weigh
		kW	kW	%	%	I/min	1	-	-	mm	kg
GITRE	GITRE' 4 LN	26,5	24	89,8	91,9	-	-	В	-	850x450x797	182
	GITRE' 5 LN	33,9	31	90,6	91,6	-	-	В	-	850x450x797	214
	GITRE' 6 LN	42,4	38	90,7	91,7	-	-	В	-	850x450x1047	249
	GITRE' 5 B/100 LN	33,9	31	90,6	91,6	10,2	100	В	В	1500x600x900	286
INSIEME EVOe	INSIEME EVOe 25 LN	28,1	25	90	91,1	-	-	В	-	900x450x660	104
	INSIEME EV0e 32 V LN	36	32	90,2	91,8	-	-	В	-	900x600x760	136
	INSIEME EV0e 25 K LN	28,1	25	90	91,1	20	-	В	В	900x450x660	106
	INSIEME EV0e 32 K LN	36	32	90,2	91,8	22	-	В	В	900x600x760	138
	INSIEME EV0e 25 B/70 LN	28,1	25	90	91,1	20	69	В	В	1355x500x735	155
	INSIEME EVOe 32 B/110 LN	36	32	90,2	91,8	22	106	В	В	1490x600x700	206
	INSIEME EVO COND 20 V LN	21,2	20	91,8	99,9	-	-	А	-	1000x600x994	120
	INSIEME EVO COND 25 V LN	26,5	24	91,4	99,6	-	-	А	-	1000x600x994	120
INSIEME EVO COND	INSIEME EVO COND 35 V LN	37,1	34	91	98,9	-	-	А	-	1000x600x994	150
	INSIEME EVO COND 45 LN	47,7	44	91,7	98,9	-	-	А	-	1138x600x1155	195
	INSIEME EVO COND 55 LN	58,3	53	91,4	98,9	-	-	А	-	1138x600x1155	198
	INSIEME EVO COND 70 LN	74,2	68	91,3	98,9	-	-	А	-	1138x600x1155	202
	INSIEME EVO COND 25 B/130 LN	26,5	24	91,4	99,6	23	130	А	В	1540x600x975	150
	INSIEME EVO COND 35 B/130 LN	37,1	34	91	98,9	24	130	Α	В	1540x600x975	195

1) Values referred to the Higher Heating Value (HHV)

2) Values calculated in a high temperature regime (80-60°C) and referred to the Higher Heating Value (HHV)

3) Values calculated in a low temperature regime (return temperature 37°C) and referred to the Higher Heating Value (HHV)

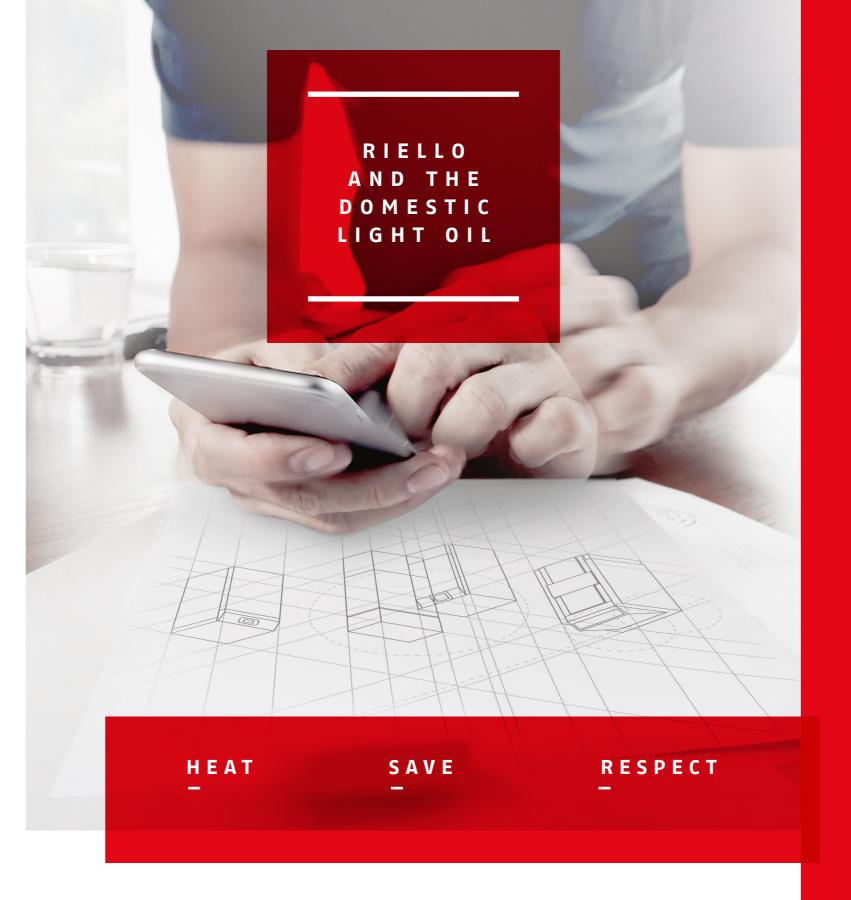
4) Values calculated according to EN13203

RIELLO SpA - 37045 Legnago (VR) Phone +39 0442 630111 - Fax +39 0442 630371 www.riello.it

As the company is constantly engaged in the continuous improvement of its entire production, the aesthetic and dimensional features, technical data, equipment and accessories can be subject to variation.











HIGH EFFICIENCY

# SMALL AND MEDIUM POWER LIGHT OIL THERMAL GROUPS SILENT AND RELIABLE



# NO GAS - NO PROBLEM

The use of methane for the room heating has gradually simplified and speeded up the construction of appliances and systems. The convenience and the capillarity of the distribution could suggest the end of the light oil...but is not so.

Maybe for the technical difficulties the further expansion of the network, maybe for economic investment limits per user point, the use of light oil, particularly in the small power systems, is still a valid alternative.

Of course, the old, heavy and smelly boilers have given way to modern, reliable and silent appliances. Elegant and compact thermal groups, often equipped with integrated accessories and components which, in addition to saving space, help to reduce dispersion and consumption.



CONTROL ELECTRONICS

ECHNICAL FOCUS

TECHNICAL FOCUS

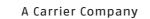
# RIELLO + LIGHT OIL THERMAL UNITS = GREAT LOVE

Fifty years have passed since RIELLO presented its first heating unit. It was large, heavy and expensive but, in 1965, it was innovation.

The real success came in the early nineties when RIELLO made a totally new one, setting much higher standards. Reliability, silence and elegance conquered thousands of customers. The time is ripe. Today it is necessary to diversify and accept more challenging competitions. The new RIELLO light oil thermal units are even quieter, more performing and more environmentally friendly. The new burners and the new exchange bodies lead to results that will not be easy to match...once again.









# GITRE'

- · 20 GG CAST IRON HEAT EXCHANGE BODY WITH HIGH THICKNESS AND QUALITY. DYNAMIC AND PROGRESSIVE DESIGN FINS
- LOW NOX LIGHT OIL BURNER WITH LOW CONSUMPTION PREHEATER AND OVERSIZED IGNITION TRANSFORMER
- · INSULATED FRONT DOOR WITH PREFORMED CERAMIC FIBER AND OPENABLE ON THE LEFT/RIGHT FOR EASY ACCESS AND CLEANING OF THE BODY
- VERSIONS WITH VERTICAL TANK PLACED ABOVE THE BOILER BODY AND FEED WITH LOW ENERGY ABSORPTION PUMP
- EASY HANDLING THANKS TO THE REAR ROLLING WHEELS.



The new high-thickness cast iron exchange body ensures high reliability. The large combustion chamber and aerodynamic fins are synonymous of low thermal load and long life. The careful design of the air path and the combustion head allow reduced fouling and low noise.



The 3-turn fumes exchanger optimizes sanitary applications.

efficiency and emissions, allowing to be ErP ready and Class B in both heating and The hydraulic unit embeed low power consumption circulators and the thickness of the insulation of the tank

reduces dispersion and consumption.

The burner is unblocked from the outside

open the front door. The light oil burner is

equipped with a thermostatic preheating

of the fuel and ensures easy starting even

at low temperatures.

(control panel) and it is not necessary to





The elegant and intuitive control panel allows to adjust and control the operation of the heating unit. It is equipped with total shutdown as standard and allows the burner to be turned on only during the heat requests. The control is designed to facilitate quick start-ups and reduce condensation.



The position of the flue discharge allows the replacement of old generators, minimizing connection interventions.

Available both in heating only and combined version for the production of domestic hot water, by means of the 100-liter storage tank, equipped with double-layer insulation to ensure maximum efficiency and minimum dispersions.



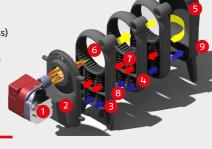
6 Combustion chamber (1st flue gas pass)

Front element

7 Central finned passages (2<sup>nd</sup> flue gas pass) 8 Lower finned passages (3rd flue gas pass)

4 Intermediate element







# INSIEME EVOe

- HIGH QUALITY STEEL EXCHANGE BODY MADE WITH AUTOMATIC CUTTING AND WELDING SYSTEMS
- LOW NOX LIGHT OIL BURNER EQUIPPED WITH ELECTRONIC IGNITION AND SAFETY EQUIPMENT WITH SELF-DIAGNOSIS
- SOLUTIONS WITH DUCTED AND REMOTE INTAKE THROUGH AIRBOX WITH SILENCING EFFECT
- VITRIFIED SANITARY TANK VERSIONS WITH HIGH EXCHANGE SURFACE FOR FAST START-UPS

# HIGH INSULATION OF THE BOILER BODY TO REDUCE ENERGY LOSSES DURING OPERATION



The tried and tested vertical carbon steel exchange body has been further improved. The careful design of the air path and combustion head ensure reduced fouling and low noise. The "sealed" versions are even more silent and do not consume the air of the installation room.

The use of LN version burners equipped with integrated recirculation of the combustion products, combined with the large exchange surface and the use of PWM circulators with low electricity consumption allow INSIEME EVOe to be ErP ready and Class B both in heating and in sanitary.



New electronic control panel that has climatic regulation as standard, the possibility of controlling a direct circuit and that can also manage the production of domestic hot water both in combination with a plate exchanger (instantaneous production) and in combination with a storage tank . This control can adjust the water flow rate of the PWM pumps and, through accessories, can manage up to three heating zones.

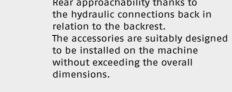


The burner is unblocked from the outside (control panel) and it is not necessary to open the front door. The light oil burner is equipped with a thermostatic preheating of the fuel and ensures easy starting even at low temperatures.



water and the surface of the demanding users.







4 ENTER / RESET key

6 Navigation keys



2 Light guide

**INSIEME EVOe** 





Valves, expansion vessel and manifold are located on the boiler to reduce heat losses and dimensions. The vitrification of the tank reduces the deposit and anchoring of limestone. The content of sanitary tubular exchanger satisfy the most

The wide range of power, combined with the different boiler layouts and the wide range of accessories are factors that make this generator able to satisfy the most diverse installation needs.



most demanding users.

# **INSIEME EVO COND B**



• HIGH QUALITY STAINLESS STEEL BOILER BODY WITH HIGH THICKNESS, OPERATING WITH LOW SLIDING TEMPERATURE

INSIEME EVO COND

• SINGLE-STAGE BURNERS FOR 20,25,35 kW MODELS AND DUAL-STAGE FOR 55,70 kW MODELS

CONDENSING THERMAL UNIT (CLASS A ACCORDING TO ERP)

HIGH VOLUME AND SURFACE COMBUSTION CHAMBER

OPERATING WITH ALL LIGHT OIL TYPES (S<1000 ppm)</li>

New condensing stainless steel

exchange body, designed to work

with all types of light oil (S< 1000

ppm) and without limits on the

careful design of the air path and

combustion head ensure reduced

fouling and low noise. The "sealed"

versions are even more silent and

do not consume the air of the

installation room.

system return temperature. The

The use of burners with low polluting emissions (dual-stage for the 55, 70 kW models, single-stage for the other models), combined with heat exchangers with a large exchange surface, allow greater use of the fuel with beneficial effects on consumption. Furthermore. the use of PWM circulators (integrated for the 20, 25, 35 kW models) with low power consumption in addition to the high thickness of the insulation, allow to minimize dispersion and consumption.



New electronic control panel, capable of managing the operation of two-stage burners (55, 70 kW) as well as ensuring climatic regulation, controlling a direct circuit and managing the production of domestic hot water in combination with a storage tank. This control can adjust the water flow rate of the PWM pumps and, through accessories, can manage up to three heating zones.



The burner is unblocked from the outside (control panel) and it is not necessary to open the front door. The light oil burner is equipped with a thermostatic preheating of the fuel and ensures easy starting even at low temperatures.



Valves, expansion vessel are located on the boiler to reduce heat losses and dimensions. The vitrification of the tank reduces the deposit and anchoring of limestone. The content of sanitary water and the surface of the tubular exchanger satisfy the

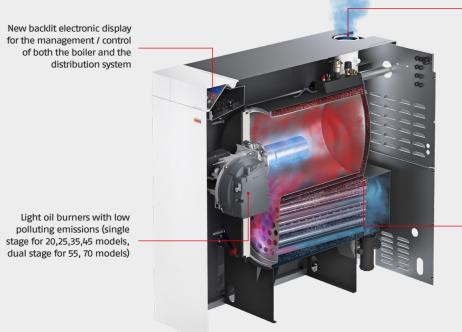


# **INSIEME EVO COND**



# INSIEME EVO COND

New backlit electronic display for the management / control of both the boiler and the distribution system



Type B flue discherge, convertible to type ( thanks to the wide accessories range

New full stainless steel

boiler body, developed for operation with all light oil types and without limits on the return temperature

# THREE DIFFERENT BOILER CONFIGURATIONS









## INSIEME EVO COND B LN INSIEME EVO COND LN

INSIEME EVO COND 20 V LN INSIEME EVO COND 25 V LN INSIEME EVO COND 35 V LN

# MAIN FEATURES:

- Heating only with integrated 3-way
- Single-stage burners

INSIEME EVO COND V LN

- FULL STAINLESS STEEL body
- MAIN FEATURES: Combined with 130 lt vitrified

INSIEME EVO COND 25 B/130 LN

INSIEME EVO COND 35 B/130 LN

- sanitary storage tank Single-stage burners
- Single-stage (45) and two-stage FULL STAINLESS STEEL body
  - (55.70 kW) burners FULL STAINLESS STEEL body

INSIEME EVO COND 45 LN

INSIEME EVO COND 55 LN

INSIEME EVO COND 70 LN

MAIN FEATURES:

Heating only