



Rondò/Estelle 4-5-6-7 ErP BE

ISTRUZIONI PER L'INSTALLAZIONE E LA MANUTENZIONE



IT

ES

PT

ENG

Gentile Cliente,
metta in funzione la sua nuova caldaia entro 30gg dalla data di installazione da personale professionalmente qualificato. Potrà così beneficiare sia della garanzia legale, sia della garanzia convenzionale Sime che trova in questo manuale.

Fonderie SIME S.p.A

Cod. 6276081 - 09/2018

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CONFORMITY

Our Company declares that RONDO'-ESTELLE ErP BE boilers comply with the essential requirements of the following directives:

- Boiler Efficiency Directive 92/42/EEC
- Ecodesign Directive 2009/125/EC
- Regulation (EU) N. 813/2013 - 811/2013
- Electromagnetic Compatibility Directive 2014/30/UE
- Low Voltage Directive 2014/35/UE



1 BOILER DESCRIPTION

1.1 INTRODUCTION

The new **RONDÒ-ESTELLE ErP BE** series of cast iron boilers they use light oil and have a perfectly balanced combustion with a very high thermal efficiency for economical performance.

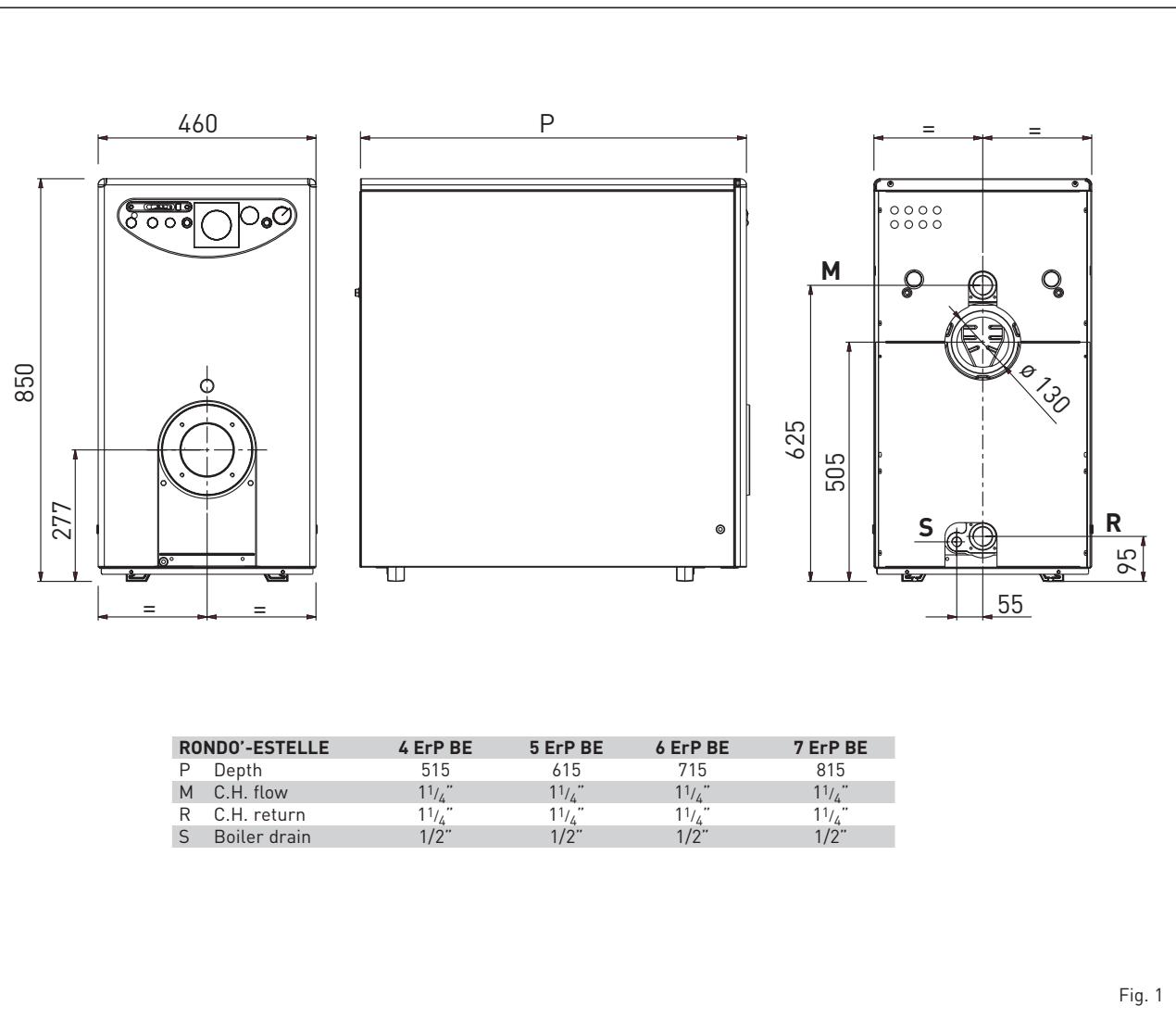
This manual provides the instructions for the following boiler models:

- **RONDÒ ErP BE** for central heating only, matchable with a separate boiler unit
- **ESTELLE ErP BE** for central heating

only, with combustion hinged door, matchable with a separate boiler unit.

The components for **RONDÒ ErP BE** installation are supplied in three separate packages: boiler body, casing with enclosed documents and control panel.

1.2 DIMENSIONAL DETAILS (fig. 1)



1.2.1 Technical data plate (fig. 1/a)

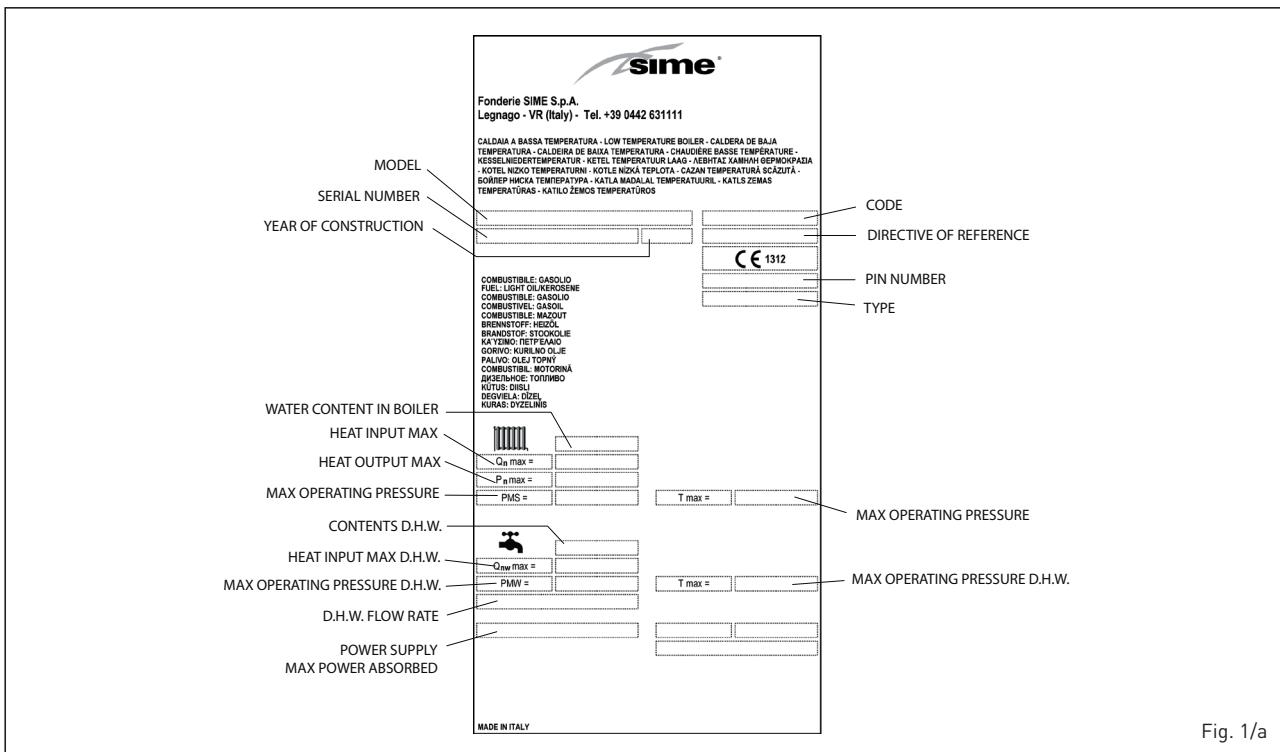


Fig. 1/a

1.3 TECHNICAL FEATURES

RONDO'-ESTELLE	4 ErP BE	5 ErP BE	6 ErP BE	7 ErP BE
Output	kW	25,2	31,0	44,5
Input	kW	26,8	32,9	46,1
Seasonal energy efficiency class of the heating system	B	B	B	B
Seasonal energy efficiency of the heating system	%	86	86	89
PIN number	1312CR192R	1312CR192R	1312CR192R	1312CR192R
Type	B23P-C23P	B23P-C23P	B23P	B23P
Sections	n°	4	5	6
Maximum water head	bar (kPa)	4 (392)	4 (392)	4 (392)
Water content	l	16,8	20,8	24,8
Smokes loss of head	mbar (kPa)	0,16 (0,0156)	0,21 (0,0205)	0,26 (0,0254)
Water loss of head ($\Delta t = 10^\circ C$)	mbar (kPa)	10 (0,98)	15 (1,47)	19 (1,86)
Combustion chamber pressure	mbar (kPa)	0,2 (0,0196)	0,2 (0,0196)	0,2 (0,0196)
Suggested chimney depression	mbar (kPa)	0,3 (0,0294)	0,3 (0,0294)	0,3 (0,0294)
Smokes temperature	°C	130	140	136
Smokes flow	m^3/h	37,4	43,9	50,4
Smokes volume	dm^3	12	15	18
CO₂	%	12,5	12,5	12,5
C.H. adjustment range	°C	45÷85	45÷85	45÷85
Weight	kg	135	161	186
				212

1.4 LOSS OF HEAD (fig. 2)

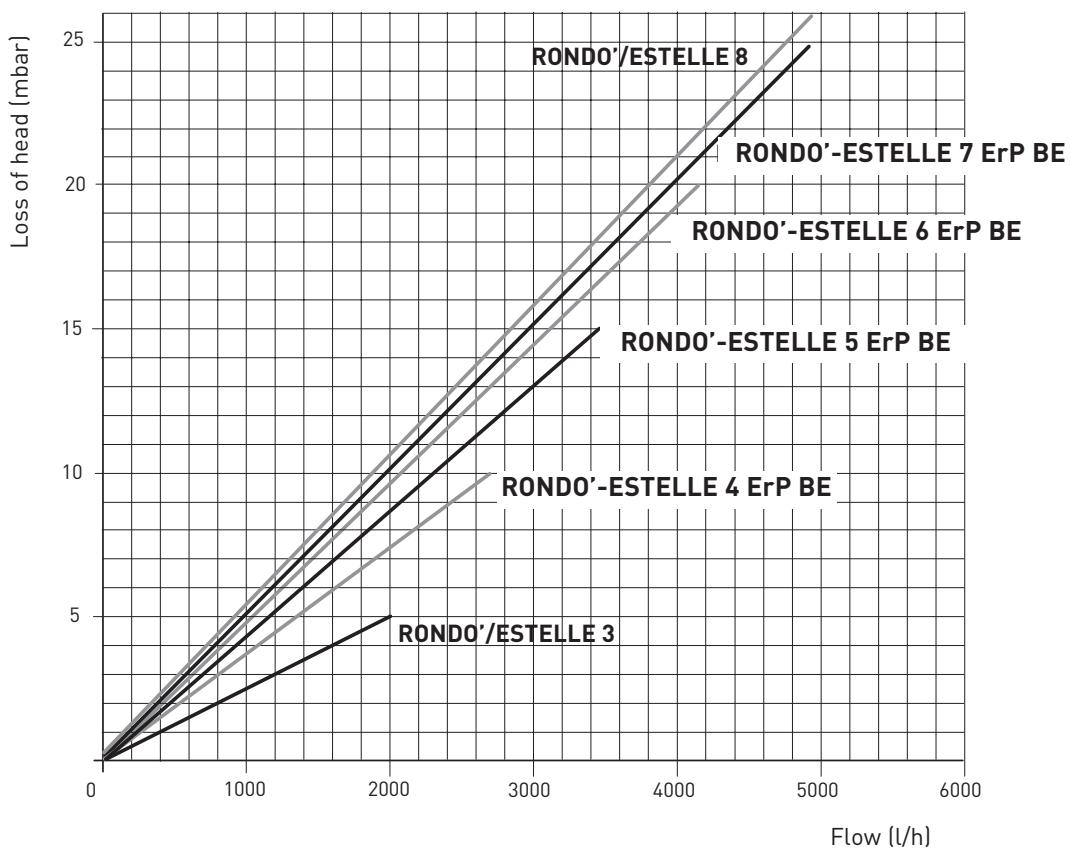


Fig. 2

1.5 FUNCTIONAL DIAGRAM (fig. 2/a)

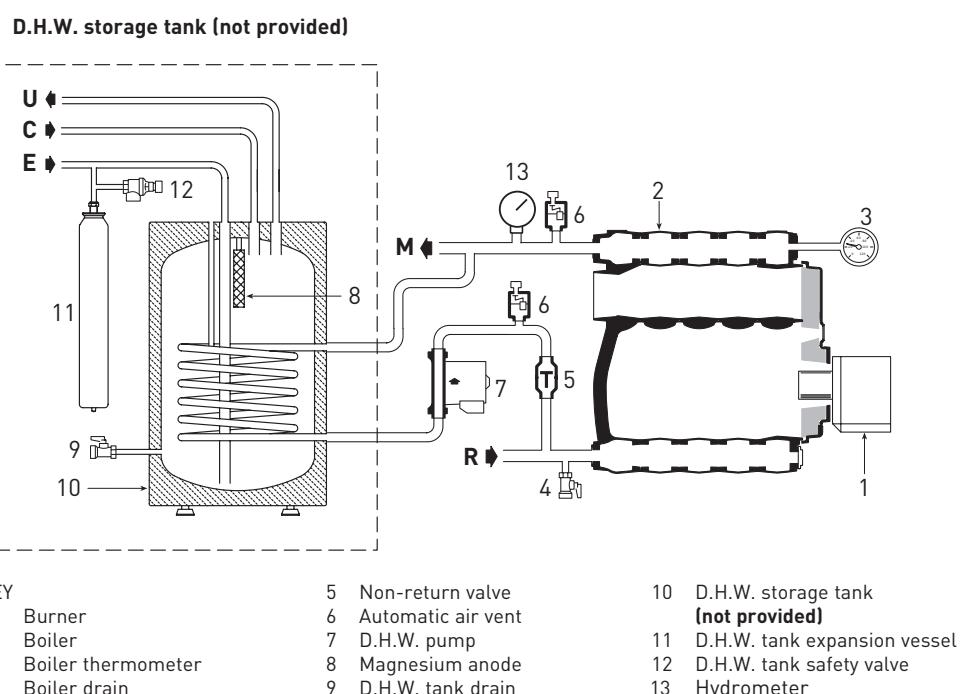


Fig. 2/a

1.6 COMBUSTION CHAMBER

The combustion chamber is of the straight flow type and complies with standard EN 303-3 appendix E.

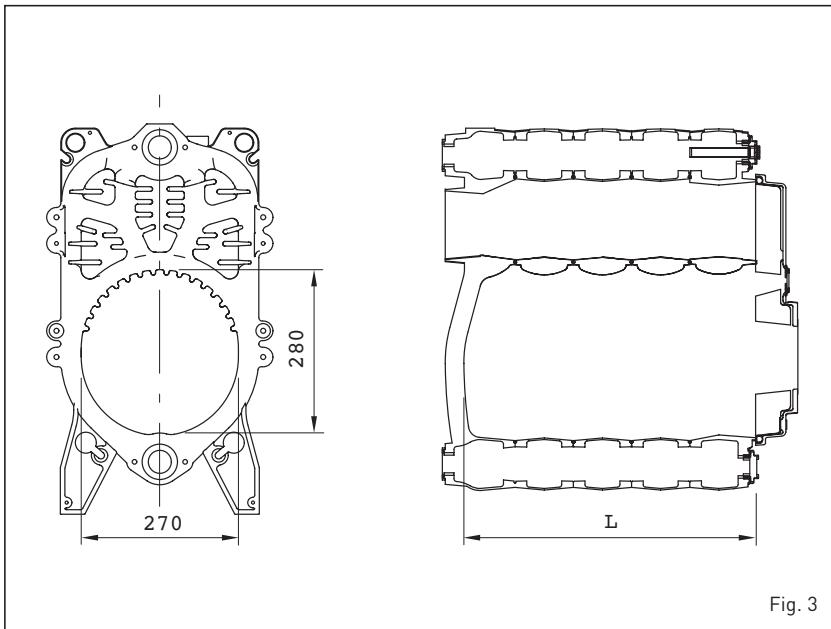
The dimensions are shown in fig. 3.

	L	Volumen
	mm	dm ³
Rondò/Estelle 4 ErP BE	405	24,0
Rondò/Estelle 5 ErP BE	505	30,5
Rondò/Estelle 6 ErP BE	605	37,0
Rondò/Estelle 7 ErP BE	705	43,5

1.7 COMPATIBLE BURNERS (➡ EN 267)

In general, the oil burner that is compatible with the boiler should use spray of the semi solid type.

Section 1.7.1 shows the matching table of the burners together with the boilers have been tested with.



1.7.1 "SIME" burners

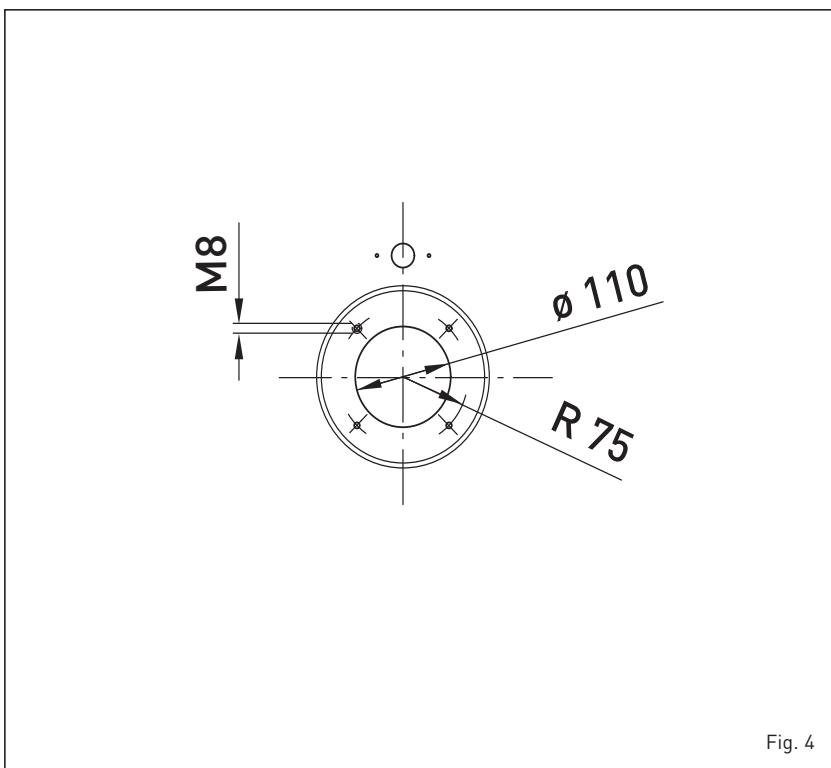
Code	Type	Nozzle		Atomising angle	Pump pressure bar	Adsorbed power consumption (*) W
		Ø	W			
Rondò/Estelle 4 ErP BE	8099155	FLUIDICS	0,60	80°HF	13	201
Rondò/Estelle 5 ErP BE	8099156	FLUIDICS	0,75	80°HF	12,5	190
Rondò/Estelle 6 ErP BE	8099157	FLUIDICS	1,00	80°HF	12	263
Rondò/Estelle 7 ErP Be	8099158	FLUIDICS	1,25	80°HF	11,2	260

(*) Values obtained during operation

1.7.2 Burners assembly (fig. 4)

The boiler door details is shown in figure 4 for burner mounting.

The burners must be regulated such that the CO₂ value is that indicated in point 1.3, with a tolerance of ± 5%.



2 INSTALLATION

ATTENTION: Before performing any work on the boiler, make sure that the same and its components have cooled in order to prevent the risk of burns due to high temperatures.

2.1 BOILER ROOM

The boiler room should feature all the characteristics required by standards governing liquid fuel heating systems.

2.2 BOILER ROOM DIMENSIONS

Position the boiler body on the foundation bed, which should be at least 10 cm high. The body should rest on a surface allowing shifting, possibly by means of sheet metal.

Leave a clearance between the boiler and the wall of at least 0.60 m, and between the top of the casing and the ceiling of 1 m (0.50 m in the case of boilers with incorporated D.H.W. tank). The ceiling height of the boiler room should not be less than 2.5 m.

2.3 CONNECTING UP SYSTEM

When connecting up the water supply to the boiler, make sure that the specifications given in fig. 1 are observed. All connecting unions should be easy to disconnect by means of tightening rings. A closed expansion tank system must be used.

2.3.1 Filling the water system

Before connecting the boiler, thoroughly flush the system to eliminate scale which could damage the appliance.

Filling must be done slowly to allow any air bubbles to be bled off through the air valves.

In closed-circuit heating systems, the cold water filling pressure and the pre-charging pressure of the expansion vessel should be no less than or equal to the height of the water head of the installation (e.g. for water head of 5 meters, the vessel pre-charging pressure and installation filling pressure should be at least 0.5 bar).

2.3.2 Characteristics of feedwater

Water supplying the heating circuit must be treated in accordance with UNI-CTI 8065 standards. It is absolutely essential to treat water in the heating system in the following cases:

- For extensive systems (with high contents of water).
- Frequent addition of water into the system.
- Should it be necessary to empty the system either partially or totally.

2.3.3 D.H.W. storage tank

The **RONDÒ -ESTELLE ErP BE** boilers may be matched with the separate boiler units.

The glass enamelled D.H.W. storage tank comes with a magnesium anode to protect the boiler and an inspection flange for checking and cleaning.

The magnesium anode must be checked annually and replaced if it is worn.

Fit a safety valve calibrated to 6 bar on the tubing of the cold water supply to the boiler unit (12 fig. 2).

In case the system pressure is excessive fit an appropriate pressure reducer. If the safety valve calibrated to 6 bar frequently intercepts, fit an expansion vessel with a capacity of 8 litres and a maximum pressure of 8 bar (11 fig. 2). The tank should be of the membrane type, made of natural rubber "caoutchouc", which is suitable for foods.

2.4 SMOKE EXHAUST

2.4.1 Connecting up flue

The flue is of fundamental importance for the proper operation of the boiler; if not installed in compliance with the standards, starting the boiler will be difficult and there will be a consequent formation of soot, condensate and encrustation.

The flue used to expel combustion products into the atmosphere must meet the following requirements:

- be constructed with waterproof materials, and resistant to smoke temperature and condensate;
- be of adequate mechanical resilience and of low heat conductivity;
- be perfectly sealed to prevent cooling of the flue itself;
- be as vertical as possible; the terminal section of the flue must be fitted with a static exhaust device that ensures constant and efficient extraction of products generated by combustion;
- to prevent the wind from creating pressure zones around the chimney top greater than the uplift force of combustion gases, the exhaust outlet should be at least 0.4 m higher than structures adjacent to the stack (including the roof top) within 8 m;
- have a diameter that is not inferior to that of the boiler union: square or rectangular-section flues should have an internal section 10% greater than that of the boiler union;
- the useful section of the flue must conform to the following formula:

$$S = K \frac{P}{VH}$$

S resulting section in cm^2

K reduction coefficient for liquid fuels:

- 0.045 for firewood
- 0.030 for coal
- 0.024 for light oil
- 0.016 for gas

P boiler input in kcal/h

H height of flue in meters, measured from the flame axis to the top of the flue reduced by:

- 0.50 m for each change of direction of the connection union between boiler and flue;
- 1.00 m for each metre of union itself.

Our boilers do not need any particular connections other than the one to the flue as described above.

2.4.2 Smoke exhaust with ø 80/125 coaxial flue (fig. 4/a)

Our boilers **RONDÒ-ESTELLE ErP BE** are set to be connected to ø 80/125 stainless steel coaxial flues that can be adjusted to the most suitable direction for room requirements (fig. 4/a).

The maximum acceptable length of the flue must not be over 7.0 equivalent meters.

Load losses in meters for each single accessory to be used in the exhaust configuration are indicated in Table A. Only use original SIME accessories and make sure that connections are correct as indicated in the instructions supplied with the accessories.

2.5 FITTING THE CASING "RONDÒ" (fig. 5)

The casing and the control panel are supplied in separate cardboard packages.

The housing package also contains the boiler documents and the glass wool for insulating the cast iron body. To fit the casing, proceed as follows (fig. 5):

- fit the lower front (1) and back (2) brackets to the heads with the four TE screws supplied;
- insert the upper bracket (5) fixing it to the front head with the two TE screws.
- insulate the cast iron body with glass wool, fixing it with the two springs supplied;
- assemble the panel (11) making sure that the TE screws are already fitted on the combustion chamber door.
- fit the left side (3) and the right side (4) by inserting them in the tangs on the

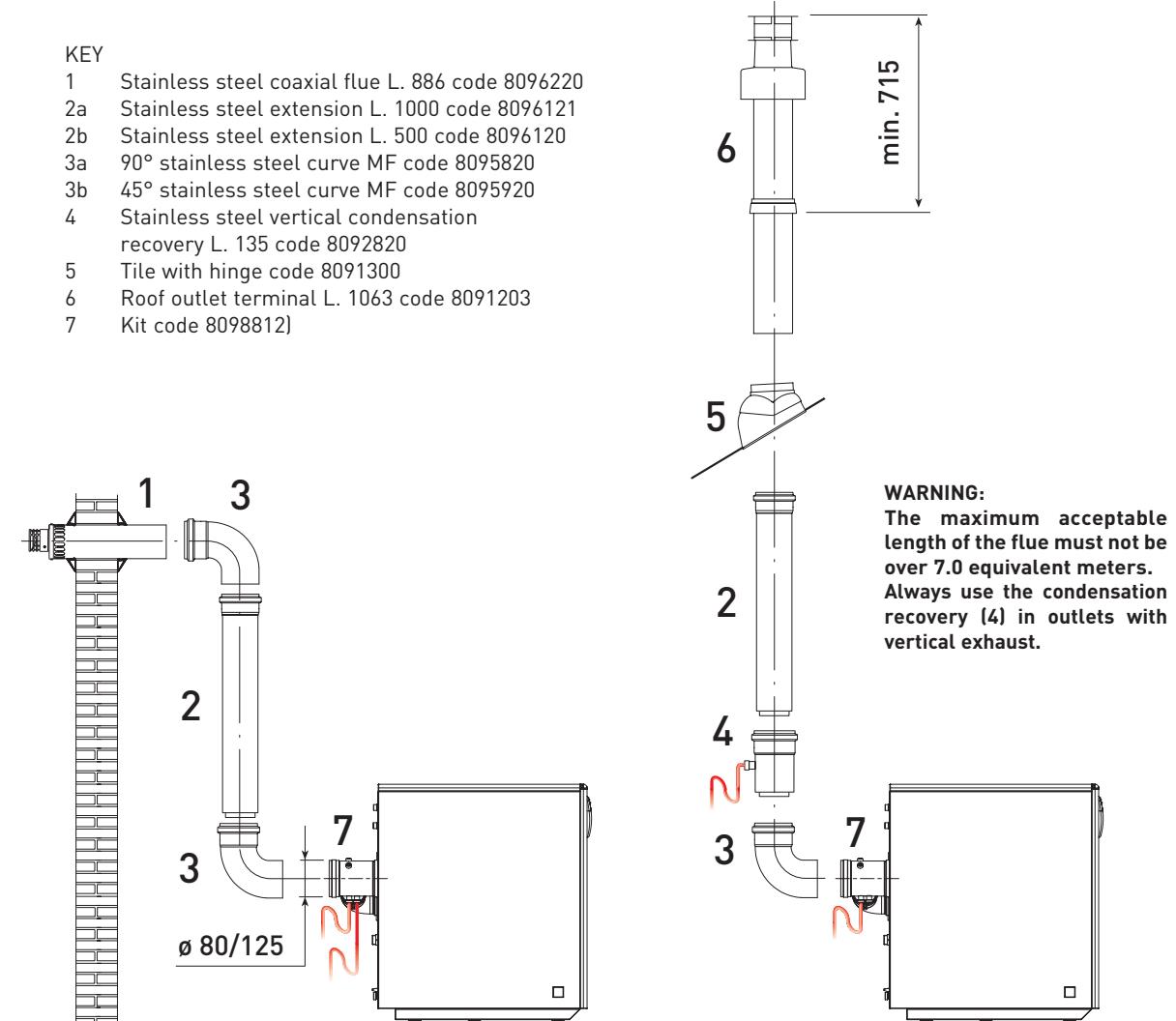


TABLE A

	Load loss (mt)
90° stainless steel curve MF	1,80
45° stainless steel curve MF	0,90
Stainless steel extension L. 1000	1,00
Stainless steel extension L. 500	0,50
Roof outlet terminal L. 1063	1,00
Stainless steel coaxial flue L. 886	0,70
Stainless steel vertical condensation recovery L. 135	0,70

Fig. 4/a

- brackets (1-2) depending on the model.
- fix the sides to the upper brackets (5 - 1) with the four self-tapping screws supplied;
 - fit the two back panels (6) and (7) of the sides with the ten self-tapping screws supplied;
 - fit the control panel (9) inserting the two lower tangs of the panel on the drains on the sides, and fix it with the four self-tapping screws supplied. Before carrying out this operation unwind the capillaries of the two thermostats and the thermometer and place the respective feelers in the sheath (10), fixing all with a capillary pin;
 - fit the front panel (8) fixing it to the sides with pin clutches;
 - complete the assembly by fixing the lid

(12) to the sides with pin clutches.

NOTE: Remove the "Testing Certificate" from inside the combustion chamber and keep together with the instructions manual.

2.6 ELECTRICAL CONNECTION (fig. 6)

The boiler is fitted with an electricity cable, and requires a 1ph - 230V - 50Hz power supply through the main switch protected by fuses.

The room thermostat (required for enhanced room temperature control) should be installed as shown in fig. 6. Connect the burner with the cable supplied.

NOTE: Device must be connected to an efficient earthing system. SIME declines all responsibility for injury caused to persons due to failure to earth the boiler. Always turn off the power supply before doing any work on the electrical panel.

2.6.1 Electrical connection to the boiler unit (fig. 6/a)

To connect the boiler to the boiler unit proceed with the following operations:

- remove the casing lid of the boiler and the back protection of the control panel in order to have access to the terminal board of the boiler;
- connect the cables as shown in the diagram (fig. 6/a).

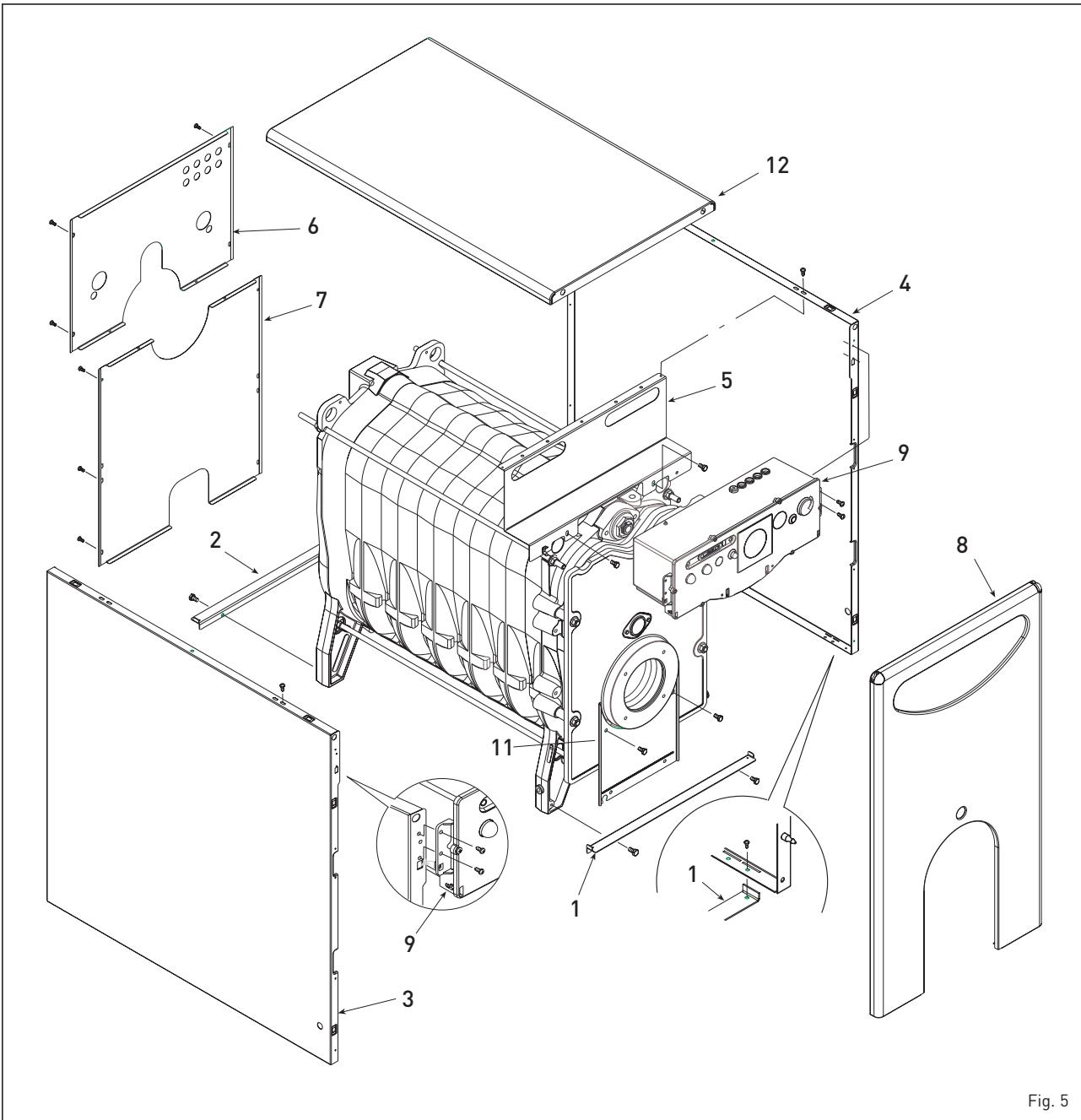
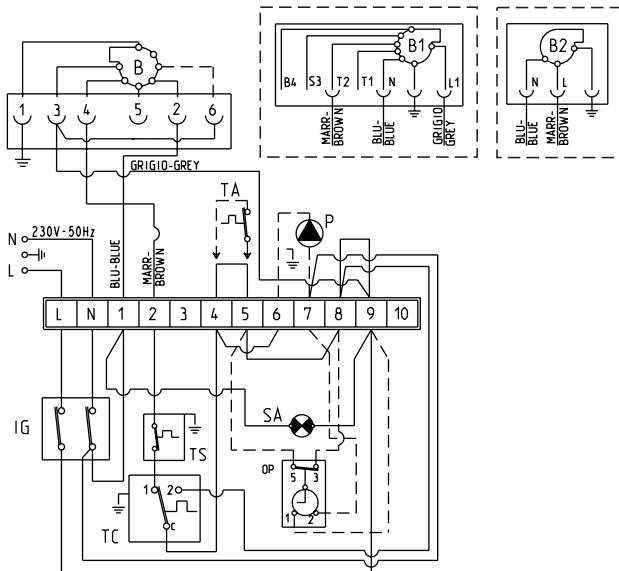
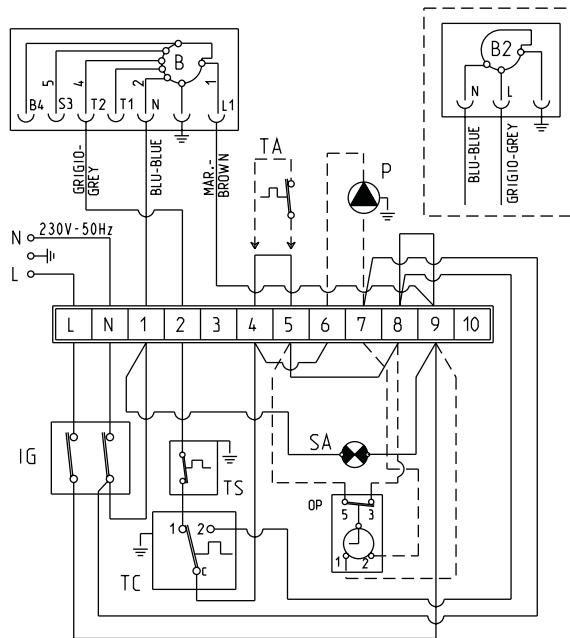


Fig. 5

RONDO'/ESTELLE 4-5 ErP BE



RONDO'/ESTELLE 6-7 ErP BE



KEY

- L Line
- N Neutral
- IG Main switch
- TS Safety stat
- TC Boiler stat
- SA Green voltage LED
- P C.H. pump
- B Permanent Feeding Burner SIME (optional)

B1 Permanent Feeding Burner (not supplied)

B2 Direct Feeding Burner (not supplied)

TA Room stat

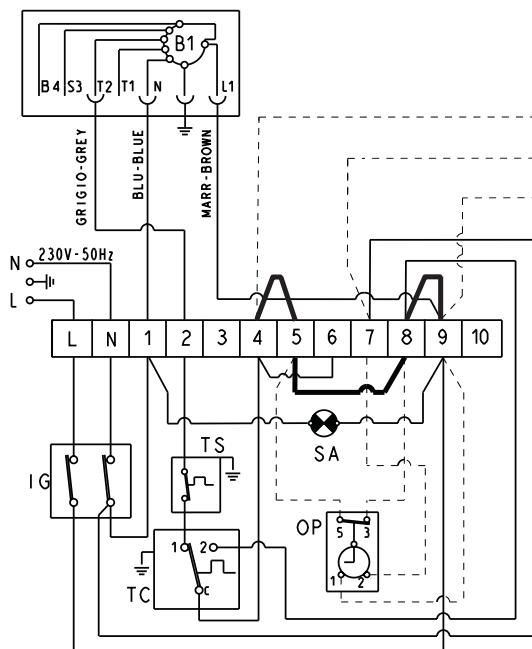
OP Programmer's clock (optional)

NOTE: When a room stat is to be fitted remove the link between terminal 4 and 5 on the connector plug.

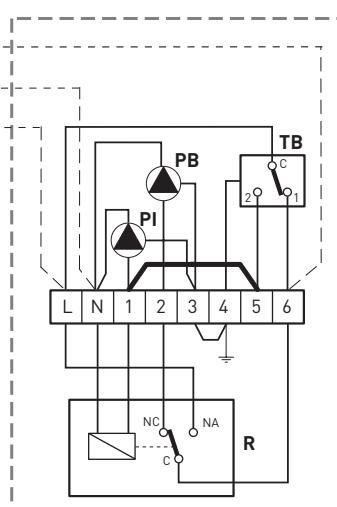
To connect the programmer's clock (OP), remove the link between terminals 5 and 8.

Fig. 6

PERMANENT FEEDING BURNER



D.H.W. STORAGE TANK



KEY

- L Line
- N Neutral
- IG Main switch
- TS Safety stat
- TC Boiler stat
- SA Green voltage LED
- P C.H. pump
- B1 Permanent Feeding Burner (not supplied)
- OP Programmer's clock (optional)
- PB D.H.W. pump
- TB D.H.W. stat
- R Relais

NOTE: To connect the ambient thermostat (TA), remove the link between terminals 1-5 of the boiler unit terminal block. Remove links 4-5 and 8-9 from the boiler terminal block.

To connect the programmer's clock (OP), remove the link between terminals 5-8.

Fig. 6/a

3 USE AND MAINTENANCE

WARNINGS

- In case of failure or malfunction of the equipment, contact authorised technical staff.
- For safety reasons, the User cannot access the internal parts of the appliance. All operations involving the removal of protections or otherwise the access to dangerous parts of the appliance must be performed by qualified personnel.
- The appliance can be used by children under 8 years and by persons with reduced physical, sensory or mental capabilities, or lack of experience or knowledge, provided they are under supervision or after they have been given instructions concerning the safe handling of the appliance and the understanding of the dangers inherent to it. Never let children play with the appliance. Children without supervision must not carry out cleaning and maintenance meant to be carried out by the user.

3.1 COMMISSIONING THE BOILER

When commissioning the boiler always make sure that:

- the system has been filled with water and adequately vented;
- the flow and return valves are fully open;
- the flue and chimney are free from obstructions;
- the electrical connections to the mains and the earthing are correct;
- no flammable liquids or materials are near the boiler;
- check that the circulating pump is not locked.

3.2 LIGHTING AND OPERATION

3.2.1 Lighting the boiler (fig. 7)

To light the boiler proceed as follows:

- check that the "Testing Certificate" has been removed from inside the combustion chamber;
- switch on the main switch (1) and verify that the green LED (3) turns on to confirm the presence of voltage. The

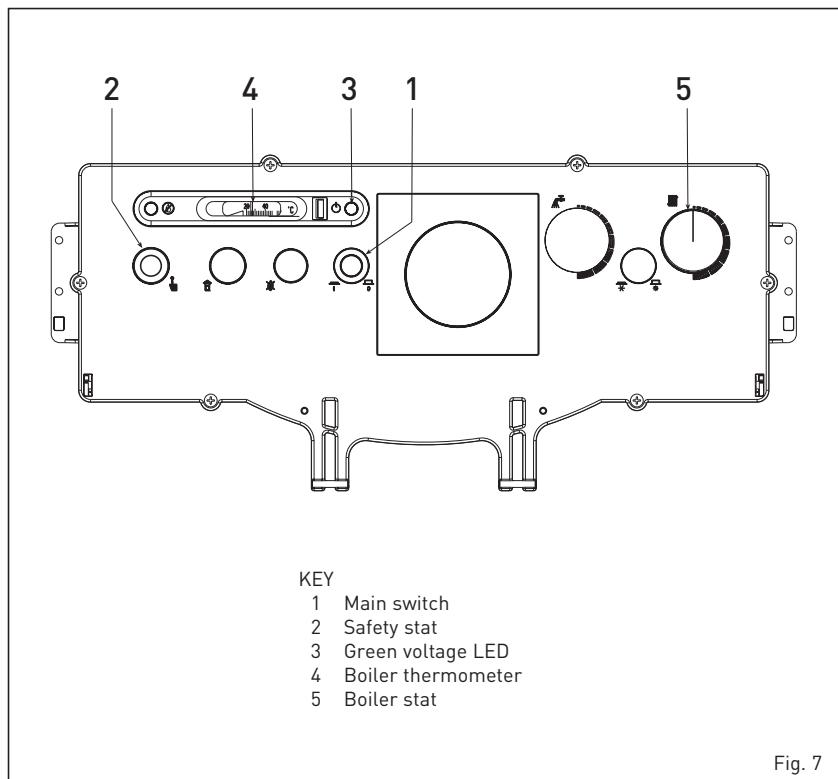


Fig. 7

burner will start;

- turn the boiler stat knob (5) to a temperature no lower than 60°C. The set temperature value can be checked on the thermometer (4).
- set the temperature of the hot-water service by pressing the thermostat of the boiler unit (6). The set temperature value can be checked on the thermometer (7).

3.2.2 Safety stat (fig. 7)

The manually reset safety stat (2) trips to switch-off the burners immediately when the boiler temperature exceeds 100°C. To restart the boiler, unscrew the black cover and press the button underneath. **If the problem occurs frequently, call an authorised technical assistance centre for the necessary checks to be carried out.**

3.2.3 System filling

Periodically check the pressure values of the hydrometer (13 fig. 2/a) mounted onto the system, when the system is cold, should range between **1-1.2 bar (98 and 117,6 kPa)**. If the pressure is less than 1 bar (98 kPa), reset the system.

3.2.4 Turning OFF boiler (fig. 7)

To temporarily turn off the boiler turn off the electricity supply by pressing the main switch (1). The following operations must be carried out if the plant will not be in use for a lengthy period of time:

- position the main switch of the plant on off;
- turn the fuel and water taps of the central heating plant off;
- empty the central heating plant if there is danger of frost:

3.3 REGULAR CLEANING

Maintenance of the boiler should be carried out annually by an authorised service engineer. Disconnect the boiler from the electrical supply before servicing or maintenance is carried out.

3.3.1 Smoke side boiler (fig. 8)

To carry out cleaning of the smoke passages remove the screws that fix the door to the body of the boiler and with the special cleaning brush clean the internal surfaces and the smoke evacuation tube well, removing any deposits.

Once the maintenance is completed, the baffles have to be fitted onto the original positions. In the **ESTELLE ErP BE** ver-

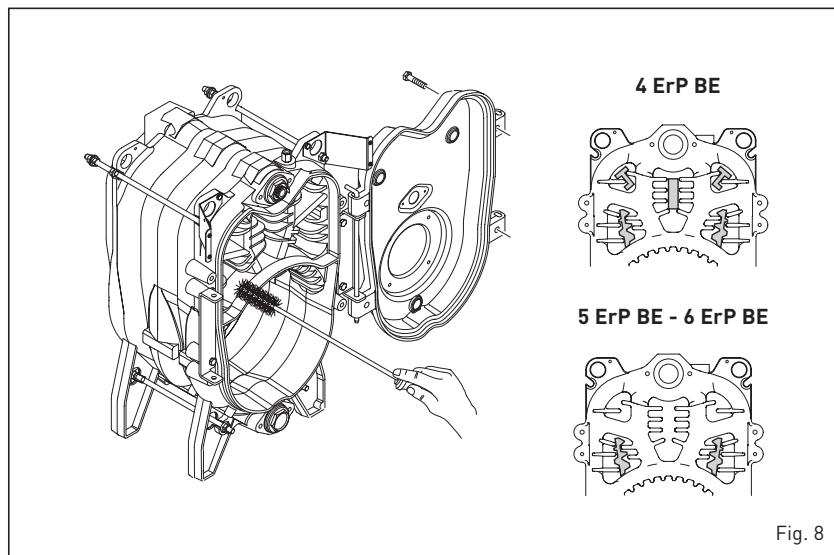


Fig. 8

sions the maintenance operations can be carried out without removing the burner.

3.3.3 Disassembly of the casing (fig. 10)

To disassemble the casing of the boiler, proceed as follows (fig. 10):

- remove the cover (12) fixed with pin clutches;
- remove the panel (8) which are fixed to the sides by pin clutches;
- remove the control panel (9) whose sides are fixed by four self-tapping screws;
- remove the back panels (6) and (7) which are fixed to the sides by ten self-

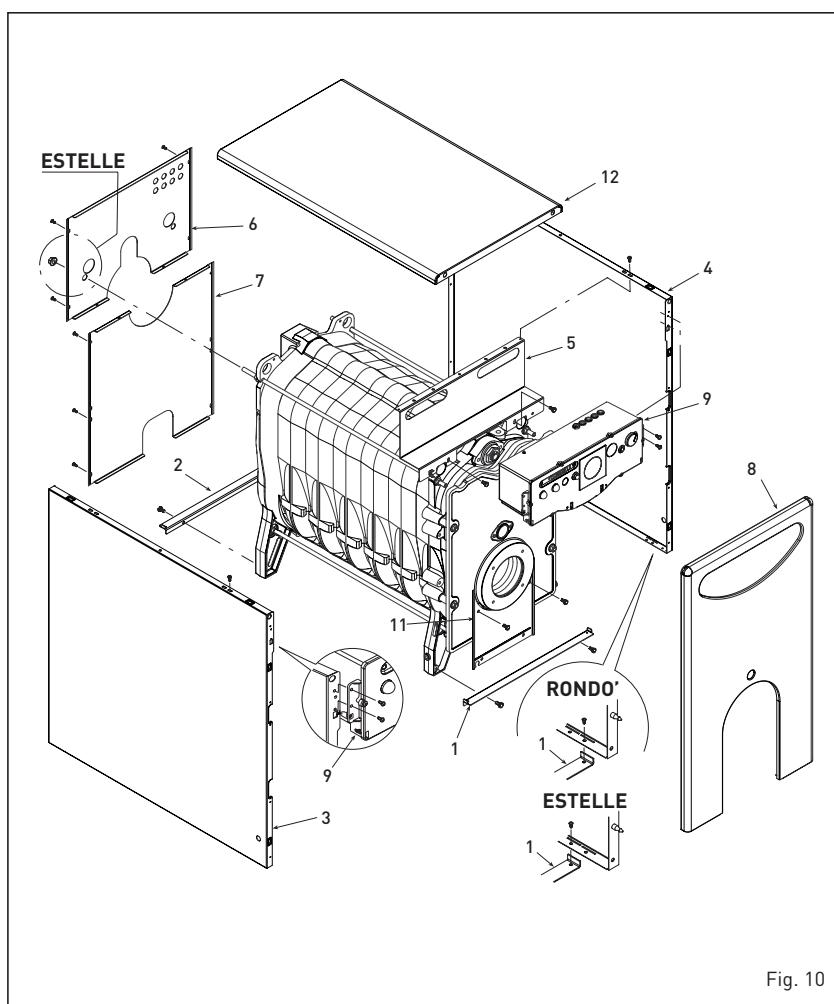


Fig. 10

- tapping screws;
- disassemble the left side (3) unscrewing the screws fixing it to the upper bracket (5), and remove the screws that fix it to the lower bracket (1);
- disassemble the right side (4) following the same operations.

3.3.4 Fault finding

Hereafter we outline a number of potential problems that may occur on the appliance and the relevant list of actions required. A working fault, in most cases, provokes the "lock out" signal onto the control panel of the control box.

When this light turns on, the burner can operate again only after the reset button has been pressed; if this has been done and a regular ignition occurs, it means the failure can be defined momentary and not dangerous. On the contrary, if the "lock out" stays, the cause of the fault, as well as the relevant action must be made according to the following chart:

The burner does not ignite

- Check the electric connections.
- Check the regular fuel flow, the cleanliness of the filters, of the nozzle and air vent from the tube.
- Check the regular spark ignition and the proper function of the burner.

The burner ignites regularly but the flame goes out immediately

- Check the flame detection, the air calibration and the function of the appliance.

Difficulty in regulating the burner and/or lack of yield

- Check: the regular flow of fuel, the cleanliness of the boiler, the non obstruction of the smoke duct, the real input supplied by the burner and its cleanliness (dust).

The boiler gets dirty easily

- Check the burner regulator (smoke analysis), the fuel quantity, the flue obstruction and the cleanliness of the air duct of the burner (dust).

The boiler does not heat up

- Control the cleanliness of the shell, the matching, the adjustment, the burner performances, the pre-adjusted temperature, the correct function and position of the regulation stat.
- Make sure that the boiler is sufficiently powerful for the appliance.

Smell of unburnt products

- Control the cleanliness of the boiler shell and the flue, the airtightness of the boiler and of the flue ducts (door, combustion chamber, smoke ducts, flue, washers).

- Control the quality of the fuel.

Frequent intervention of the boiler shutoff valve

- Control the presence of air in the system, the function of the circulation pumps.
- Check the load pressure of the appliance, the efficiency of the expansion tanks and the valve calibration.

3.4 FROST PROTECTION

In the event of frost, ensure that the central heating plant is functional and effective frost protection interlocks are in place to protect against frost damage

3.5 USER WARNINGS

It is mandatory that the dedicated power cable is replaced only with a spare cable ordered and connected by professionally qualified personnel.

ATTENTION: Before performing any work on the boiler, make sure that the same and its components have cooled in order to prevent the risk of burns due to high temperatures.

3.6 DISPOSAL OF THE EQUIPMENT (2012/19/UE)



Once it reaches the end of its operating life, the equipment MUST BE RECYCLED in line with current legislation.

IT MUST NOT be disposed of together with urban waste.

It can be handed over to recycling centres, if there are any, or to retailers that offer this service.

Recycling prevents potential damage to the environment and health. It allows to recover a number of recyclable materials, with considerable savings in terms of money and energy.

ALLEGATO/ANEXO/ ATTACHED AA.1

RONDO' 4 ErP BE (cod. 8104340) - ESTELLE 4 ErP BE (cod. 8104360)

Informazioni da fornire per le caldaie per il riscaldamento d'ambiente e le caldaie miste Información obligatoria para calderas de calefacción de espacios y calderas mixtas Informações a fornecer para aquecedores de ambiente com caldeira e aquecedores combinados com caldeira Information requirements for boiler space heaters, boiler combination heaters							
Modello / Modelos / Model:	RONDO' - ESTELLE 4 ErP BE						
Caldaia a condensazione / Caldera de condensación: <i>Caldeira de condensação / Condensing boiler:</i>	No						
Caldaia a bassa temperatura / Caldera de baja temperatura: <i>Caldeira de baixa temperatura / Low-temperature boiler:</i>	Yes						
Caldaia di tipo B11/ Caldera de tipo B11/ Caldeira B11 / B11 boiler:	No						
Apparecchio di cogenerazione per il riscaldamento d'ambiente: Equipo de cogeneración para calefacción de espacios: Aquecedor de ambiente com cogeração: Cogenenerator space heater:	No	Munito di un apparecchio di riscaldamento supplementare: Equipado con un aparato de calefacción suplementario: Equipado com aquecedor complementar: Equipped with a supplementary heater:					No
Apparecchio di riscaldamento misto / Equipo de calefacción mixto: Aquecedor combinado / Combunation heater:	No						
Elemento / Elemento Elemento / item	Symbol	Value	Unit	Elemento / Elemento Elemento / item	Symbol	Value	Unit
Potenza termica nominale Potencia térmica nominal Potência calorífica nominal Nominal heat output for space heating	P _n	25	kW	Efficienza energetica stagionale Eficiencia energética estacional de calefacción Eficiência energética do aquecimento ambiente sazonal Seasonal space heating energy efficiency	ηs	86	%
Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: potenza termica utile Para calderas de calefacción de espacios y calderas mixtas: potencia térmica útil Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: energia calorífica útil For boiler space heaters and boiler combination heaters: useful heat output	Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: efficienza utile Para calderas de calefacción de espacios y calderas mixtas: eficiencia útil Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: eficiencia útil For boiler space heaters and boiler combination heaters: useful efficiency						
Alla potenza termica nominale e a un regime ad alta temperatura ^a A potencia calorífica nominal y régimen de alta temperatura ^a À potência calorífica nominal e em regime de alta temperatura ^a At nominal heat output and high-temperature regime ^a	P ₄	25,2	kW	Alla potenza termica nominale e a un regime ad alta temperatura (*) A potencia calorífica nominal y régimen de alta temperatura (*) À potência calorífica nominal e em regime de alta temperatura (*) At nominal heat output and high-temperature regime (*)	η4	88,1	%
Al 30% della potenza termica nominale e a un regime a bassa temperatura ^b A 30% de potencia calorífica nominal y régimen de baja temperatura ^b A 30% da potência calorífica nominal e em regime de baixa temperatura ^b At 30% of nominal heat output and low-temperature regime ^b	P ₁	7,6	kW	Al 30% della potenza termica nominale e a un regime a bassa temperatura (*) A 30% de potencia calorífica nominal y régimen de baja temperatura (*) A 30% da potência calorífica nominal e em regime de baixa temperatura (*) At 30% of nominal heat output and low-temperature regime (*)	η1	92,1	%
Consumo ausiliario di elettricità / Consumos eléctricos auxiliares Consumos elétricos auxiliares / Auxiliary electricity consumption	Altri elementi / Otros elementos Outros elementos / Other items						
A pieno carico (bruciatore 8099170) A plena carga (quemador 8099170) Em plena carga (queimador 8099170) At full load (burner 8099170)	el _{máx}	0,201	kW	Dispersione termica in standby Dispersión térmica en stand-by Perdas de calor em modo de vigília Standby heat loss	Pstby	0,084	kW
A carico parziale A carga parcial Em carga parcial At part load	el _{min}	0,062	kW	Consumo energetico del bruciatore di accensione Consumo energético del quemador de encendido Consumo de energia do queimador de ignição Ignition burner power consumtion	Pign	0	kW
In modo standby / En modo de espera Em modo de vigília / In standby mode	PSB	0,019	kW	Emissioni di NOx / Emisiones de Nox Emissões de Nox / Emission of nitrogen oxides	NOx	--	mg/kWh
Per gli apparecchi di riscaldamento misto / Para los calefactores combinados / Aquecedores combinados / For combination heaters:							
Profilo di carico dichiarato Perfil de carga declarado Perfil de carga declarado / Declared load profile	--		Efficienza energetica di riscaldamento dell'acqua Eficiencia energética de caldeo de agua Eficiência energética do aquecimento de água Water heating energy efficiency				
Consumo quotidiano di energia Consumo diario de electricidad Consumo diário de eletricidade Daily electricity consumption	Qelec	--	kWh	Consumo quotidiano di combustibile Consumo diario de combustible Consumo diário de combustível Daily fuel consumption	Qfuel	--	kWh
Recapiti / Datos de contacto Elementos de contacto / Contact details	Fonderie Sime S.p.A. Via Garbo 27, 37045 Legnago (VR) ITALIA						
a. Regime ad alta temperatura: temperatura di ritorno di 60°C all'entrata e 80°C di temperatura di fruizione all'uscita dell'apparecchio b. Bassa temperatura: temperatura di ritorno (all'entrata della caldaia) per le caldaie a condensazione 30°C, per le caldaie a bassa temperatura 37°C e per le altre caldaie 50°C a. Régime de alta temperatura: temperatura de retorno de 60°C à entrada e 80°C de temperatura de alimentación a la salida del aparato. b. Baja temperatura: temperatura de retorno (a la entrada de la caldera) de 30°C para las calderas de condensación, de 37°C para las calderas de baja temperatura y de 50°C para las demás calderas. a. Regime de alta temperatura: temperatura de retorno de 60°C à entrada do aquecedor e temperatura de alimentação de 80°C à saída do aquecedor. b. Baixa temperatura: temperatura de retorno de 30°C para as caldeiras de condensação, 37°C para as caldeiras de baixa temperatura e 50°C para os outros aquecedores (à entrada do aquecedor). a. High-temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet. b. Low-temperature regime means for condensig boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature. (*) Dati di rendimento calcolati con potere calorifico superiore Hs / Datos de rendimiento calculado con el valor calorífico superior Hs Os valores do desempenho calculados com valor calorífico superior Hs / Performance data calculated with gross calorific value Hs							

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RONDO' 5 ErP BE (cod. 8104341) - ESTELLE 5 ErP BE (cod. 8104361)

Informazioni da fornire per le caldaie per il riscaldamento d'ambiente e le caldaie miste Información obligatoria para calderas de calefacción de espacios y calderas mixtas Informações a fornecer para aquecedores de ambiente com caldeira e aquecedores combinados com caldeira Information requirements for boiler space heaters, boiler combination heaters								
Modello / Modelos / Modelos / Model:	RONDO' - ESTELLE 5 ErP BE							
Caldaia a condensazione / Caldera de condensación: Caldeira de condensação / Condensing boiler:	No							
Caldaia a bassa temperatura / Caldera de baja temperatura: Caldeira de baixa temperatura / Low-temperature boiler:	Yes							
Caldaia di tipo B11/ Caldera de tipo B11/ Caldeira B11 / B11 boiler:	No							
Apparecchio di cogenerazione per il riscaldamento d'ambiente: Equipo de cogeneración para calefacción de espacios: Aquecedor de ambiente com cogeração: Cogenerator space heater:	No	Munito di un apparecchio di riscaldamento supplementare: Equipado con un aparato de calefacción suplementario: Equipado com aquecedor complementar: Equipped with a supplementary heater:						
Apparecchio di riscaldamento misto / Equipo de calefacción mixto: Aquecedor combinado / Combination heater:	No							
Elemento / Elemento Elemento / item	Symbol	Value	Unit	Elemento / Elemento Elemento / item	Symbol	Value	Unit	
Potenza termica nominale Potencia térmica nominal Potência calorífica nominal Nominal heat output for space heating	P _n	31	kW	Efficienza energetica stagionale del riscaldamento d'ambiente Eficiencia energética estacional de calefacción Eficiência energética do aquecimento ambiente sazonal Seasonal space heating energy efficiency	ηs	86	%	
Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: potenza termica utile Para calderas de calefacción de espacios y calderas mixtas: potencia térmica útil Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: energía calorífica útil For boiler space heaters and boiler combination heaters: useful heat output	Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: efficienza utile Para calderas de calefacción de espacios y calderas mixtas: eficiencia útil Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: eficiencia útil For boiler space heaters and boiler combination heaters: useful efficiency							
Alla potenza termica nominale e a un regime ad alta temperatura ^a A potencia calorífica nominal y régimen de alta temperatura ^a À potência calorífica nominal e em regime de alta temperatura ^a At nominal heat output and high-temperature regime ^a	P ₄	31,0	kW	Alla potenza termica nominale e a un regime ad alta temperatura ^(*) A potencia calorífica nominal y régimen de alta temperatura ^(*) À potência calorífica nominal e em regime de alta temperatura ^(*) At nominal heat output and high-temperature regime ^(*)	η4	88,4	%	
Al 30% della potenza termica nominale e a un regime a bassa temperatura ^b A 30% de potencia calorífica nominal y régimen de baja temperatura ^b A 30% da potência calorífica nominal e em regime de baixa temperatura ^b At 30% of nominal heat output and low-temperature regime ^b	P ₁	9,3	kW	Al 30% della potenza termica nominale e a un regime a bassa temperatura ^(*) A 30% de potencia calorífica nominal y régimen de baja temperatura ^(*) A 30% da potência calorífica nominal e em regime de baixa temperatura ^(*) At 30% of nominal heat output and low-temperature regime ^(*)	η1	91,8	%	
Consumo ausiliario di elettricità / Consumos eléctricos auxiliares Consumos elétricos auxiliares / Auxiliary electricity consumption	Altri elementi / Otros elementos Outros elementos / Other items							
A pieno carico (bruciatore 8099171) A plena carga (quemador 8099171) Em plena carga (queimador 8099171) At full load (burner 8099171)	el _{máx}	0,190	kW	Dispersione termica in standby Dispersión térmica en stand-by Perdas de calor em modo de vigília Standby heat loss	Pstby	0,105	kW	
A carico parziale A carga parcial Em carga parcial At part load	el _{min}	0,057	kW	Consumo energetico del bruciatore di accensione Consumo energético del quemador de encendido Consumo de energía do quemador de ignição Ignition burner power consumtion	Pign	0	kW	
In modo standby / En modo de espera Em modo de vigilia / In standby mode	PSB	0,021	kW	Emissioni di NOx / Emisiones de Nox Emissões de Nox / Emission of nitrogen oxides	NOx	--	mg/kWh	
Per gli apparecchi di riscaldamento misto / Para los calefactores combinados / Aquecedores combinados / For combination heaters:								
Profilo di carico dichiarato Perfil de carga declarado Perfil de carga declarado / Declared load profile	--		Efficienza energetica di riscaldamento dell'acqua Eficiencia energética de caldeo de agua Eficiencia energética do aquecimento de água Water heating energy efficiency	ηwh	--	%		
Consumo quotidiano di energia Consumo diario de electricidad Consumo diário de eletricidade Daily electricity consumption	Qelec	--	kWh	Consumo quotidiano di combustibile Consumo diario de combustible Consumo diário de combustível Daily fuel consumption	Qfuel	--	kWh	
Recapiti / Datos de contacto Elementos de contacto / Contact details	Fonderie Sime S.p.A. Via Garbo 27, 37045 Legnago (VR) ITALIA							
a. Regime ad alta temperatura: temperatura di ritorno di 60°C all'entrata e 80°C di temperatura di fruizione all'uscita dell'apparecchio b. Bassa temperatura: temperatura di ritorno (all'entrata della caldaia) per le caldaie a condensazione 30°C, per le caldaie a bassa temperatura 37°C e per le altre caldaie 50°C a. Régimen de alta temperatura: temperatura de retorno de 60°C a la entrada y 80°C de temperatura de alimentación a la salida del aparato. b. Baja temperatura: temperatura de retorno (a la entrada de la caldera) de 30°C para las calderas de condensación, de 37°C para las calderas de baja temperatura y de 50°C para las demás calderas. a. Regime de alta temperatura: temperatura de retorno de 60°C à entrada do aquecedor e temperatura de alimentação de 80°C à saída do aquecedor. b. Baixa temperatura: temperatura de retorno de 30°C para as caldeiras de condensação, 37°C para as caldeiras de baixa temperatura e 50°C para os outros aquecedores (à entrada do aquecedor). a. High-temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet. b. Low-temperature regime means for condensing boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.								
(*) Dati di rendimento calcolati con potere calorifico superiore Hs / Datos de rendimiento calculado con el valor calorífico superior Hs Os valores do desempenho calculados com valor calorífico superior Hs / Performance data calculated with gross calorific value Hs								

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RONDO' 6 ErP BE (cod. 8104342) - ESTELLE 6 ErP BE (cod. 8104362)

Informazioni da fornire per le caldaie per il riscaldamento d'ambiente e le caldaie miste Información obligatoria para calderas de calefacción de espacios y calderas mixtas Informações a fornecer para aquecedores de ambiente com caldeira e aquecedores combinados com caldeira Information requirements for boiler space heaters, boiler combination heaters														
Modello / Modelos / Model:	RONDO' - ESTELLE 6 ErP BE													
Caldaia a condensazione / Caldera de condensación: <i>Caldeira de condensação / Condensing boiler:</i>	No													
Caldaia a bassa temperatura / Caldera de baja temperatura: <i>Caldeira de baixa temperatura / Low-temperature boiler:</i>	Yes													
Caldaia di tipo B11/ Caldera de tipo B11/ Caldeira B11 / B11 boiler:	No													
Apparecchio di cogenerazione per il riscaldamento d'ambiente: Equipo de cogeneración para calefacción de espacios: Aquecedor de ambiente com cogeração: Cogenerator space heater:	No	Munito di un apparecchio di riscaldamento supplementare: Equipado con un aparato de calefacción suplementario: Equipado com aquecedor complementar: Equipped with a supplementary heater.												
Apparecchio di riscaldamento misto / Equipo de calefacción mixto: Aquecedor combinado / Combunation heater:	No													
Elemento / Elemento <i>Elemento / item</i>	Symbol	Value	Unit	Elemento / Elemento <i>Elemento / item</i>	Symbol	Value	Unit							
Potenza termica nominale Potencia térmica nominal <i>Potência calorífica nominal</i> <i>Nominal heat output for space heating</i>	P _n	45	kW	Efficienza energetica stagionale del riscaldamento d'ambiente Eficiencia energética estacional de calefacción <i>Eficiência energética do aquecimento</i> <i>ambiente sazonal</i> <i>Seasonal space heating energy efficiency</i>	ηs	89	%							
Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: potenza termica utile Para calderas de calefacción de espacios y calderas mixtas: potencia térmica útil <i>Aquecedores de ambiente com caldeira e aquecedores combinados</i> <i>equipados com caldeira: energía calorífica útil</i> <i>For boiler space heaters and boiler combination heaters: useful heat output</i>	Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: efficienza utile Para calderas de calefacción de espacios y calderas mixtas: eficiencia útil <i>Aquecedores de ambiente com caldeira e aquecedores combinados</i> <i>equipados com caldeira: eficiência útil</i> <i>For boiler space heaters and boiler combination heaters: useful efficiency</i>													
Alla potenza termica nominale e a un regime ad alta temperatura ^a A potencia calorífica nominal y régimen de alta temperatura ^a <i>À potência calorífica nominal e em regime</i> <i>de alta temperatura ^a</i> <i>At nominal heat output and</i> <i>high-temperature regime ^a</i>	P ₄	44,5	kW	Alla potenza termica nominale e a un regime ad alta temperatura ^(*) A potencia calorífica nominal y régimen de alta temperatura ^(*) <i>À potência calorífica nominal e em regime</i> <i>de alta temperatura ^(*)</i> <i>At nominal heat output and</i> <i>high-temperature regime ^(*)</i>	η4	91,0	%							
Al 30% della potenza termica nominale e a un regime a bassa temperatura ^b A 30% de potencia calorífica nominal y régimen de baja temperatura ^b <i>A 30% da potência calorífica nominal e</i> <i>em regime de baixa temperatura ^b</i> <i>At 30% of nominal heat output and</i> <i>low-temperature regime ^b</i>	P ₁	13,4	kW	Al 30% della potenza termica nominale e a un regime a bassa temperatura ^(*) A 30% de potencia calorífica nominal y régimen de baja temperatura ^(*) <i>A 30% da potência calorífica nominal e</i> <i>em regime de baixa temperatura ^(*)</i> <i>At 30% of nominal heat output and</i> <i>low-temperature regime ^(*)</i>	η1	94,4	%							
Consumo ausiliario di elettricità / Consumos eléctricos auxiliares <i>Consumos elétricos auxiliares / Auxiliary electricity consumption</i>	Altri elementi / Otros elementos <i>Outros elementos / Other items</i>													
A pieno carico (bruciatore 8099050) A plena carga (quemador 8099050) <i>Em plena carga (queimador 8099050)</i> <i>At full load (burner 8099050)</i>	el _{máx}	0,263	kW	Dispersione termica in standby Dispersión térmica en stand-by <i>Perdas de calor em modo de vigília</i> <i>Standby heat loss</i>	Pstby	0,057	kW							
A carico parziale A carga parcial <i>Em carga parcial</i> <i>At part load</i>	el _{min}	0,078	kW	Consumo energetico del bruciatore di accensione Consumo energético del quemador de encendido <i>Consumo de energia do queimador de ignição</i> <i>Ignition burner power consumtion</i>	Pign	0	kW							
In modo standby / En modo de espera <i>Em modo de vigília / In standby mode</i>	PSB	0,001	kW	Emissioni di NOx / Emisiones de Nox <i>Emissões de Nox / Emission of nitrogen oxides</i>	NOx	--	mg/kWh							
Per gli apparecchi di riscaldamento misto / Para los calefactores combinados / Aquecedores combinados / For combination heaters:														
Profilo di carico dichiarato Perfil de carga declarado <i>Perfil de carga declarado / Declared load profile</i>	--		Efficienza energetica di riscaldamento dell'acqua Eficiencia energética de caldeo de agua <i>Eficiência energética do aquecimento de água</i> <i>Water heating energy efficiency</i>		ηwh	--	%							
Consumo quotidiano di energia Consumo diario de electricidad <i>Consumo diário de eletricidade</i> <i>Daily electricity consumption</i>	Qelec	--	kWh	Consumo quotidiano di combustibile Consumo diario de combustible <i>Consumo diário de combustível</i> <i>Daily fuel consumption</i>	Qfuel	--	kWh							
Recapiti / Datos de contacto <i>Elementos de contacto / Contact details</i>	Fonderie Sime S.p.A. Via Garbo 27, 37045 Legnago (VR) ITALIA													
a. Regime ad alta temperatura: temperatura di ritorno di 60°C all'entrata e 80°C di temperatura di fruizione all'uscita dell'apparecchio b. Bassa temperatura: temperatura di ritorno (all'entrata della caldaia) per le caldaie a condensazione 30°C, per le caldaie a bassa temperatura 37°C e per le altre caldaie 50°C a. Régimen de alta temperatura: temperatura de retorno de 60°C a la entrada y 80°C de temperatura de alimentación a la salida del aparato. b. Baja temperatura: temperatura de retorno (a la entrada de la caldera) de 30°C para las calderas de condensación, de 37°C para las calderas de baja temperatura y de 50°C para las demás calderas. a. <i>Regime de alta temperatura: temperatura de retorno de 60°C à entrada do aquecedor e temperatura de alimentação de 80°C à saída do aquecedor.</i> b. <i>Baixa temperatura: temperatura de retorno de 30°C para as caldeiras de condensação, 37°C para as caldeiras de baixa temperatura e 50°C para os outros aquecedores (à entrada do aquecedor).</i> a. <i>High-temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.</i> b. <i>Low-temperature regime means for condensig boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature.</i>														
(*) Dati di rendimento calcolati con potere calorifico superiore Hs / Datos de rendimiento calculado con el valor calorífico superior Hs Os valores do desempenho calculados com valor calorífico superior Hs / Performance data calculated with gross calorific value Hs														

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RONDO' 7 ErP BE (cod. 8104343) - ESTELLE 7 ErP BE (cod. 8104363)

Informazioni da fornire per le caldaie per il riscaldamento d'ambiente e le caldaie miste Información obligatoria para calderas de calefacción de espacios y calderas mixtas Informações a fornecer para aquecedores de ambiente com caldeira e aquecedores combinados com caldeira Information requirements for boiler space heaters, boiler combination heaters							
Modello / Modelos / Model:							RONDO' - ESTELLE 7 ErP BE
Caldaia a condensazione / Caldera de condensación: <i>Caldeira de condensação / Condensing boiler:</i>							No
Caldaia a bassa temperatura / Caldera de baja temperatura: <i>Caldeira de baixa temperatura / Low-temperature boiler:</i>							Yes
Caldaia di tipo B11 / Caldera de tipo B11 / Caldeira B11 / B11 boiler:							No
Apparecchio di cogenerazione per il riscaldamento d'ambiente: Equipo de cogeneración para calefacción de espacios: <i>Aquecedor de ambiente com cogeração: Cogenerator space heater:</i>				Munito di un apparecchio di riscaldamento supplementare: Equipado con un aparato de calefacción suplementario: <i>Equipado com aquecedor complementar: Equipped with a supplementary heater:</i>			No
Apparecchio di riscaldamento misto / Equipo de calefacción mixto: <i>Aquecedor combinado / Combunation heater:</i>							
Elemento / Elemento Elemento / item	Symbol	Value	Unit	Elemento / Elemento Elemento / item	Symbol	Value	Unit
Potenza termica nominale Potencia térmica nominal <i>Potência calorífica nominal Nominal heat output for space heating</i>	P _n	52	kW	Efficienza energetica stagionale Eficiencia energética estacional de calefacción <i>Eficiência energética do aquecimento ambiente sazonal Seasonal space heating energy efficiency</i>	ηs	89	%
Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: potenza termica utile Para calderas de calefacción de espacios y calderas mixtas: potencia térmica útil <i>Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: energía calorífica útil For boiler space heaters and boiler combination heaters: useful heat output</i>				Per le caldaie per il riscaldamento d'ambiente e le caldaie miste: efficienza utile Para calderas de calefacción de espacios y calderas mixtas: eficiencia útil <i>Aquecedores de ambiente com caldeira e aquecedores combinados equipados com caldeira: eficiência útil For boiler space heaters and boiler combination heaters: useful efficiency</i>			
Alla potenza termica nominale e a un regime ad alta temperatura ^a A potencia calorífica nominal y régimen de alta temperatura ^a <i>À potência calorífica nominal e em regime de alta temperatura ^a At nominal heat output and high-temperature regime ^a</i>	P ₄	52,0	kW	Alla potenza termica nominale e a un regime ad alta temperatura (*) A potencia calorífica nominal y régimen de alta temperatura (*) <i>À potência calorífica nominal e em regime de alta temperatura (*) At nominal heat output and high-temperature regime (*)</i>	η4	88,6	%
Al 30% della potenza termica nominale e a un regime a bassa temperatura ^b A 30% de potencia calorífica nominal y régimen de baja temperatura ^b <i>A 30% da potência calorífica nominal e em regime de baixa temperatura ^b At 30% of nominal heat output and low-temperatura regime ^b</i>	P ₁	15,6	kW	Al 30% della potenza termica nominale e a un regime a bassa temperatura (*) A 30% de potencia calorífica nominal y régimen de baja temperatura (*) <i>A 30% da potência calorífica nominal e em regime de baixa temperatura (*) At 30% of nominal heat output and low-temperatura regime (*)</i>	η1	94,7	%
Consumo ausiliario di elettricità / Consumos eléctricos auxiliares <i>Consumos eléctricos auxiliares / Auxiliary electricity consumption</i>				Altri elementi / Otros elementos <i>Outros elementos / Other items</i>			
A pieno carico (bruciatore 8099050) A plena carga (quemador 8099050) <i>Em plena carga (queimador 8099050) At full load (burner 8099050)</i>	el _{máx}	0,260	kW	Dispersione termica in standby Dispersión térmica en stand-by <i>Perdas de calor em modo de vigilia Standby heat loss</i>	Pstby	0,066	kW
A carica parziale A carga parcial <i>Em carga parcial At part load</i>	el _{min}	0,078	kW	Consumo energetico del bruciatore di accensione Consumo energético del quemador de encendido <i>Consumo de energía do queimador de ignição Ignition burner power consumtion</i>	Pign	0	kW
In modo standby / En modo de espera <i>Em modo de vigília / In standby mode</i>	PSB	0,002	kW	Emissioni di NOx / Emisiones de Nox <i>Emissões de Nox / Emission of nitrogen oxides</i>	NOx	--	mg/kWh
Per gli apparecchi di riscaldamento misto / Para los calefactores combinados / Aquecedores combinados / For combination heaters:							
Profilo di carico dichiarato Perfil de carga declarado <i>Perfil de carga declarado / Declared load profile</i>	--		Efficienza energetica di riscaldamento dell'acqua Eficiencia energética de caldeo de agua <i>Eficiência energética do aquecimento de água Water heating energy efficiency</i>	ηwh	--	%	
Consumo quotidiano di energia Consumo diario de electricidad <i>Consumo diário de eletricidade Daily electricity consumption</i>	Qelec	--	kWh	Consumo quotidiano di combustibile Consumo diario de combustible <i>Consumo diário de combustível Daily fuel consumption</i>	Qfuel	--	kWh
Recapiti / Datos de contacto <i>Elementos de contacto / Contact details</i>	Fonderie Sime S.p.A. Via Garbo 27, 37045 Legnago (VR) ITALIA						
a. Regime ad alta temperatura: temperatura di ritorno di 60°C all'entrata e 80°C di temperatura di fruizione all'uscita dell'apparecchio b. Bassa temperatura: temperatura di ritorno (all'entrata della caldaia) per le caldaie a condensazione 30°C, per le caldaie a bassa temperatura 37°C e per le altre caldaie 50°C a. Régimen de alta temperatura: temperatura de retorno de 60°C a la entrada y 80°C de temperatura de alimentación a la salida del aparato. b. Baja temperatura: temperatura de retorno (a la entrada de la caldera) de 30°C para las calderas de condensación, de 37°C para las calderas de baja temperatura y de 50°C para las demás calderas. a. Regime de alta temperatura: temperatura de retorno de 60°C à entrada do aquecedor e temperatura de alimentação de 80°C à saída do aquecedor. b. Baixa temperatura: temperatura de retorno de 30°C para as caldeiras de condensação, 37°C para as caldeiras de baixa temperatura e 50°C para os outros aquecedores (à entrada do aquecedor). a. High-temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet. b. Low-temperature regime means for condensig boilers 30°C, for low-temperature boilers 37°C and for other heaters 50°C return temperature. (*) Dati di rendimento calcolati con potere calorifico superiore Hs / Datos de rendimiento calculado con el valor calorífico superior Hs Os valores do desempenho calculados com valor calorífico superior Hs / Performance data calculated with gross calorific value Hs							

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Fonderie Sime S.p.A - Via Garbo, 27 - 37045 Legnago (Vr)
Tel. + 39 0442 631111 - Fax +39 0442 631292 - www.sime.it