

GuiVal

PREVIEW
of the
NEW



small

Il calore intelligente, nascosto ma potente.
Smart heat, hidden but powerful.



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GuiVal

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small

Smart heat, hidden but powerful



small C x Inside

Elektra SMALL C x Inside is the new version of electric combi boilers, with digital electronics and single-phase 230/240V power supply, or three-phase 400V + Neutral, designed for installation both external and internal to residential and commercial buildings. Different from the previous Small C (standalone), it is designed for installation with a built-in boiler and storage tank that operate as a single unit, always combining hot water production and heating. This boiler, designed to be installed on the wall, is a reversible thermal electric boiler with a single front door and reversible left or right connection, to suit the position of the inlet and outlet connections. The Box version also contains a storage tank. The boiler and storage tank can be positioned on the wall next to the boiler, completing a highly efficient 2 kW electric system using polyurethane insulation and including the tank in a metal sheet cabinet. The storage tank with accumulator is made of AISI 316L stainless steel and is protected by a layer of injected polyurethane, the boiler unit by a 2 kW electric heating element.

Elektra SMALL C x Inside is the new version of electric wall-mounted boilers, featuring digital electronics and a 230/240V single-phase or 400V three-phase with Neutral power supply. Designed for installation either externally or internally in residential and commercial buildings, it differs from the Small C (standalone) by including a built-in boiler and storage tank in a single unit, always combining heating and domestic hot water. This boiler comes complete with a storage box, made from high-thickness galvanised sheet metal, paintable, with a single reversible front door (right or left), depending on the installation requirements. The unit also includes melamine resin insulation to minimise heat loss in case of external installation. In the version with a storage tank, an accumulator tank is added beside the boiler, equipped with a 2 kW electric heating element, insulated with injection-moulded polyurethane foam, and protected by an enamel-coated steel cabinet to ensure maximum energy efficiency for storage. Maximum useful thermal power ranges from 12 to 15-18 kW depending on the model. The complete box with adhesive insulation must be installed after wall mounting, and the accumulator tank is provided for versions with the Small TANK.

The range



Elektra SMALL C x Inside

Combined versions for hot water production and heating, domestic hot water with instant operation storage system and built-in storage tank. Power supply 230/240V single-phase or 400V three-phase with Neutral, for external or internal installation. These local technical regulations require a Box for protection. Maximum useful thermal power ranges from 12 to 15-18 kW.



Elektra SMALL C x Inside + Small TANK

Combined versions for hot water production and heating, domestic hot water with instant operation storage system and external built-in storage tank (capacity 35 L) with high efficiency insulation, anode and magnesium anode for manual descaling. Like the above version, it requires a Box for protection. Maximum useful thermal power ranges from 6-7-8-9-12-15-18 kW.



The ELEKTRA series is certified... / The ELEKTRA series is certified...

- in compliance with the European EMC Directive 2009/42, in accordance with EN IEC 60335-2-21:2012 with EN 60335-2-21:2003+A1:2005+A2:2008 - EN 60335-1:2012 - EN 62233:2008, European Directive 2014/30/EU with IEC 60335-2-21:2012 with IEC 60335-1:2012 - EN 62233:2012 - EN 62323:2008.
- equipped with EMC marking with CB marking No. IT-22669/A1, if required by product number.
- equipped with Test Report EMC n° TRA-030968-36-00A, if equipped with EMC Test Report No. TRA-030968-36-00A.
- MADE IN ITALY in accordance with Law No. 135-25/09/1990 art.16 dated 05/08/2010.
MADE IN ITALY in compliance with Italian D.L. No. 135-25/09/1990 art.16 and No. 55/08/04/10 Italian Law.



The heart of the product



The boilers in the **ELEKTRA SMALL C x Inside** range have an important heart, a main core that contains a few essential components: a large backlit display with easy-to-read icons and a microprocessor digital control board, with software specifically designed to control and manage the operation of the appliance, to optimise energy efficiency and comfort in the home. This unit continuously monitors and controls the electricity supply, ensuring constant power distribution. The boiler also includes high-precision temperature sensors and control board (in models with storage tank) that manages the accumulation (in complete safety) of heat energy in specially selected technical materials that hold thermal energy for a long time, produced by the system at

at preferential times of the day, to make it available for heating when needed.

A high level of resistance to corrosive and scaly water materials is specially chosen for the manufacture of the boiler (version + TANK), to guarantee maximum hygiene, reliability and long life, even in installations without water treatment, with rapid heat exchange without the need for a sanitary circuit or storage tank, ensuring immediate hot water.

All of this is achieved with minimal consumption of electricity or fuel, resulting in the maximum comfort of hot water at a constant temperature and maximum reduction of consumption with lower available energy power.

The thermal containment. Reducing heat loss.

The boilers in the **ELEKTRA SMALL C x Inside** range are supplied with a general containment system for all the internal components and the BOX containing the structure, which allows it to be installed inside buildings during operation. The technical materials used for all the boiler components are made of expanded-density melamine resin, which guarantees optimal protection and thermal insulation.

The boiler compartment is made of injected polyurethane foam and melamine resin, specially treated for perfect thermal insulation.

The boilers in the **Elektra SMALL C x Inside** range are free from a general insulation system for the structure's casings, which reduces thermal dispersion and makes the appliances very quiet during operation. The material used is melamine resin for all parts of the casing and the boiler body. The heaters are protected by injected polyurethane, which is shielded and compartmentalised by an enamelled steel sheet.



Accumulation tank insulation
in polyurethane, protected by an enamelled steel sheet.

The preheated storage water heater
in polyurethane, protected by an enamelled steel sheet.

The insulation of the side, top and front panels of the BOX and the bottom and front casings are made of melamine resin, with special melamine resin panels.

INSTALLATION AND MAINTENANCE – For After-Sales.

The **ELEKTRA SMALL C x Inside** boilers are very easy to install, with simple hydraulic, electrical and vertical connections, and easy access to all internal parts using the front-opening panels of the BOX and the vertical hydraulic connections and the positioning of the Kit to connect the boiler to the BOX and the system connections. This also includes the option to integrate a dirt separator for the heating system and a polyphosphate dispenser for the cold domestic water inlet inside the BOX.



Complete integrated filter with isolation taps for inlet and outlet circuits.

Polyphosphate dispenser for cold domestic water inlet.

The electrical connection is designed with fast-opening front closure and quick, easy access to the internal parts of the BOX. This unit can be used in a high temperature operating mode, in a weekly or daily programmed mode, with systems for thermal temperature, thermostatic or sliding temperature regulation, and with radiant panel mounting at low temperature.

The connection of the external temperature sensor for system operation at variable temperature, with a curving climatic function, allows the use of the remote control panel with room chronothermostat function.

The connections on the upper and lower closure panels of the boiler and on both sides of the BOX can be used with any type of room thermostat: weekly/daily programmable thermostat. Additionally, they can be installed in heating systems of all sizes, with multiple temperature levels, for zoned systems, indoor heating, and/or radiant wall systems, suitable for high, medium, or low-temperature applications. They can also be connected to temperature sensors or sliding sensors with a climatic curve. For remote internal control, a dedicated remote panel with advanced thermostat functionality and boiler control can be used, requiring only a two-wire connection.

Technical Features

Elektra SMALL C x Inside series

Model	U.M.	WITHOUT STORAGE TANK / No Tank		
		12 kW	15 kW	18 kW
Thermal power (circuit for heating)	kW	12	15	18
Thermal power (circuit for domestic hot water)	kW	12	15	18
Nominal resistance (heating circuit)	n°xkW	2x6	1x6	2x9
Nominal resistance (domestic hot water circuit)	n°xkW	-	1x9	2x9
Operating pressure (heating circuit)	bar	2.5	2.5	2.5
Max. pressure, safety valve	bar	3	3	3
Expansion tank capacity	litres	7	7	7
DHW circuit content	litres	7	7	7
Heating circuit pressure	bar	0.6	0.6	0.6
DHW circuit pressure	bar	0.25	0.25	0.25
Domestic hot water circuit pressure	bar	0.05	0.05	0.05



Electrical supply
(no tank version /
single-phase version)
230/240V ~ 50 Hz
(Ph + N)

Electrical supply
(with tank version /
three-phase version)
400V ~ 50 Hz
(3Ph + N)

Expansion vessel capacity
(circuit for heating)
9 L



WITH STORAGE TANK

Model	U.M.	with Tank						
		6 kW	7 kW	8 kW	9 kW	12 kW	15 kW	18 kW
Thermal power (circuit for heating)	kW	6	7	8	9	12	15	18
Thermal power (circuit for domestic hot water)	kW	4+2	5+2	6+2	7+2	10+2	13+2	16+2
Nominal resistance (heating circuit)	n°xkW	2x3	1x3	1x3	1x3	2x6	1x6	2x9
Nominal resistance (domestic hot water circuit)	n°xkW	1x2	1x2	1x2	1x2	1x2	1x2	1x2
Operating pressure (heating circuit)	bar	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Max. pressure, safety valve	bar	3	3	3	3	3	3	3
Expansion tank capacity	litres	5.5	5.5	5.5	5.5	5.5	5.5	5.5
DHW circuit content	litres	6.5	6.5	6.5	6.5	6.5	6.5	6.5
Heating circuit pressure	bar	7	7	7	7	7	7	7
DHW circuit capacity (storage tank)	litres	7	7	7	7	7	7	7
Expansion vessel capacity (storage tank circuit)	litres	35	35	35	35	35	35	35
Heating circuit pressure	bar	0.6	0.6	0.6	0.6	0.6	0.6	0.6
DHW circuit pressure	bar	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Domestic hot water circuit pressure	bar	0.05	0.05	0.05	0.05	0.05	0.05	0.05



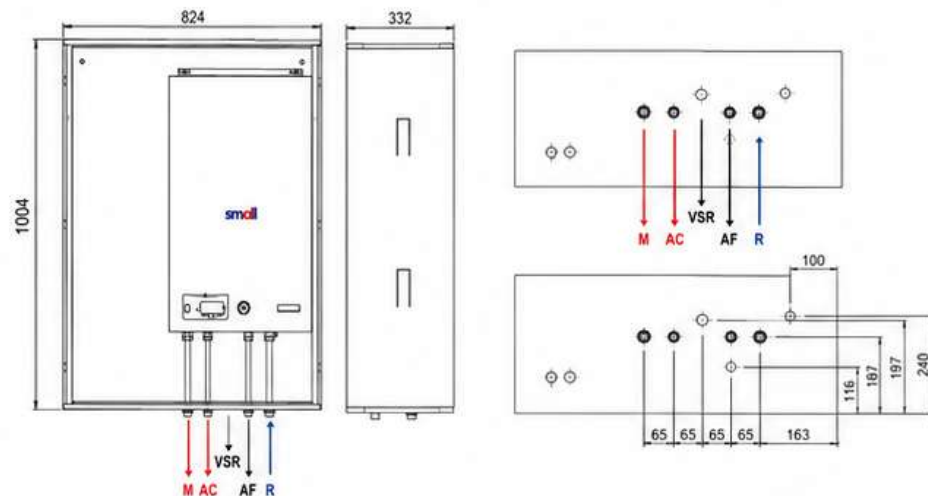
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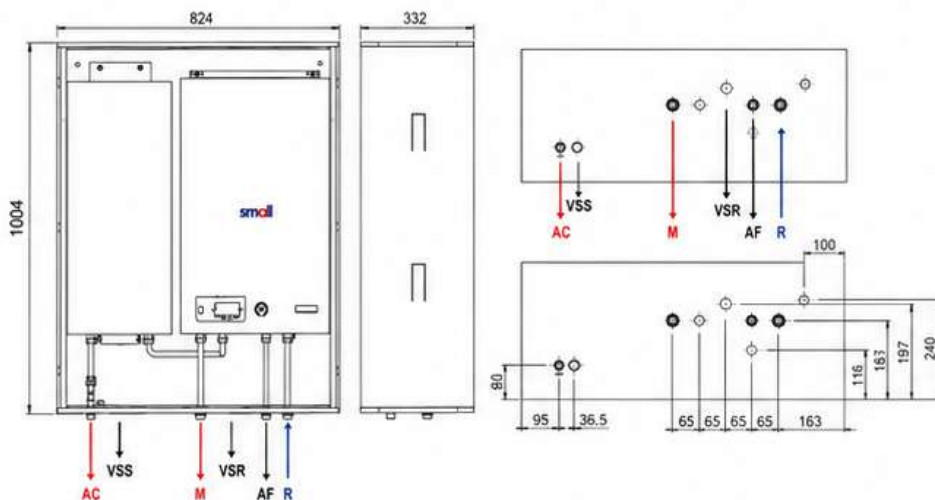


Dimensional scheme

No tank version



With tank version



Hydraulic connections legend

VSR	- Safety heating circuit flow
AF	- Domestic hot water cold inlet / Safety valve drain
VSS	- Domestic hot water outlet / Safety DHW circuit return
AC	- Domestic hot water inlet / Hot water outlet
M	- System flow / Heating system delivery
R	- System return / Heating system return

Weight and hydraulic connections table

Model	CONNECTIONS			
	HEATING		SANITARY / DHW	
	Flow	Return	Domestic cold water inlet	Domestic hot water outlet
Small C	3/4" (M)	3/4" (M)	1/2" (M)	1/2" (M)

ACCESSORI A RICHIESTA - Componenti per la sicurezza e affidabilità della caldaia e dell'impianto.

ACCESSORIES ON REQUEST - OPTIONAL - Components for the safety and reliability of the boiler and the system.

Pannello remoto di comando caldaia

Il pannello remoto di comando caldaia, serie OT11, si collega alla caldaia tramite due soli fili, non necessita di alimentazione elettrica e permette all'utente di impostare tutti i funzionamenti, di visualizzare le varie informazioni di funzionamento, i guasti. È provvisto di una funzione cronotermostato per programmare il funzionamento della caldaia secondo le proprie esigenze. Dimensioni: 140x90x32 mm.



Remote control panel for boiler

The remote boiler control panel, OT11 series, connects to the boiler via just two wires, does not require power supply and allows the user to set all the functions, view the various operating information, alarms. It is equipped with a chronothermostat function to program the boiler operation according to your needs.

Dimensions: 140x90x32 mm.

Filtro Defangatore completo di rubinetti di intercettazione.

Il Filtro defangatore FAMMA, è completo di inserto calamita ad estrazione per catturare la magnetite e lo sporco metallico contenuto nell'acqua dell'impianto, realizzato in materiale composito e ottone è provvisto di valvola sfiato manuale e rubinetti di scarico impianto con porta-gomma.

Magnete inclusi nel separatore completo di valvola di sfato.



The FAMMA Magnetic filter dirt separator is complete with an extraction magnet insert to capture the magnetite and metallic dirt contained in the system water, made of composite material and brass, it is equipped with a manual vent valve and a system drain valve with hose holder.

Dosatore di polisolfati sotto caldaia.

Realizzato con corpo in ottone è fornito di ricarica di cristalli di polisolfato per circuito sanitario. Taratura media di carica: da cristalli 35-40 m³ di acqua calda sanitaria (dati riferiti ad acqua con durezza media di 12°f, pH 7, temperatura 20 °C e consumo medio di acqua calda sanitaria). È completo di rubinetto di chiusura per manutenzione serbatoio cristalli.

Under-boiler polyphosphate dispenser

Complete with polyphosphate crystal refill for domestic hot water circuit.

Average crystal refill shelf life: 35-40 m³ domestic hot water (data referring to water with an average hardness of 12°f, pH 7, temperature 20 °C and average domestic hot water usage). It is complete with a shut-off tap for glass tank maintenance.



Kit Tubi di collegamento Caldaia / Box

I Kit tubi di collegamento sono di varia tipologia, per sola caldaia combinata istantanea, per caldaia combinata con accumulo interno, per versioni complete di Dosatore di polisolfati e filtro defangatore. Nelle versioni con accumulo, il kit è completo di gruppo acqua calda con valvola di sicurezza da 6 bar.



Boiler / Box Connection Pipe Kit

The connection pipe kits are of various types, for instantaneous combined boiler only, for combined boiler with internal storage, and for the version complete with polyphosphate doser and mud filter.

In the versions with storage, the kit is complete with hot water group with 6 bar safety valve.