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1972-2022

 **sime**
VALUING YOUR CLIMATE



EDEA
PERFECT BALANCE

EDEA



HIGH MODULATION

Power modulation up to 1:10

3-PIECES METAL CASING

For easier maintenance



EXCHANGER WITH LARGE SECTION

A new stainless steel mono-tube heat exchanger with enlarged cross-sectional dimensions for the water flow

IT CAN BE INSTALLED OUTDOOR OR BUILT-IN

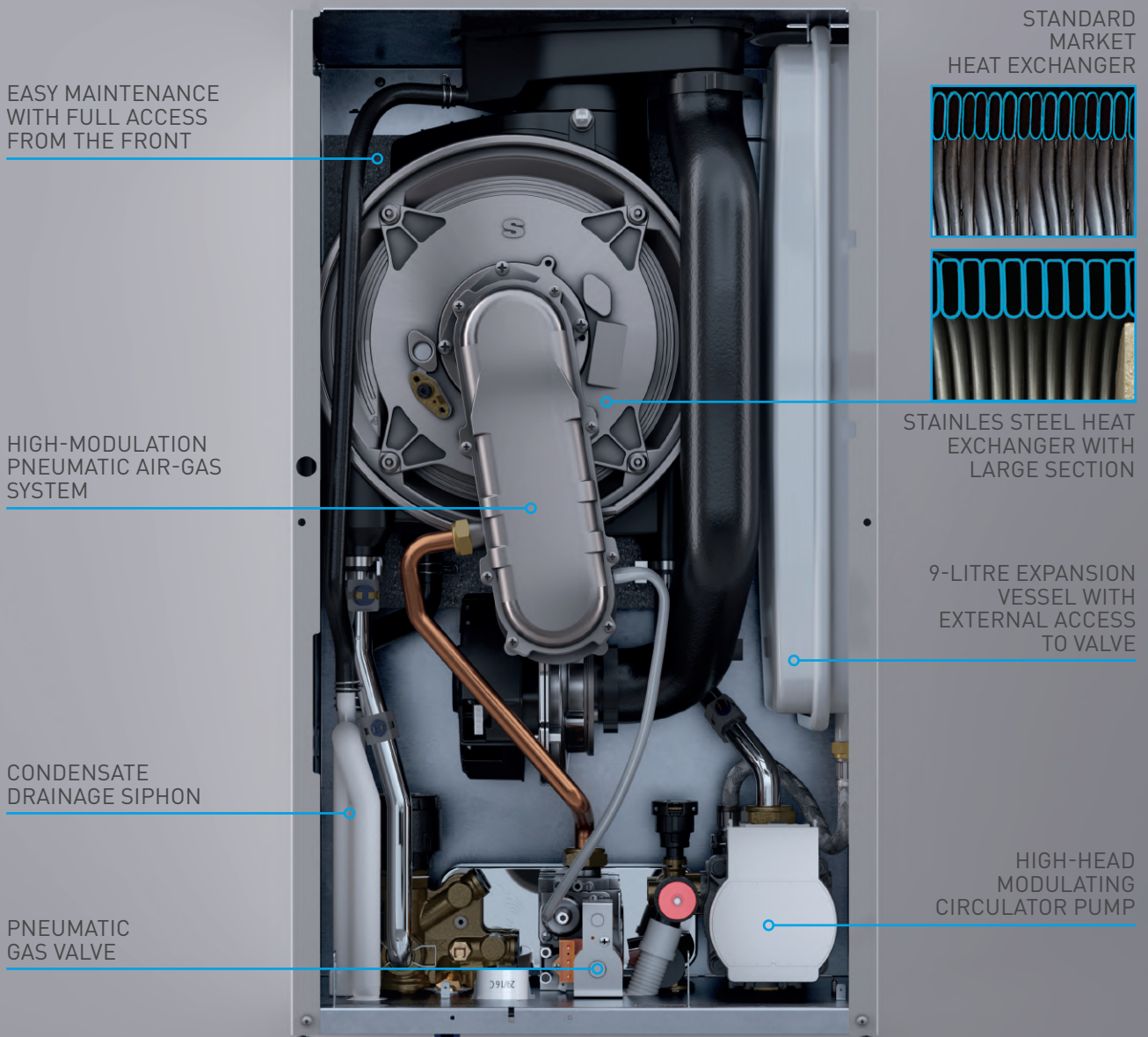
Using appropriate accessories or kits



HIGH-EFFICIENCY MODULATING CIRCULATOR PUMP

Suitable also for radiant heating systems

THE BOILER FOR EACH TYPE OF SYSTEM



MODULATION RANGE UP TO 1:10

The thermal efficiency of casings has improved over the past few years, causing a sensible drop in the heating load of homes (30-35 Watt/m²). For a 100 m² house, an average power of 3,0-3,5 kW is enough and can be further reduced the smaller the surface area of the home. A conventional condensing boiler is therefore subject to continuous on-off cycles that partly offset its

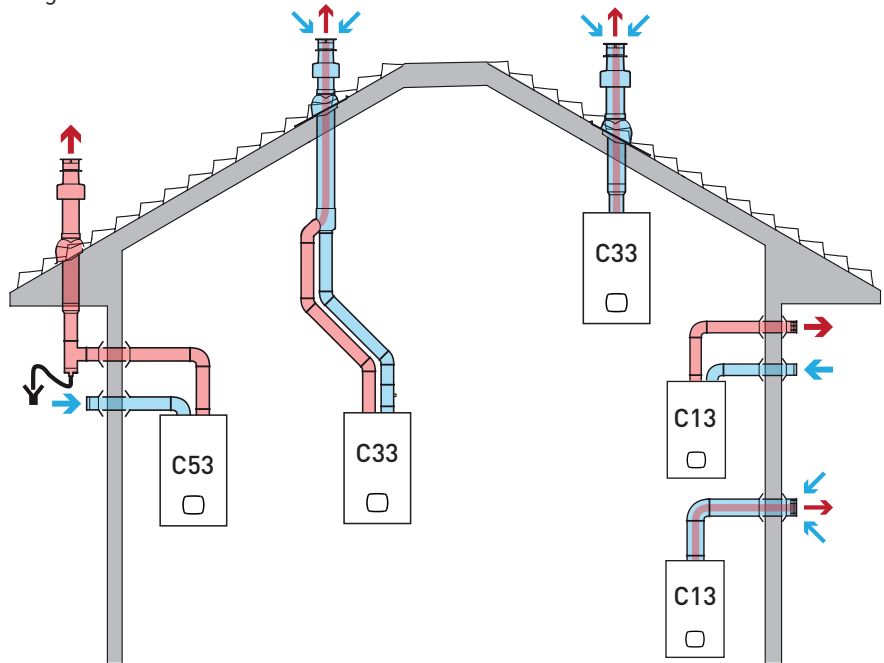
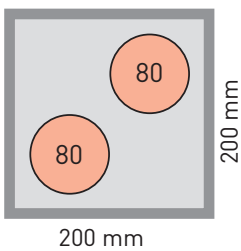
high combustion performance. **EDEA** has a power modulation ratio up to 1:10. This means, for example, that **EDEA 25** can supply power continuously starting from a minimum 2,8 kW up to a maximum of 24,5 kW. With its high modulation power, **EDEA** reduces boiler cycling, thus improving the seasonal performance of the heating system.

FLUE PIPE DUCTING

Flue pipes or existing technical air shafts can be ducted using $\varnothing 80$ mm rigid or flexible ducts, depending on the indications of the reference standard.

In this way, **EDEA** can solve potential fume exhaust problems that may occur when replacing an old conventional boiler.

DUCTING EXAMPLES FOR 200x200 mm FLUE PIPE WITH DUCTS SIZE: - $\varnothing 80$ mm



HIGH EFFICIENCY MODULATING CIRCULATION PUMP

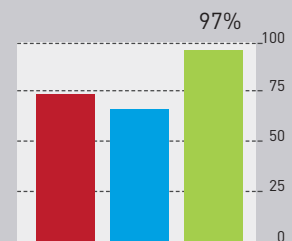
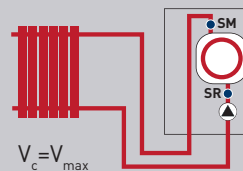
The maximum energy efficiency of a condensing boiler is obtained when the return temperature of the plant is lower than $45-50^{\circ}\text{C}$.

This is why the common thought is that the condensing boiler must be connected to low temperature radiant systems.

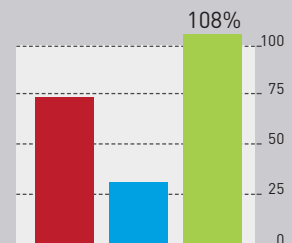
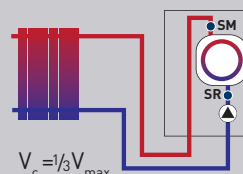
With **EDEA**, if necessary, the flow rate decreases automatically, which extends the duration of the exchange with the environment and lowers the temperature of the water returning to the boiler.

Consequently, **EDEA** self-regulates so that it always operates in condensing mode, regardless of the type of system served. The variable-capacity circulator pump is extremely useful when replacing existing systems, which are normally based on conventional radiators.

HIGH SPEED OF THE CIRCULATION PUMP



LOW SPEED OF THE CIRCULATION PUMP



■ Flow Temperature ($^{\circ}\text{C}$) ■ Return Temperature ($^{\circ}\text{C}$) ■ Efficiency (%)

MAXIMUM COMFORT AND SAVING BY COMBINING A REMOTE CONTROL

Sime Home Plus



- Weekly chrono-thermostat with room temperature sensor
- Display of operation of boiler and solar heating system (if present)
- Continuous modulation of system delivery temperature (class V reg.)
- Boiler anomaly warnings
- Warning of faults on the boiler, with relative description and the possibility of resetting it

Sime Smart - Sime Smart Plus



- Wi-Fi connection for remote control via the free Sime Connect App
- Weekly chrono-thermostat function programmable via App or colour display (Plus version)
- Continuous modulation of system delivery temperature (class V reg.)
- Boiler anomaly warnings
- Data communication with Sime boilers via 2-wire bus

DIGITAL CONTROL INTERFACE

PARAMETER MODIFICATION AND SETTING

PARAMETER MODIFICATION AND SETTING

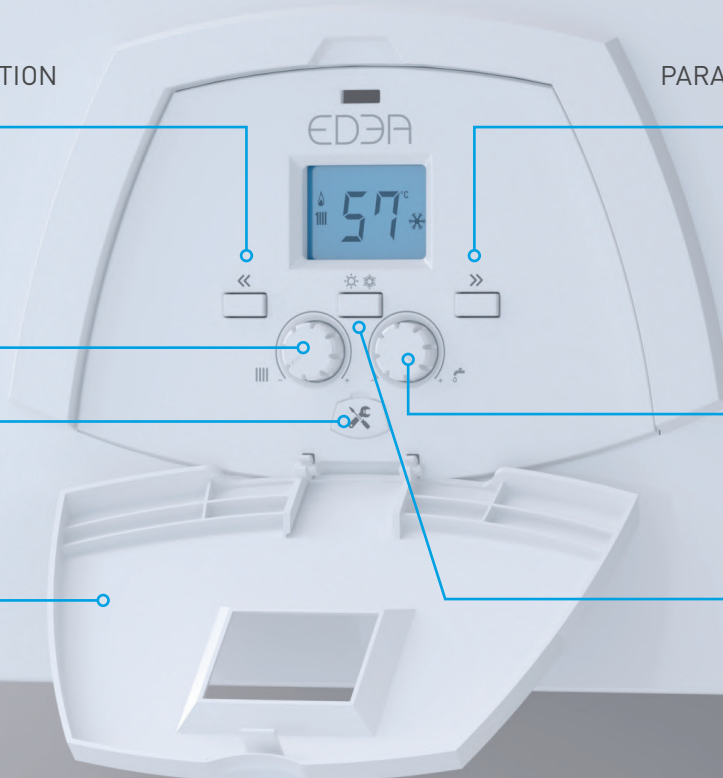
HEATING TEMPERATURE ADJUSTMENT

HOT WATER TEMPERATURE ADJUSTMENT

SERVICE CONNECTOR

FLAP

ON-OFF RESET SUMMER-WINTER



THE SMALL BOILER IS ALREADY GREAT

A highly compact new-generation wall-mounted boiler, **EDEA** is the ideal solution for modern home environments in which space must be optimally exploited. Despite its limited dimensions, its technical characteristics and solutions are typical of other product classes.

All models with power up to 40 kW measure 70 x 40 x 25 cm, making this product ideal for replacing existing boilers. Moreover, thanks to dedicated accessories, it can be easily installed outdoors and in built-in configurations.



Casing for outdoors

Cabinet for built-in version

EXPANDIBILITY BEYOND EXPECTATIONS

The **EDEA** boilers are designed with a wide plant flexibility: the possibility of managing a modern heating system significantly increases due to the number of dedicated accessories.

SOLAR KIT WITH THERMOSTATIC VALVE

Kit that intercepts hot water coming from a solar circuit and directs it to the boiler, possibly mixed, that will activate to integrate if needed.

MANAGEMENT KIT OF A MIXED AREA

Kit consisting of an electronic board, temperature probe and mixing valve to manage a low temperature area. The kit includes the Sime Home Plus remote control.

MANAGEMENT KIT OF FOUR DIRECT AREAS

Kit consisting of an electronic board and Sime Home Plus remote control to manage 4 areas.

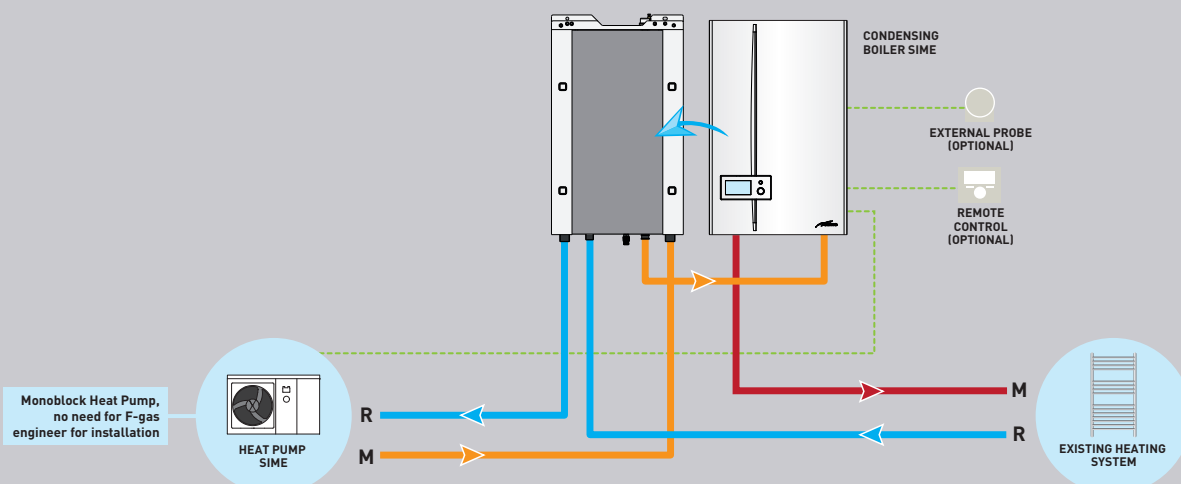
EXPANSION BOARD KIT WITH TWO RELAY

Through appropriate parameter setting, can perform two of the following functions: alarm for remoteness of occurred anomaly, area valve controlled by ambient thermostat or remote control, automatic loading of boiler.

HYBRID WALL

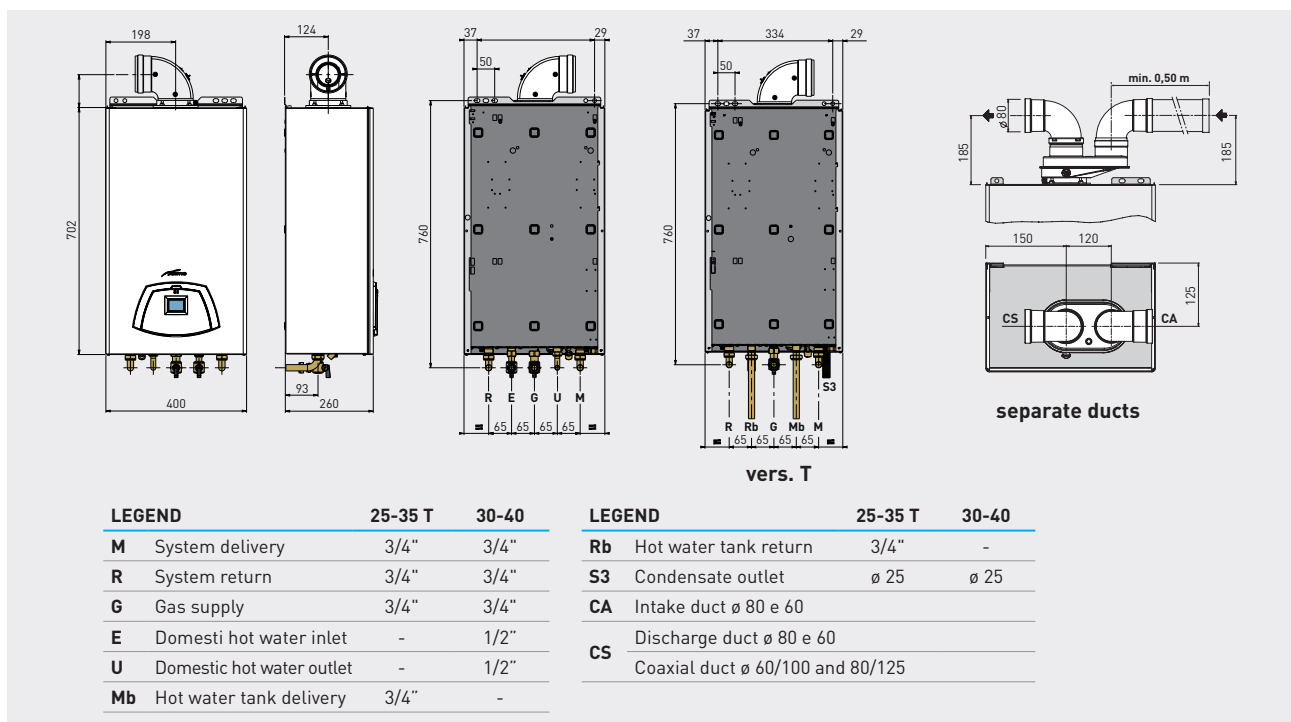
Thanks to **HYBRID WALL**'s specific hydraulic configuration, the **HEAT PUMP** always operates on the return flow from the system, thus maintaining high efficiency even in radiator systems.

The temperature control electronics of the entire system, including those in the boiler, automatically activate the burner for integration or complete replacement, based on the external temperature and convenience.



TECHNICAL DATA

Edea		30	40	25 T	35 T
Nom/min heat input in DHW mode	kW	30,0 / 3,0	40,0 / 4,5	25,0 / 2,5	34,8 / 4,5
Nom/min heat input in heating mode	kW	25,0 / 3,0	34,8 / 4,5	25,0 / 2,5	34,8 / 4,5
Nom/min heat output (80-60°C)	kW	24,5 / 2,8	34,1 / 4,2	24,5 / 2,3	34,1 / 4,2
Nom/min heat output (50-30°C)	kW	26,4 / 3,1	36,7 / 4,7	26,4 / 2,6	36,7 / 4,7
Max/min useful efficiency (80-60°C)	%	98,0 / 93,3	98,0 / 93,3	98,0 / 93,3	98,0 / 93,3
Max/min useful efficiency (50-30°C)	%	105,8 / 104,7	105,6 / 104,2	105,8 / 104,7	105,6 / 104,2
Useful efficiency at 30% load (40-30°C)	%	108,7	108,5	108,8	108,5
Energy efficiency class of heating function		A	A	A	A
Energy efficiency class of DHW function		A	A	-	-
Domestic hot water load profile		XL	XXL	-	-
Heating sound power	dB (A)	55	56	55	56
Maximum electrical power	W	93	113	93	113
Electrical protection rating	IP	X5D	X5D	X5D	X5D
Heating adjustment range	°C	20÷80	20÷80	20÷80	20÷80
Water content in boiler	l	5,1	5,8	5,1	5,8
Pressione max esercizio	bar	3	3	3	3
Maximum operating pressure	°C	85	85	85	85
Heating expansion vessel capacity	l	9	10	9	9
Heating expansion vessel pressure	bar	1	1	1	1
Domestic hot water adjustment range	°C	10÷60	10÷60	10÷60	10÷60
Specific DHW flow rate (EN 13203)	l/min	13,0	18,8	-	-
Continuous DHW flow rate (ΔT 35°C)	l/min	12,0	16,1	-	-
Maximum DHW flow rate	l/min	2,0	2,0	-	-
Max/min DHW pressure	bar	7,0 / 0,5	7,0 / 0,5	-	-
Max horizontal straight length of duct ø 60/100	m	6	10	6	10
Max horizontal straight length of duct ø 80/125	m	12	18	12	18
Max horizontal straight length of ducts 80+80	m	25+25	25+25	25+25	25+25
NOx Class (EN 15502-1:2015)		6	6	6	6
Weight	kg	28,4	30,8	27,4	29,9





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