



# EDEA HM

PERFECT BALANCE

# EDEA HM



## HIGH MODULATION

Power modulation up to 1:10



## EXCHANGER WITH LARGE SECTION

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



## HIGH-EFFICIENCY MODULATING CIRCULATOR PUMP

Suitable also for radiant heating systems

## 3-PIECES METAL CASING

For easier maintenance

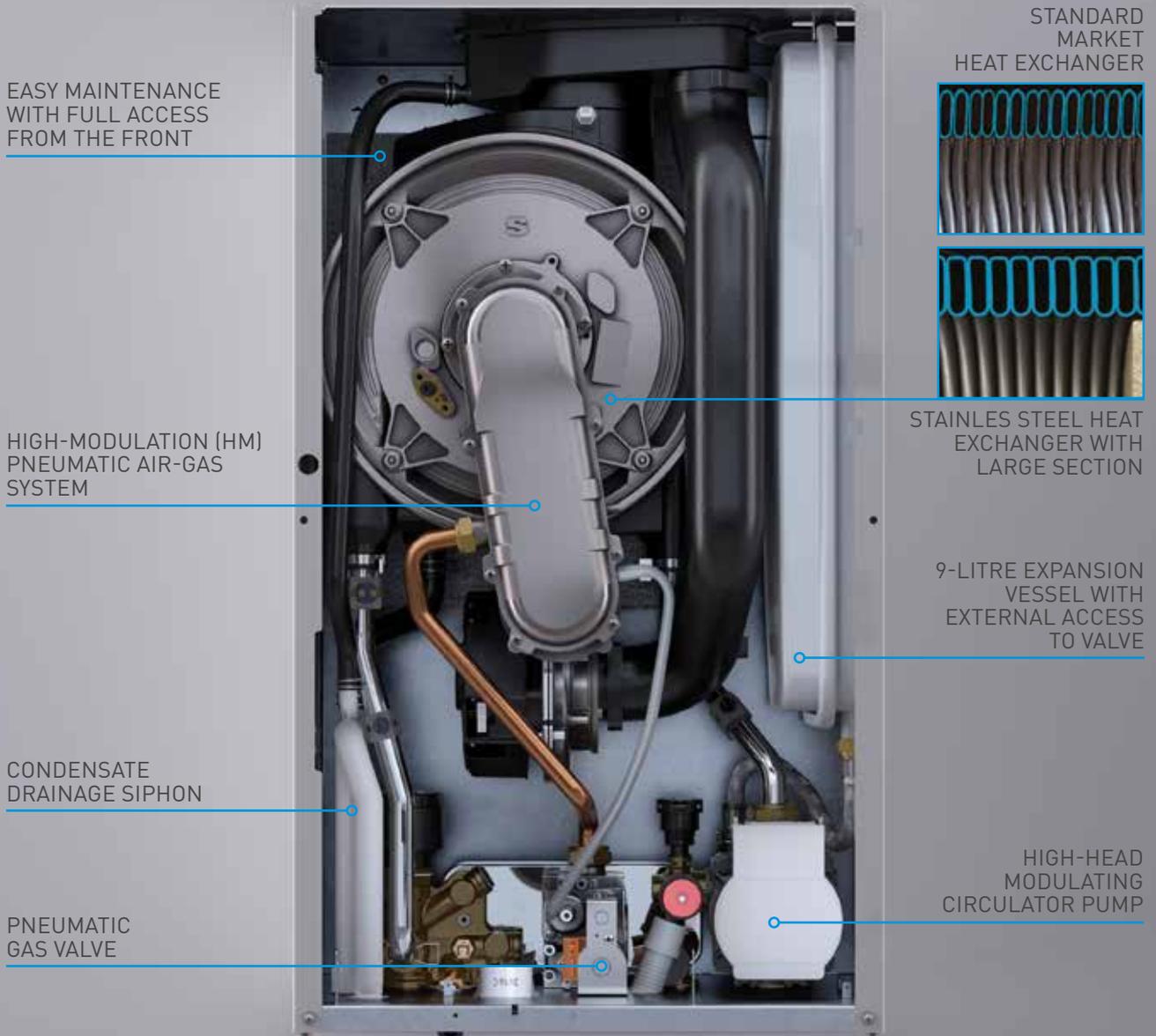


## IT CAN BE INSTALLED OUTDOOR OR BUILT-IN

Using appropriate accessories or kits



# 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/m<sup>2</sup>). For a 100 m<sup>2</sup> 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

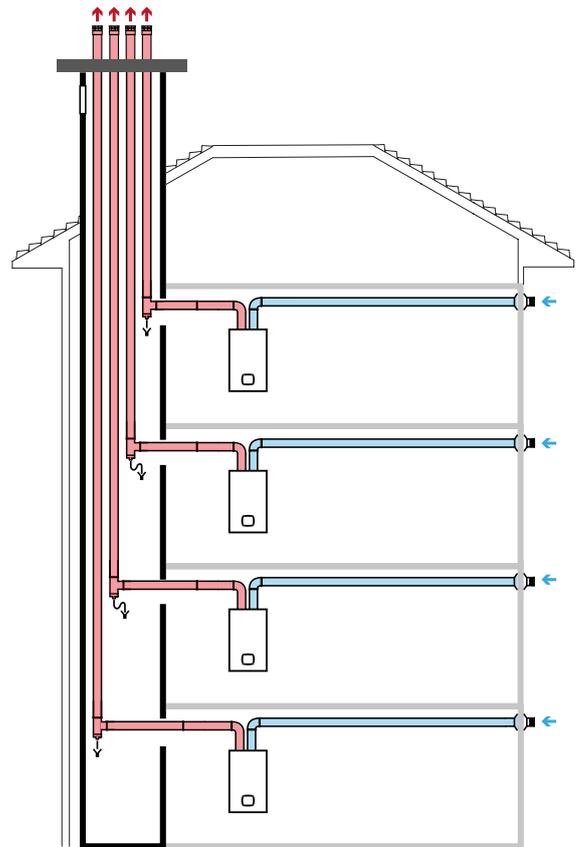
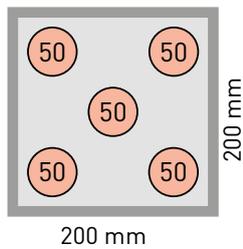
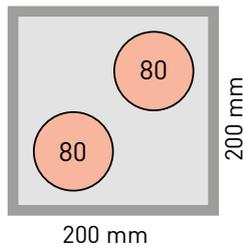
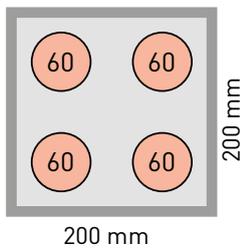
combustion performance. **EDEA HM** has a power modulation ratio up to 1:10. This means, for example, that **EDEA HM 25** can supply power continuously starting from a minimum 2,3 kW up to a maximum of 24,5 kW. With its high modulation power, **EDEA HM** reduces "Stop&Go" activities, thus improving the seasonal performance of the heating system.

# FLUE PIPE DUCTING

Flue pipes or existing technical air shafts can be ducted using  $\varnothing$  60 mm or  $\varnothing$  50 mm rigid or flexible ducts, depending on the indications of the reference standard. In this way, **EDEA HM** 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
- $\varnothing$  60 mm
- $\varnothing$  50 mm



# HIGH EFFICIENCY MODULATING CIRCULATION PUMP

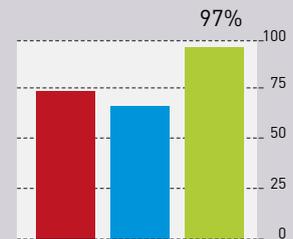
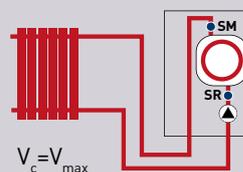
The maximum energy efficiency of a condensing boiler is obtained when the return temperature of the plant is lower than 45-50°C.

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

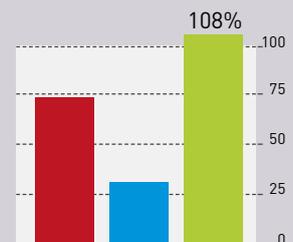
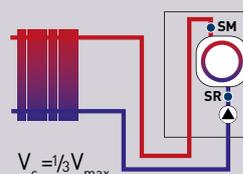
With **EDEA HM**, if necessary, the flow rate decreases automatically, which extends the duration of the exchange with the environment and lowers the temperature of the water returning to the boiler.

Consequently, **EDEA HM** 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 (°C) ■ Return Temperature (°C) ■ Efficiency (%)

# COMFORT AND SAVING WITH SIME HOME PLUS

The perfect complement for **EDEA HM**, it ensures maximum saving and ideal comfort at all times thanks to continuous modulation and the weekly timer-controlled thermostat function.



## CONTINUOUS MODULATION

Of the system delivery temperature



## WEEKLY TIMER-CONTROLLED THERMOSTAT

With room temperature sensor



## OPERATION DISPLAY

Of the boiler and solar heating system (if present)



## WARNING OF FAULTS

On the boiler, with relative description and the possibility of **RESETTING** it



## ASSISTANCE CENTRE CONTACT INFO

The assistance service contact numbers can be set for being displayed in case of faults



## 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 HM** 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 HM** 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.

### 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.

### 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.

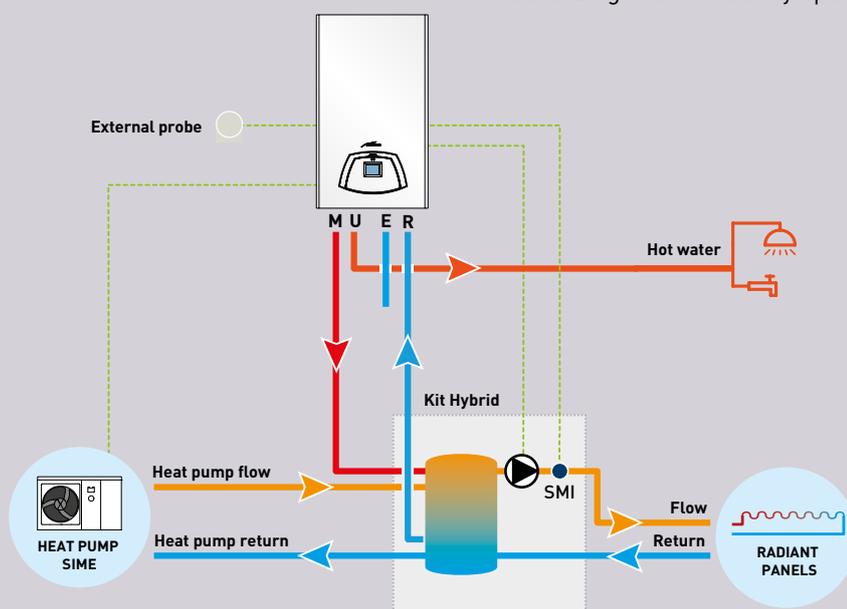
### MANAGEMENT KIT OF FOUR DIRECT AREAS

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

### KIT HYBRID

A kit consisting of an inertial storage tank, hydraulic separator and booster pump for optimally integrating **EDEA HM** with a **HEAT PUMP**.

The electronic management system integrated into the boiler is used to automatically activate the 2 generators according to an efficiency optimisation logic.



# TECHNICAL DATA

Edea HM		25	30	35	40	25 T	35 T
Nom/min heat input in DHW mode	kW	25,0 / 2,5	30,0 / 3,0	34,8 / 3,48	40,0 / 4,5	25,0 / 2,5	34,8 / 4,5
Nom/min heat input in heating mode	kW	25,0 / 2,5	25,0 / 3,0	30,0 / 3,48	34,8 / 4,5	25,0 / 2,5	34,8 / 4,5
Nom/min heat output (80-60°C)	kW	24,5 / 2,3	24,5 / 2,8	29,5 / 3,3	34,1 / 4,2	24,5 / 2,3	34,1 / 4,2
Nom/min heat output (50-30°C)	kW	26,4 / 2,6	26,4 / 3,1	32,0 / 3,6	36,7 / 4,7	26,4 / 2,6	36,7 / 4,7
Max/min useful efficiency (80-60°C)	%	98,0 / 93,5	98,0 / 93,3	98,4 / 93,5	98,0 / 93,3	98,0 / 93,3	98,0 / 93,3
Max/min useful efficiency (50-30°C)	%	105,8 / 104,7	105,8 / 104,7	106,6 / 104,1	105,6 / 104,2	105,8 / 104,7	105,6 / 104,2
Useful efficiency at 30% load (40-30°C)	%	108,7	108,7	108,5	108,5	108,8	108,5
Energy efficiency class of heating function		A	A	A	A	A	A
Energy efficiency class of DHW function		A	A	A	A	-	-
Domestic hot water load profile		XL	XL	XL	XXL	-	-
Heating sound power	dB (A)	55	55	55	56	55	56
Maximum electrical power	W	82	93	100	113	93	113
Electrical protection rating	IP	X5D	X5D	X5D	X5D	X5D	X5D
Heating adjustment range	°C	20÷80	20÷80	20÷80	20÷80	20÷80	20÷80
Water content in boiler	l	5,1	5,1	5,5	5,8	5,1	5,8
Maximum operating pressure	bar	3	3	3	3	3	3
Max operating temperature	°C	85	85	85	85	85	85
Heating expansion vessel capacity	l	9	9	9	10	9	9
Heating expansion vessel pressure	bar	1	1	1	1	1	1
Domestic hot water adjustment range	°C	10÷60	10÷60	10÷60	10÷60	10÷60	10÷60
Specific DHW flow rate (EN 13203)	l/min	11,3	13,0	16,5	18,8	-	-
Continuous DHW flow rate (ΔT 25°C)	l/min	14,0	16,9	19,7	22,9	-	-
Maximum DHW flow rate	l/min	2,0	2,0	2,0	2,0	-	-
Max/min DHW pressure	bar	7,0 / 0,5	7,0 / 0,5	7,0 / 0,5	7,0 / 0,5	-	-
Max horizontal straight length of duct ø 60/100	m	6	6	6	10	6	10
Max horizontal straight length of duct ø 80/125	m	12	12	12	18	12	18
Max horizontal straight length of ducts 80+80	m	25+25	25+25	25+25	25+25	25+25	25+25
Max horizontal straight length of ducts 60+60	m	18+18	16+16	14+14	16+16	18+18	16+16
Max horizontal straight length of ducts 50+80*	m	30+5	22+5	12+5	12+5	30+5	12+5
NOx Class (EN 15502-1:2015)		6	6	6	6	6	6
Weight	kg	28,3	28,4	30,2	30,8	27,4	29,9

\* For ducting a ø 50 mm smoke outlet with ø 80 mm intake

