DOMUSA
TEKNIK

OIL FIRED CONDENSING BOILER

EVOLUTION EV HFM / EVOLUTION EV HFC

ErP Compliant A A

HIGH PERFORMANCE
STAINLESS STEEL CONDENSER
CAST IRON BODY
POLYPROPYLENE FLUE DUCTS
2 VERSIONS: EVOLUTION EV HFC (ONLY HEATING), EVOLUTION HFM (COMBINATION BOILER)
POWER RANGE FROM 20 TO 40 kW



The most advanced technology
at the most reasonable price

The EVOLUTION EV HF boiler belongs to a new generation of boilers that respond to users' requirements in terms of energy-saving and ecological concerns while preserving optimal comfort and reliability.

Silent

The effective acoustic isolation of the body and the boiler housing, as well as the use of an airtight burner, makes this boiler a discrete companion.

Ecological

The EVOLUTION EV HF boiler permits the reduction of contaminating CO_2 emissions, contributing to the reduction of the greenhouse effect, as this boiler consumes less energy than a conventional boiler to provide the same power and performance.

Cast iron body

The body of the boiler is made of cast iron which ensures its long life.

Range: 2 versions

EVOLUTION EV HFM:

This boiler can produce high quantities of instant hot water with a double pump system that ensures reduced maintenance costs.

EVOLUTION EV HFC:

This boiler is exclusively prepared for heating. It is equipped with hydraulic and electrical connection to connect a cylinder.



EVOLUTION EV HFM
EVOLUTION EV HFC

SAVINGS

The **EVOLUTION EV HF** boiler takes advantage of the condensation effect of the combustion gases **reaching yields of over 104% LHV.**

To take advantage of this effect, the combustion gas temperature must be reduced to below the dew point temperature. This gas temperature reduction takes place in the condenser.

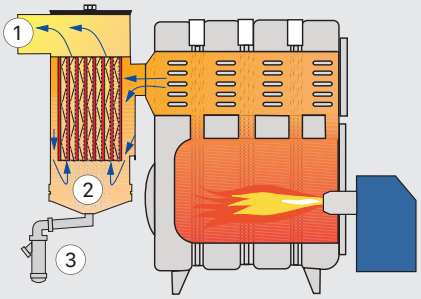
This condenser is especially designed to prevent unburnt combustion fuel from depositing on the

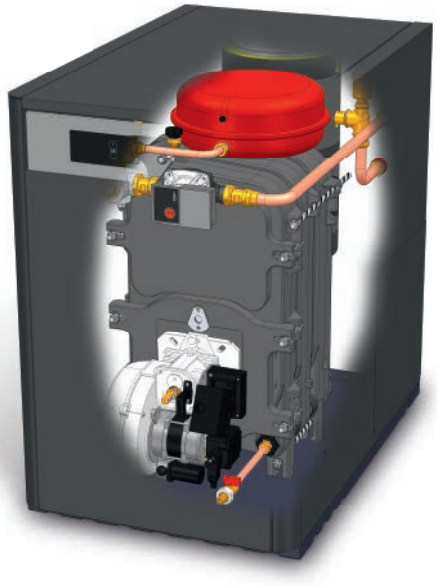
condenser interchange surface, thus reducing maintenance costs.

The **EVOLUTION EV HF** boiler is equipped with a modulating hot water production system that stabilises the water temperature, adapting it to the temperature selected on the control panel, regardless of the water flow required and of the cold water intake temperature at any given time.

Modulation enables the continuous adaptation of the boiler power to the hot water demand at any time, allowing it to work at lower boiler temperatures. With this system cold returns, as well as low fume temperatures, are achieved even when producing DHW, by taking advantage of the latent heat to **reduce consumption.**

1. GAS OUTLET
2. CONDENSATES
3. CONDENSING DRAIN





EASE OF USE

Priority has been given in the design of this boiler to make it **easy for users** to handle. Thus, the boiler integrates a highly intuitive control panel.

The boiler is controlled with an electronic system that provides considerable safety and operating advantages.

Worthy of note among these advantages are:

Safety system in case of lack of water

It prevents breakages in boiler body due to lack of water.

Pump anti-blocking system

It reduces the maintenance of the circulation pumps.

Anti-inertia system

Post-circulation system in order to prevent overheating in the boiler body.

Anti-freeze system

When the boiler temperature goes below 6ºC, the boiler is activated even if it is switched off, in order to avoid problems in the system due to freezing.

Legionella prevention system

The temperature of the tank in these boilers regularly rises to 70ºC, thus avoiding the formation of legionella.

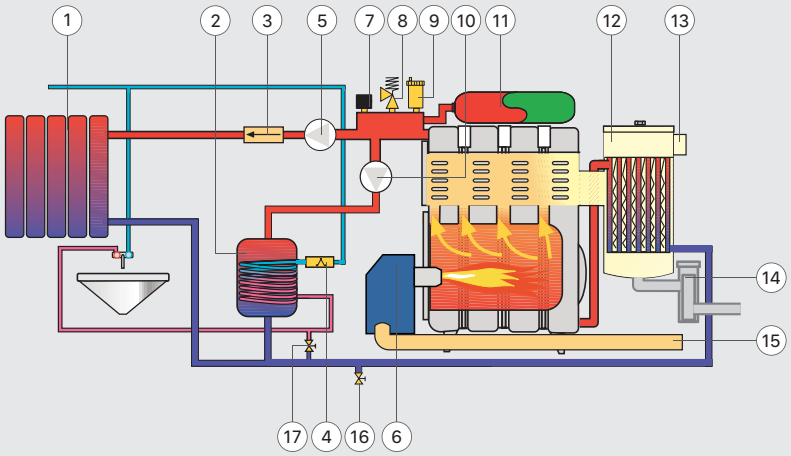
SIMPLICITY OF INSTALLATION

The design simplifies the installation for the professional, allowing for fast installation.

As it does not use air from the room for combustion, **the boiler can even be installed in rooms without ventilation**, thus making installation easier.

HYDRAULIC DIAGRAM:

1. Radiator
2. Heat exchanger
3. Heating retaining valve
4. Summer retaining valve
5. Heating pump
6. Burner
7. Pressure transducer
8. Safety valve
9. Automatic air vent
10. Summer pump
11. Expansion vessel
12. Condenser
13. Gas outlet
14. Condensate drain
15. Air intake
16. Emptying valve
17. Fill valve

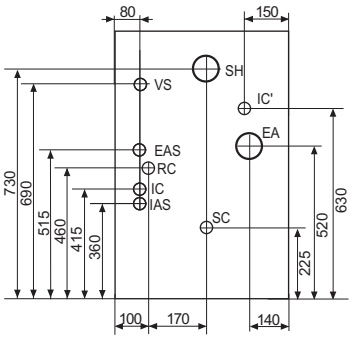




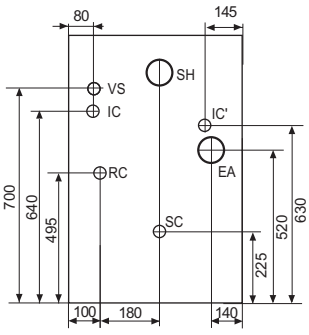
DIMENSIONS

IC: Heating flow.
RC: Heating return.
EAS: Domestic cold water intake.
IAS: Domestic hot water intake.
VS: Safety valve.
V: Emptying.
SH: Gas outlet.
SC: Condensate outlet.
EA: Air intake.
IC': Optional heating flow.

Model	IAS EAS	IC RC	EA mm	SH mm	Depth mm	Height mm	Width mm	Weight (Kg)
EV25 HFM	1/2" M	3/4"M	80	100	755	550	840	150
EV30 HFM	1/2" M	3/4"M	80	100	855	550	840	160
EV40 HFM	1/2" M	1"M	80	100	955	550	840	190
EV20 HFC	–	1"M	80	100	755	550	840	122
EV30 HFC	–	1"M	80	100	855	550	840	155
EV40 HFC	–	1"M	80	100	955	550	840	180



EVOLUTION EV HFM



EVOLUTION EV HFC

EQUIPMENT

	EV HFM	EV HFC		EV HFM	EV HFC
Heating retaining valve	•	•	Coil heat exchanger	•	
Heating pump	•	•	Flow switch	•	
Summer pump	•		Hot water flow rate limiter	•	
Pressure transducer	•	•	Pump anti-blocking	•	•
Safety valve	•	•	Minimum pressure relief device	•	•
Automatic air vent	•	•	Anti-freeze	•	•
Summer retaining valve	•		Hot water modulation	•	
Heating expansion vessel	•	•	Electrical connection for tank		•
Fill valve	•		**OPTIONS**		
Condensing boiler	•	•	Underfloor heating kit SRAM2 / EV	•	
Condensate drain	•	•	Underfloor heating kit SRAC2 / EV		•
Empying valve	•	•	Remote control E20	•	•
Sealed burner	•	•	External probe for E20	•	•
Telephone relay connection	•	•	Gas discharge kit	•	•

EVOLUTION EV HF INSTALLATION EXAMPLE

Maximum discharge length

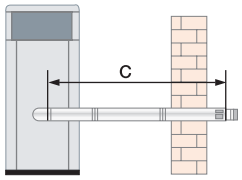
	A+B	C
EV 20 HF	15m Ø 100	8
EV 25 HF	15m Ø 100	8
EV 30 HF	15m Ø 100	6
EV 40 HF	12m Ø 100	-

Equivalences

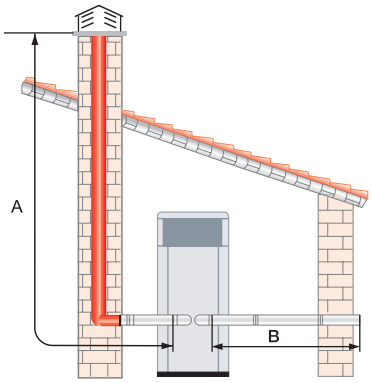
Diameter	90ºCurve	45ºCurve
80/125	1 m	0.5 m
100	1 m	0.5 m

1 horizontal metre equals 2 vertical meters.

Nota: Due to the low fume temperature, the gas outlet must be airtight and made of an anticorrosive material due to the condensation of the combustion gas water vapour.



Horizontal coaxial outlet



Double flow outlet

Model	Nominal power 50º C / 30º C	Nominal power 80º C / 60º C	Production DHW L/min		Heating Efficiency Class	DHW Efficiency Class
	kW	kW	ΔT30ºC	ΔT25ºC		
Evolution EV 25 HFM	26.1	24.8	11.8	14.2		
Evolution EV 30 HFM	30.2	28.7	13.7	16.4		A
Evolution EV 40 HFM	40.5	38.7	18.4	22.1		
Evolution EV 20 HFC	20.3	19.1	-	-	A	-
Evolution EV 30 HFC	30.2	28.7	-	-		-
Evolution EV 40 HFC	40.5	38.7	-	-		-

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CERTIFICATION ISO - 9001 ISO - 14001
HUMANITY AT WORK
MONDRAGON

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