



Wall hung
condensing boiler

MURELLE HE

- **Condensing wall hung up to 97% efficiency**
- **Full gas/air modulation**
- **Combi, provides heating and DHW**
- **Built-in circulator, expansion tank and air eliminator**
- **Stainless steel heat-exchanger**
- **Available in natural gas and LP gas**



 **sime**®



High efficiency gas boilers



aquaGUARD
Filter System

NO_x<30
mg/kWh

VERY LOW NO_x



CHIMNEY SWEEP
FUNCTION



AUTOMATIC
BY-PASS



FROST
PROTECTION



WEATHER
COMPENSATION

MURELLE HE

The Versatile Intelligent Boiler

Murelle HE is a condensing boiler defined by an electronic management system that allows remarkable flexibility of use to each installation in compliance with current legislation and with the

principles of energy saving and ecological awareness. Sime offers a model with 35 kW (119 kBtu/h) in combi version that would provide heating and instantaneous D.H.W. production.

A green heart

At the heart of the **Murelle HE** boiler is a combustion system that ensures the highest efficiency by extracting the most heat possible from the burnt gas. **Murelle HE** has an efficiency of up to 97% efficiency with annual efficiencies well above 90%.

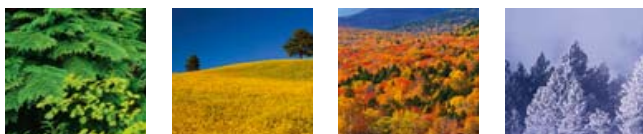
- A** The main heat exchanger is manufactured in high quality stainless steel (AISI 316 LC) to resist the corrosive action of the condensation that is produced. Its cylindrical shape, as well as efficiently collecting the condensate liquid, ensures the best possible heat exchange takes place.
- B** The pre-mixed burner, also in stainless steel, is cylindrical and positioned radially in the combustion chamber. Its 'micro-flame' feature allows for a lower operating surface temperature which reduces significantly the amount of polluting emissions (nitrous-oxide) produced. Air and gas for combustion are introduced into the burner manifold pre-mixed in an ideal balance.
- C** The recovery of normally wasted energy occurs where the water vapour, present in the hot flue gases, condenses as it contacts the cooler surface created by the return water from the heating system.
- D** The sophisticated pre-mixing system along with constant temperature monitoring means the boiler output is perfectly matched to demand and ensures the highest possible operating efficiency at all times.



The pre-mixed condensation system of Murelle HE

Energy efficiency and environmental protection

The innovation of **Murelle HE** range incorporates a new exchanger that achieves a modulation range from 1:5 and 1:4.



Furthermore **Murelle HE** pays particular attention to environmental protection with the adoption of a

The advanced system also means pollution emissions are kept to a minimum for a greener environment.

The NOx emissions are well within the limits set by regional standards.

sophisticated pre-mix system, in which air and gases are mixed in a special collector. Together with a constant temperature monitoring this ensures the boiler output is always perfectly matched to demand and also ensures the highest operating efficiency at all times reducing pollutant emissions (CO and NOx).

Thanks to these solutions NOx emissions of **Murelle HE** are about 30 mg/kWh, less than half of the more restrictive rules.

New Range of Intelligent Remote Controllers

The remote controllers **CR 53** and **CR 73** are multifunctional devices managing time and thermoregulation delivering comfort with efficiency.



Remote controller CR 53

Remote controller CR 73

CR 53 allows a constant display of time and temperature managing the comfort of your environment .

Its main functions are:

- Maintaining a climate zone on the basis of room temperature
- Programming daily time

CR 73 thanks to a bigger screen and the internal clock allows a constant display of the room temperature, the time, the hourly programming, operation mode and the state of the burner.

Its main functions are:

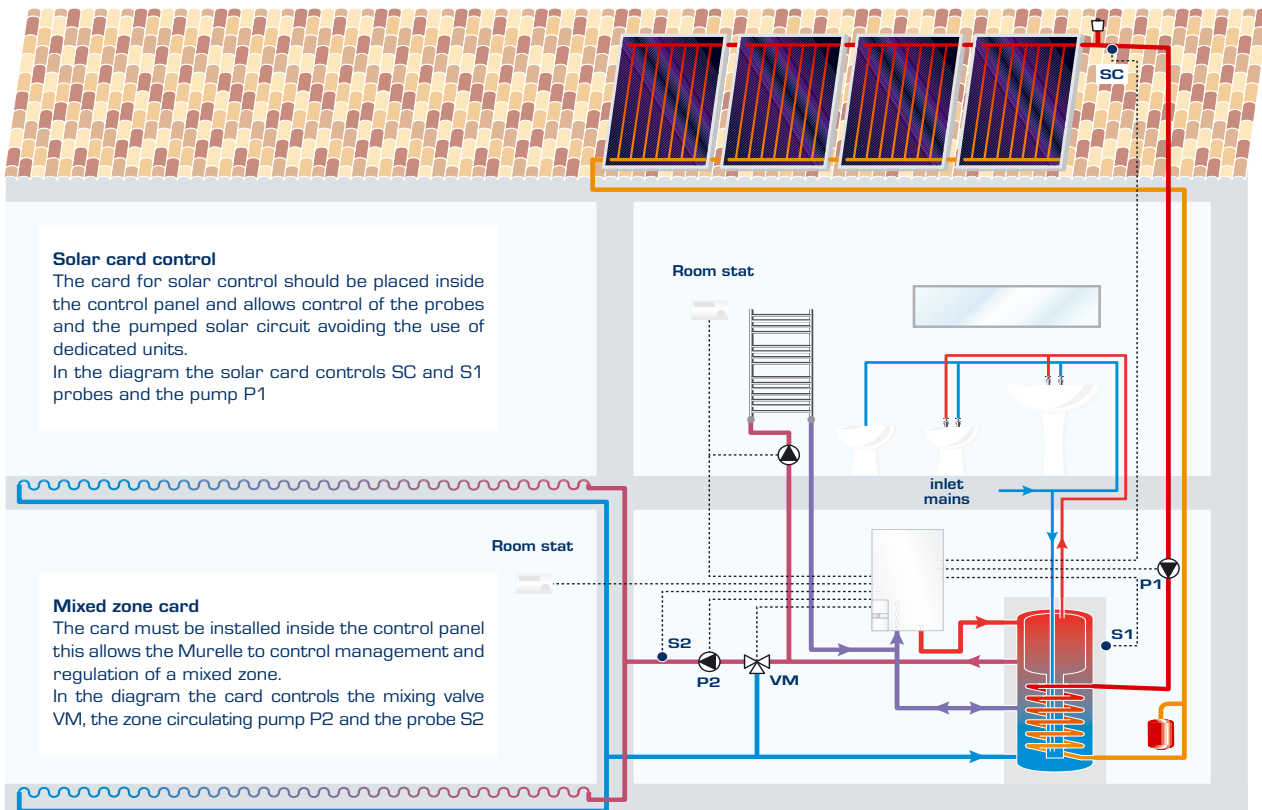
- management of 2 climate zones on the basis of room and external temperature
- C.H. weekly programming
- D.H.W. storage weekly programming

Flexible & modern system

The **Murelle HE** can manage the temperature regulation externally by installing an external probe directly into the electronic management controller (PCB), and reduce operating costs of the heating system. The management controller (PCB) allows inputs from two different thermostats managing two different circuits at different temperatures. The use of an optional card for

mixed zones provides management and regulation of zone devices (mixing valve, circulating pump, temperature probe).

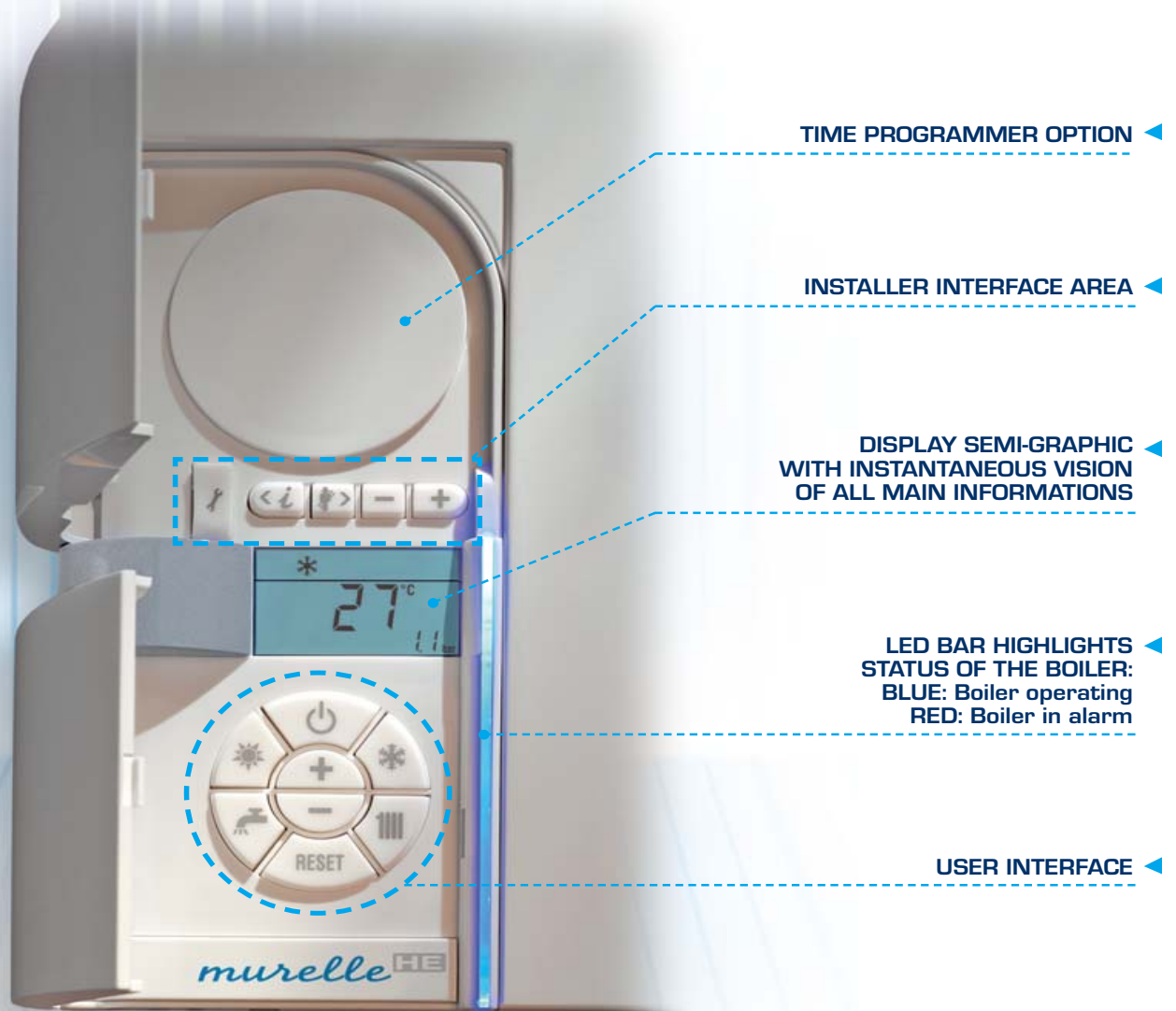
The **Murelle HE** is fully compliant with solar heating and, with an optional PCB, is capable of running a forced circulation system managing the circulating pump through the temperature detected in the solar collectors and storage cylinder.



New Interface Controls

Murelle HE has a control panel that consists of two separate areas. The lower area is dedicated to the end-user interface via a keyboard with eight keys to manage operation intuitively. The area above the

display is dedicated to the operating parameters of the **Murelle HE** managed by four buttons and a port for connecting to a PC for data extraction. In addition, the integral time programmer housing is also located above the display.



USER INTERFACE



ON/OFF
In OFF mode security features active



SUMMER MODE
The boiler works only on D.H.W. demand



WINTER MODE
The boiler works in heating 24 hrs or within programmable controller settings



D.H.W.
Displays the D.H.W. temperature



C.H.
Press once to view heating temperature circuit 1
Press twice to view heating temperature circuit 2



RESET
Allows reset of the appliance after an operating anomaly



ADJUST THE VALUE
Increases or decreases the value of the parameter you are setting

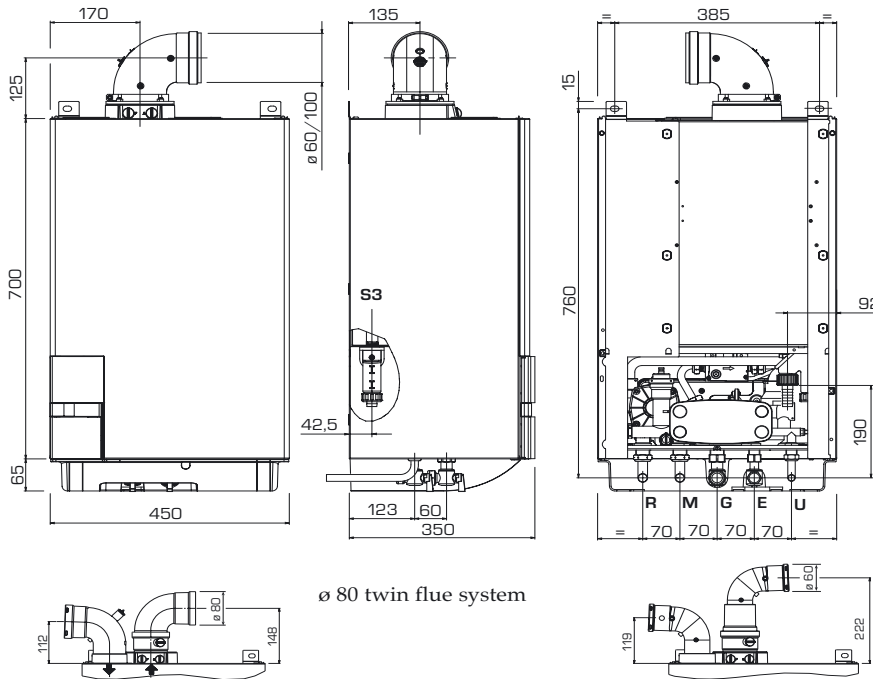
Technical features

| | | Murelle HE 35 BF |
|---|----------------|------------------|
| Maximum input | kW (Btu/h) | 34,8 (119.000) |
| Minimum input | kW (Btu/h) | 8,2 (28.000) |
| Maximum output (60-80 °C) | kW (Btu/h) | 34,1 (116.000) |
| Minimum output (60-80 °C) | kW (Btu/h) | 7,9 (27.000) |
| Maximum output (30-50 °C) | kW (Btu/h) | 37,2 (127.000) |
| Minimum output (30-50 °C) | kW (Btu/h) | 8,8 (30.000) |
| Water content | litres (USgal) | 6,0 (1,3) |
| Electrical power consumption | W | 140 |
| Maximum C.H. pressure | bar (psi) | 3 (44) |
| C.H. Expansion vessel | | |
| Capacity | litres (USgal) | 10 (2,6) |
| Precharging pressure | bar (psi) | 1 (15) |
| C.H. setting range | °C (F) | 20÷80 (68÷176) |
| D.H.W. setting range | °C (F) | 30÷60 (86÷140) |
| D.H.W. production | | |
| Continuous D.H.W. flow rate Δt 30°C 1/min (USgal/min) | | 16,3 (4,3) |
| Minimum/Maximum D.H.W. pressure | bar (psi) | 0,2/7 (3/101) |
| Weight | kg (lb) | 65 (143) |

Main features

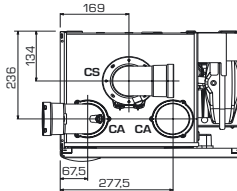
| | | Murelle HE 35 BF |
|---|--|------------------|
| Frost thermostat | | ▲ |
| Weather compensation | | ▲ |
| Two room stat connections | | ▲ |
| Wide modulating range | | ▲ |
| Very low NOx emissions (NOx < 30 mg/kWh) | | ▲ |
| Mixed zone card (optional) | | ▲ |
| Solar card control (optional) | | ▲ |
| Time and temperature controllers (optional) | | ▲ |
| Automatic by-pass fitted | | ▲ |
| No compartment ventilation required | | ▲ |
| Pre-wired electrical lead | | ▲ |
| Aquaguard filter protection | | ▲ |
| Full gas/air modulation | | ▲ |
| Anti-cycling device | | ▲ |

Dimensions - Connections



Connections

| | | Dimensions |
|----|----------------------|------------|
| M | C.H. flow | 3/4" |
| R | C.H. return | 3/4" |
| G | Gas | 3/4" |
| E | D.H.W. inlet | 1/2" |
| U | D.H.W. outlet | 1/2" |
| S3 | Condensate discharge | ø 25 |



CA Inlet duct
CS Outlet duct

A Name you can trust

Sime is one of Europe's top ten heating manufacturers, founded in 1972. Sime have continued to develop a reputation for manufacturing quality products supported by a dedicated service network. Our strength is our commitment to research and development embracing challenges such as global warming, demand for improved efficiencies, reduced carbon emissions and adoption of new technologies.

Our extensive range of intelligent High Efficiency domestic gas boilers, deliver flexibility with complete integration of renewable technologies. Our policy of continuous improvements ensures that we deliver solutions that match today's heating requirements, both in terms of comfort and efficiency and of course impact on the environment.

We pursue a policy of continuing improvement in design and performance of our products. The right is therefore reserved to vary specifications without notice.

North American Distribution by:

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