en

NeOvo
EASYLIFE

User Manual

Oil-fired boiler

NeOvo EcoNox

EF 36
EF 46

SOLAR
SOLID FUEL
HEAT PUMPS
CONDENSING OIL/GAS

De Dietrich
Sustainable Comfort®

Dear customer,

Thank you for purchasing this appliance.

Please read this manual carefully before using the product and keep it in a safe place for future reference.

In order to ensure continued safe and efficient operation we recommend that the product is regularly maintained. Our Service and After Sales organization can assist with this.

We hope you will receive many years of satisfactory service.

Contents

1 Safety

1.1 General safety instructions

Danger
This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance.

Warning
Only qualified professionals are authorised to work on the boiler and the heating installation.

Caution
A disconnection method must be allowed in the fixed pipes in accordance with the rules on installation in force in the country.

Danger of electric shock

Danger
If you smell flue gases:
1. Switch off the appliance.
2. Open the windows.
3. Evacuate the premises.
4. Contact a qualified professional.

Warning
Do not touch the flue gas pipes. Depending on the boiler settings, the temperature of the flue gas pipes may exceed 60°C.

Warning
Do not touch the radiators for long periods. Depending on the boiler settings, the temperature of the radiators may exceed 60°C.

Warning
Take precautions with the domestic hot water. Depending on the boiler settings, the domestic hot water temperature may exceed 65°C.

Caution
If a power cord comes with the appliance and it turns out to be damaged, it must be replaced by the manufacturer, its after sales service or persons with similar qualifications in order to obviate any danger.

Note
Respect the minimum and maximum water inlet pressure to ensure correct operation of the boiler: refer to the chapter Technical Specifications.

Caution
Do not neglect to service the boiler. Contact a qualified professional or subscribe to a maintenance contract for the annual servicing of the boiler.

Caution
Only genuine spare parts may be used.

1.2 Recommendations

Caution
The installation must satisfy each point in the rules (DTU, EN and others, etc.) that govern works and interventions in individual homes, blocks of flats or other buildings.

Note
Keep the boiler accessible at all times.

Caution
Install the boiler in a frost-free location.

Caution
The appliance should be on Summer or Antifreeze mode rather than switched off to guarantee the following functions:
- Anti-blocking of pumps
- Frost Protection

Note
Regularly check the presence of water and pressure in the heating installation.

Note
Never remove or cover labels and data plates affixed to the appliances. Labels and data plates must be legible throughout the entire lifetime of the appliance. Immediately replace damaged or illegible instructions and warning stickers.

Note
Remove the casing only to perform maintenance and repair work. Put the casing back in place after maintenance and repair work.

Note
Insulate the pipes to reduce heat losses to the minimum.

Caution
If the home is unoccupied for a long period and there is a risk of frost, drain the boiler and the heating system.

1.3 Liabilities

1.3.1 Manufacturer's liability

Our products are manufactured in compliance with the requirements of the various Directives applicable. They are therefore delivered with the CE marking and any documents necessary. In the interests of the quality of our products, we strive constantly to improve them. We therefore reserve the right to modify the specifications given in this document.

Our liability as manufacturer may not be invoked in the following cases:
- Failure to abide by the instructions on installing the appliance.
- Failure to abide by the instructions on using the appliance.
- Faulty or insufficient maintenance of the appliance.

1.3.2 Installer's liability

The installer is responsible for the installation and initial commissioning of the appliance. The installer must abide by the following instructions:
- Read and follow the instructions given in the manuals provided with the appliance.
- Install the appliance in compliance with prevailing legislation and standards.
- Carry out initial commissioning and any checks necessary.
- Explain the installation to the user.
- If maintenance is necessary, warn the user of the obligation to check the appliance and keep it in good working order.
- Give all the instruction manuals to the user.

1.3.3 User's liability

To guarantee optimum operation of the system, you must abide by the following instructions:
- Read and follow the instructions given in the manuals provided with the appliance.
- Call on a qualified professional to carry out installation and initial commissioning.
- Get your installer to explain your installation to you.
- Have the required inspections and maintenance carried out by a qualified installer.
- Keep the instruction manuals in good condition close to the appliance.

2 About this manual

2.1 General

This manual is intended for users of EF boilers.

Note
The user guide can also be found on our internet site.

2.2 Symbols used

2.2.1 Symbols used in the manual

This manual uses various danger levels to draw attention to special instructions. We do this to improve user safety, to prevent problems and to guarantee correct operation of the appliance.

Danger
Risk of dangerous situations that may result in serious personal injury.

Danger of electric shock
Risk of electric shock.

Warning
Risk of dangerous situations that may result in minor personal injury.

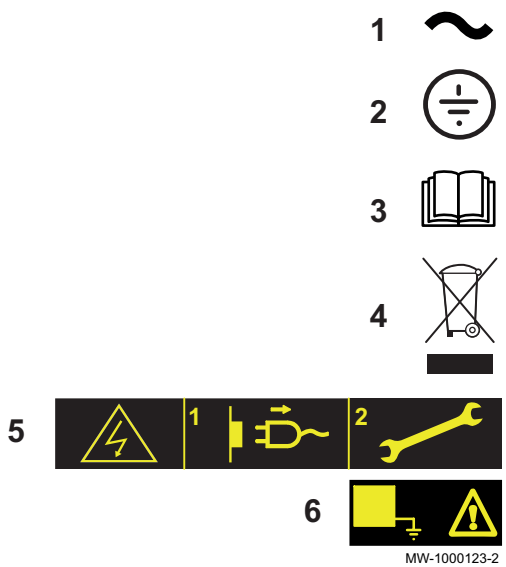
Caution
Risk of material damage.

Note
Please note: important information.

See
Reference to other manuals or pages in this manual.

2.2.2 Symbols used on the appliance

Fig.1 Symbols used on the appliance



1 Alternating current.
2 Protective earthing.
3 Before installing and commissioning the appliance, carefully read the instruction manuals provided.
4 Dispose of used products through an appropriate recovery and recycling structure.
5 Caution: danger of electric shock, live parts. Disconnect the mains power prior to carrying out any work.
6 Connect the appliance to the protective earthing.

3 Technical specifications

3.1 Homologations

3.1.1 Certifications

Tab.1 Certifications

CE identification number	0085CQ0006
Type of connection	• B_{23}

3.1.2 Directives

This product complies with the requirements of the following European Directives and Standards:
- Pressure Equipment Directive 97/23/EC, Article 3, paragraph 3
- European New Approach Directive 98/70/EC 13/10/1998: Directive on petrol and diesel fuel quality
- Efficiency Directive 92/42/EC
- Electromagnetic Compatibility Directive 2004/108/EC
  Generic standards: EN 61000-6-3, EN 61000-6-1
  Relevant Standard: EN 55014
- Low Voltage Directive 2006/95/EC
  Generic standard: EN 60335–1
  Relevant Standard: EN 60335-2-102
- DIN 51603–1: Oil 5 < S < 2000 ppm
- EN 590: GONR
- DIN 51603-6: Bio-oil (10% FAME)
- EN 303–1 - EN 303-2 - EN 304

Apart from the legal provisions and Directives, the additional Directives described in these instructions must also be observed.

For all provisions and Directives referred to in these instructions, it is agreed that all addenda or subsequent provisions will apply at the time of installation.

3.1.3 Oil categories

Tab.2 Oil categories

Type of oil that can be used	Maximum viscosity
Standard fuel oil	6 mm^2/s at 20 °C
Low-sulphur oil	6 mm^2/s at 20 °C
Bio-oil B10 Mixture of low-sulphur oil (<50 mg/kg) plus 5.9 to 10.9% (in volume) of **FAME** (1)	6 mm^2/s at 20 °C
Bio-oil B5 (or Bio 5) Mixture of low-sulphur oil (<50 mg/kg) plus 3 to 5.9% (in volume) of **FAME** (1)	6 mm^2/s at 20 °C
(1) Liquid petroleum products — Fatty Acid Methyl Esters used as heating fuel	

3.2 Technical data

Note
Technical parameters obtained in association with the F10S2–1.40_P and F10S2–1.50_C burners.

Tab.3 Technical parameters for boiler space heaters

Product name			EF 36	EF 46
Condensing boiler			No	No
Low-temperature boiler(1)			Yes	Yes
B1 boiler			No	No
Cogeneration space heater			No	No
Combination heater			No	No
Rated heat output	*Prated*	kW	37	46
Useful heat output at rated heat output and high temperature regime(2)	P_4	kW	37.2	46.4
Useful heat output at 30% of rated heat output and low temperature regime(1)	P_1	kW	11.6	14.5
Seasonal space heating energy efficiency	η_s	%	86	86
Useful efficiency at rated heat output and high temperature regime(2)	η_4	%	87.3	86.9
Useful efficiency at 30% of rated heat output and low temperature regime(1)	η_1	%	90.9	90.7
Auxiliary electricity consumption				
Full load	*elmax*	kW	0.156	0.160
Part load	*elmin*	kW	0.064	0.066
Stand-by	P_{SB}	kW	0.004	0.004
Other characteristics				
Standby heat loss	P_{stby}	kW	0.109	0.122
Ignition burner power consumption	P_{ign}	kW	--	--
Annual energy consumption	Q_{HE}	GJ	124	154
Sound power level, indoors	L_{WA}	dB	-	-
Emissions of nitrogen oxides	NO_X	mg/kWh	105	105

(1) Low temperature means for condensing boilers 30°C, for low temperature boilers 37°C and for other heaters 50°C return temperature (at heater inlet).
(2) High temperature regime means 60°C return temperature at heater inlet and 80°C feed temperature at heater outlet.

See
The back cover for contact details.

Tab.4 General

	Unit	EF 36	EF 46
Useful output Pn - at 80/60°C Heating mode	kW	37.2	46.4
Nominal input Qn - Hi Heating mode	kW	40	50
Efficiency Hi - 100% Pn - Average temperature 70°C Heating mode under full load	%	93.1	92.7
Efficiency Hi - 30% Pn - Average temperature 40 °C Heating mode under part load	%	97	96.7
Nominal water flow rate at Pn and ΔT = 20K	m^3/h	1.602	1.994

	Unit	EF 36	EF 46
Standby losses Pstby at ΔT = 30K	W	109	122
Loss through the outer casing at Δt = 30K	%	86	85

Tab.5 Hydraulic specifications

	Unit	EF 36	EF 46
Water content (excluding expansion vessel)	litre	35.5	41
Minimum operating pressure	MPa (bar)	0.05 (0.5)	0.05 (0.5)
Maximum operating pressure	MPa (bar)	0.3 (3)	0.3 (3)
Maximum water temperature	°C	90	90
Pressure loss of hydraulic circuit at Δt = 10K	mbar	51	89
Pressure loss of hydraulic circuit at Δt = 15K	mbar	23	40
Pressure loss of hydraulic circuit at Δt = 20K	mbar	13	22

Tab.6 Data on the combustion gases

	Unit	EF 36	EF 46
NOx emission according to EN267	mg/kWh	Class 3	Class 3
Flue gas mass flow rate Pn 40/30°C	kg/h	59	76
Flue gas circuit volume	litre	61	71
Flue gas temperature Pn 80/60°C	°C	<160	<160
Required depressurisation at the nozzle	Pa	5	5
Number of cast iron parts	Part	6	7
Number of baffle plates	Part	2	2

Tab.7 Electrical characteristics

	Unit	EF 36	EF 46
Power supply voltage	VAC	230	230
Electrical protection rating	IP	21	21
Absorbed power - Stand-by - Psb	W	4	4

Tab.8 Other characteristics

	Unit	EF 36	EF 46
Maximum operating temperature	°C	90	90
Settings range for the heating water temperature	°C	30 - 90	30 - 90
Settings range for the domestic hot water temperature	°C	40 - 65	40 - 65
Safety thermostat	°C	110	110
Weight empty	kg	230	255

4 Description of the product

4.1 General description

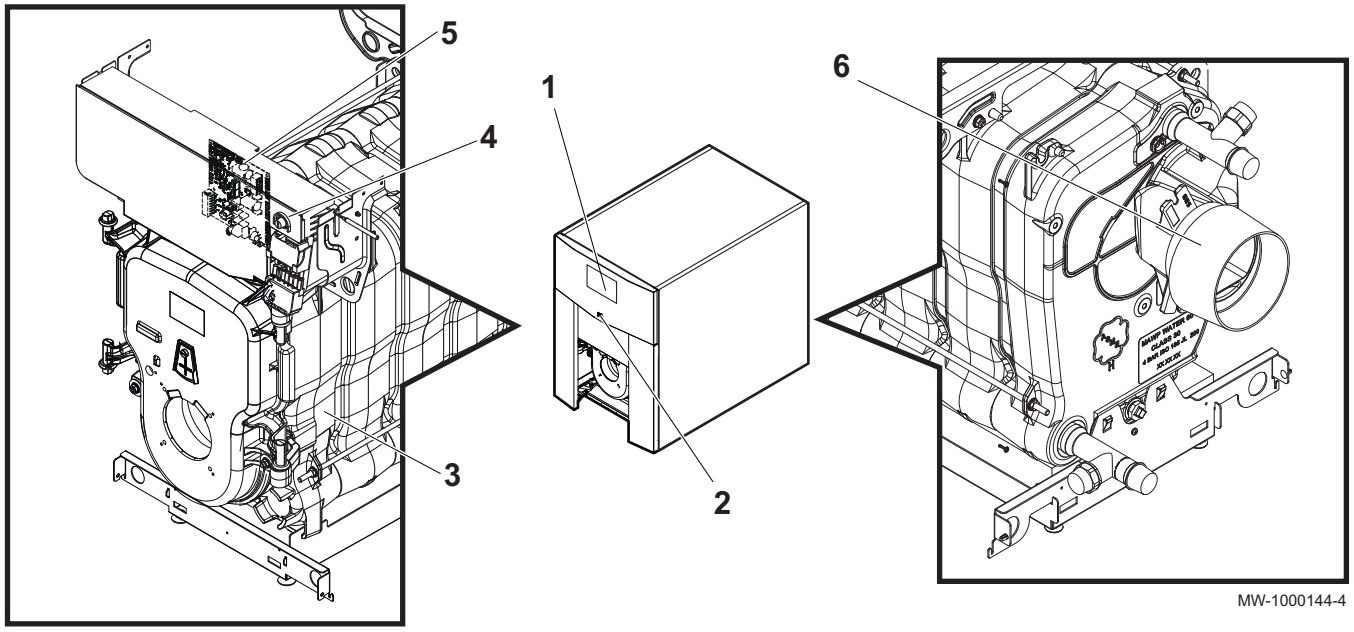
The floor-standing oil boilers in the EF range have the following specifications:

- Heating only with possibility to produce domestic hot water by combining them with a domestic hot water tank
- High-efficiency heating
- Low polluting emissions
- Heating body in cast iron
- Electronic control panel
- Flue gas discharge via a chimney type connection

4.2 Main components

4.2.1 Boiler

Fig.2 Main components

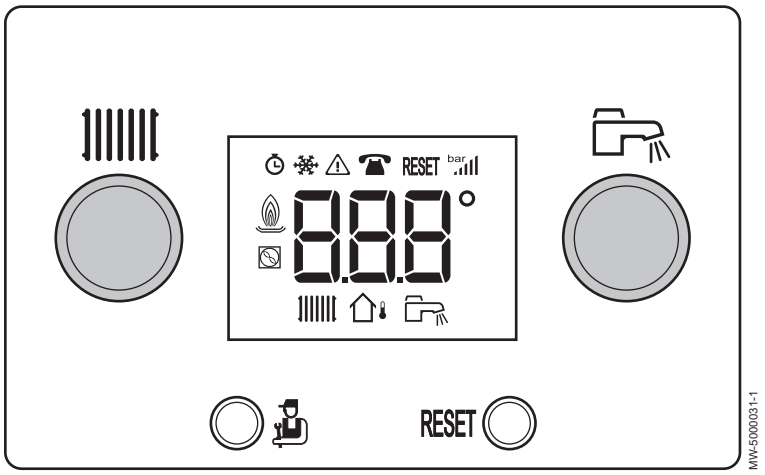


1 Control panel
2 On/Off switch
3 Heating body
4 Safety thermostat manual reset button
5 Position of the control panel PCB
6 Flue gas nozzle

4.3 Description of the control panel B-Control

4.3.1 Description of the keys

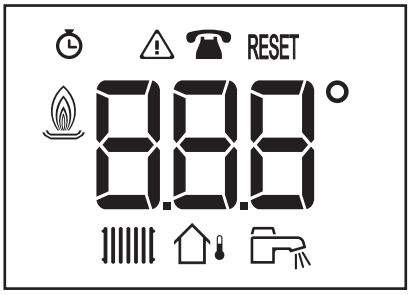
Fig.3 Control panel keys



Heating temperature setting button
Level access key: Information, Installer or Chimney Sweep
RESET Manual reset key
Domestic hot water temperature setting button

4.3.2 Description of the display

Fig.4 Display



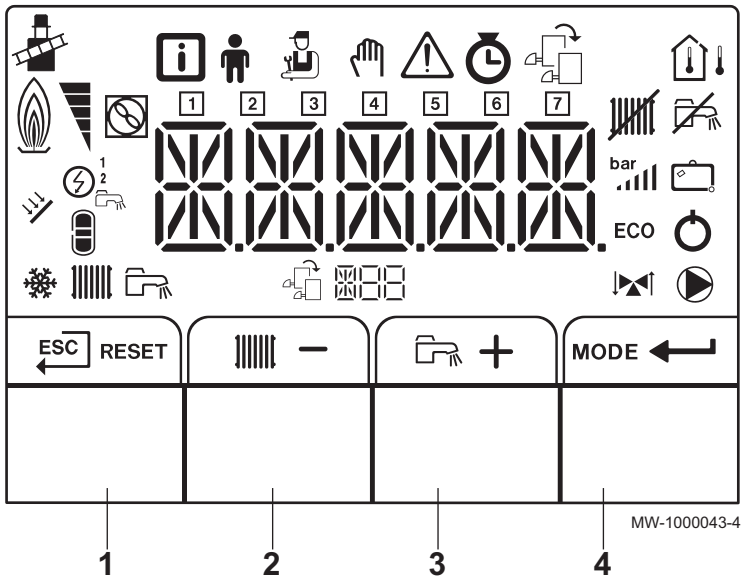
MW-3000235-1

Hour run meter
Failures
Maintenance
RESET Reset necessary
Burner status
Heating mode
Outside temperature sensor
Domestic hot water mode

4.4 Description of the control panel IniControl 2

4.4.1 Description of the keys

Fig.5 Control panel keys



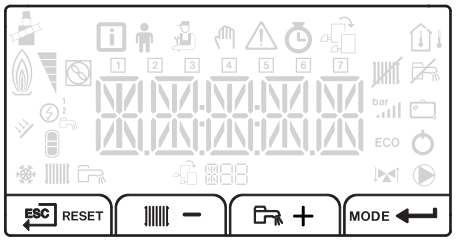
1 **ESC** key (ESC) or **RESET**
2 Key for the heating temperatures or −
3 Key for the domestic hot water temperatures or +
4 **MODE** key or **CONFIRM** (↵)

4.4.2 Description of the display

■ **Key functions**

ESC Back to the previous level without saving the modifications made
RESET Manual reset
Accessing the heating parameters
− Lowering the value
Accessing the domestic hot water parameters
+ Raising the value
MODE MODE display
↵ Accessing the menu selected or confirming the value modification

Fig.6 Function keys

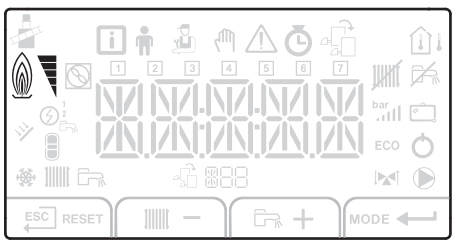


MW-1000082-3

■ **Burner Operation**

Burner OFF
Burner ON

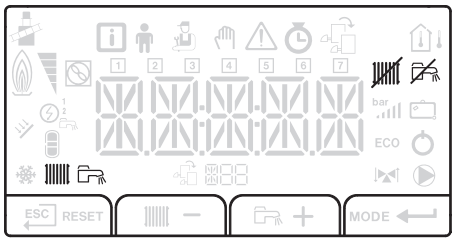
Fig.7 Burner Operation



MW-1000085-2

Operating modes

Fig.8 Operating modes

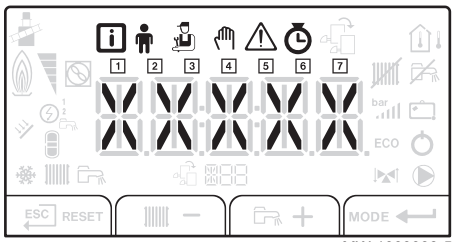


MW-1000083-3

- Steady symbol: heating function enabled
- Flashing symbol: heating production running
- Steady symbol: domestic hot water function enabled
- Flashing symbol: domestic hot water production running
- Heating function disabled
- Domestic hot water function disabled

Menu display

Fig.9 Menu display

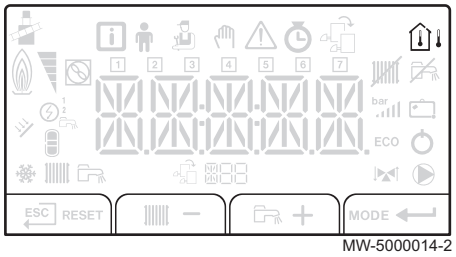


MW-1000086-5

- **Information menu**: displays the measured values and the statuses of the appliance
- **User menu**: provides access to the User level setting parameters
- **Installer menu**: provides access to the Installer level setting parameters
- **Manual Forcing menu**: the appliance runs at the set point displayed, the pumps operate and the 3-way valves are not controlled
- **Malfunction menu**: the appliance has malfunctioned. This information is signalled by an error code and a flashing display
- **Hour run meters menu**
  - **Timer Program menu**
  - **Clock menu**
- **Timer program for Mondays**
- **Timer program for Tuesdays**
- **Timer program for Wednesdays**
- **Timer program for Thursdays**
- **Timer program for Fridays**
- **Timer program for Saturdays**
- **Timer program for Sundays**

Temperature sensors

Fig.10 Temperature sensors

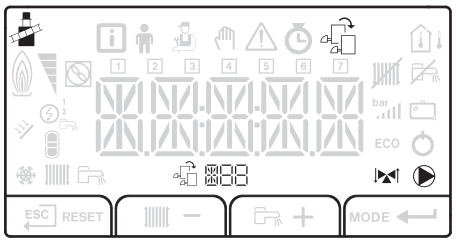


MW-5000014-2

- Room temperature sensor connected
- Steady symbol: WINTER mode (outside temperature sensor connected)
- Flashing symbol: SUMMER mode (outside temperature sensor connected)

Other Information

Fig.11 Other Information



MW-5000038-2

- **Chimney Sweep Menu**: forced operation in full load mode
- Access to information on the additional PCBs
- Name of the PCB for which the parameters are displayed
- Three-way valve connected
- Pump running

5 Utilisation with the control panel B-Control

5.1 Use of the control panel

5.1.1 Accessing the menus

Fig.12 Press the key

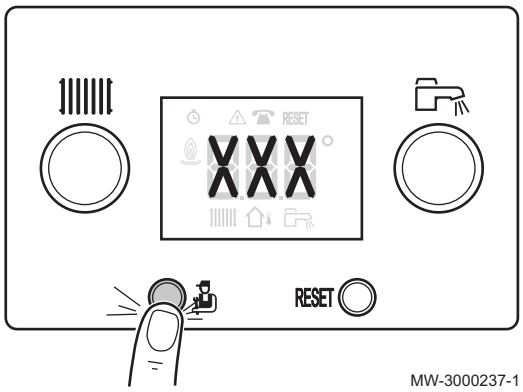


Fig.13 Accessing the Information menu

1. The key is used to access the various menus and to scroll up and down the information in the Information menu.
2. To access the Information menu, press the key once.

Note
Five minutes after the key is pressed for the last time, the display goes back to the main display, once the venting cycle has been completed.

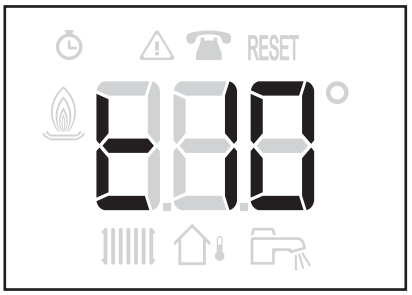
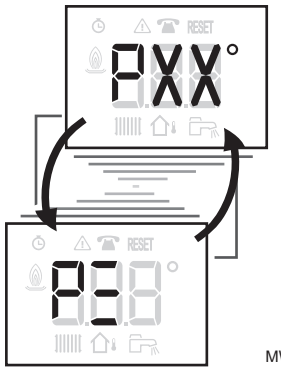


Fig.14 Accessing the Chimney Sweep menu

3. To access the Chimney Sweep menu, press the key for two seconds.

Note
Thirty minutes after the key is pressed for the last time, the display goes back to the main display.

For more information, see
Information menu, page 25



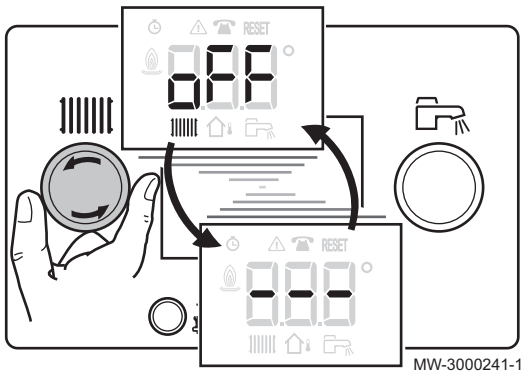
5.2 Start-up

1. Check that the heating system and the boiler are adequately primed with water.
2. Check that the storage tank is duly filled with fuel.
3. Check the water pressure in the heating system. The recommended water pressure is 0.15 MPa (1.5 bar).
4. Open the oil inlet valve.
5. Switch on the boiler.
6. A venting cycle is run automatically.
7. The display shows the operating status of the boiler, the heating flow temperature and any error codes.

5.3 Shutdown

5.3.1 Switching off the heating

Fig.15 Switching off the heating

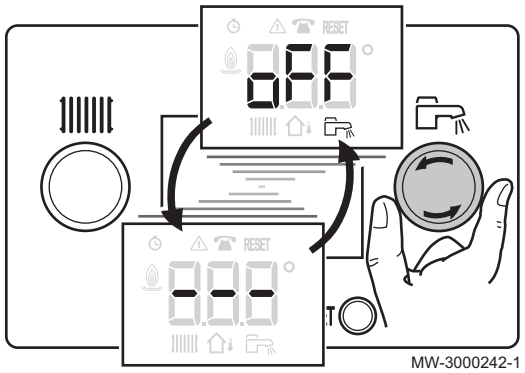


1. Turn the setting button all the way to the left until OFF is displayed.

Note
The frost protection function continues to run

5.3.2 Stopping domestic hot water production

Fig.16 Stopping domestic hot water production



1. Turn the setting button all the way to the left until OFF is displayed.

Note
Frost protection continues to run on the domestic hot water tank. The venting cycle is not tripped when domestic hot water production is shut down.

5.3.3 Shutting down the installation

If the central heating system is not used for a long period of time, we recommend switching off the boiler.

1. Switch the On/Off switch to Off.
2. Cut the electrical power to the boiler.
3. Close the oil inlet.
4. Have the boiler and the chimney carefully swept.
5. Close the door of the boiler to prevent air circulating inside it.
6. Remove the pipe connecting the boiler to the chimney and plug the flue gas nozzle.
7. Keep the area frost-free.

5.4 Frost Protection

If the central heating system is not in use and there is a risk of frost, we recommend activating the boiler's antifreeze protection function.

Caution
The frost protection does not work if the boiler is switched off.

Caution
The integrated protection system only protects the boiler, not the heating installation

Caution
If the home is unoccupied for a long period and there is a risk of frost, drain the boiler and the heating system.

1. Put the boiler in frost protection mode. The standby function will be deactivated.
   The boiler will then only start up to protect itself from frost.

Note
To prevent the radiators and the installation from freezing in places where that risk exists (e.g. in a garage or an equipment room), we recommend the connection of an outside temperature sensor to the boiler.

If the temperature of the water in the boiler falls too much, the integrated protection device switches itself on. This device functions as follows:

- If the water temperature is lower than 7°C, the circulation pump starts up.
- If the water temperature is lower than 4°C, the boiler starts up.
- If the water temperature is higher than 10°C, the boiler shuts down and the circulation pump continues to run for a short time.

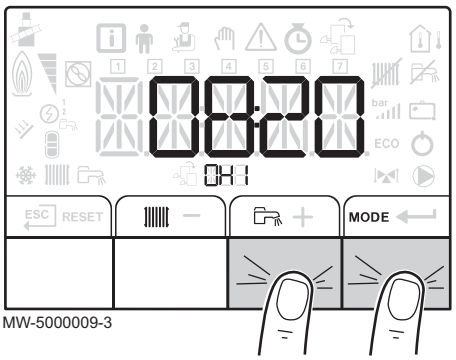
6 Utilisation with the control panel IniControl 2

6.1 Use of the control panel

6.1.1 Browsing in the menus

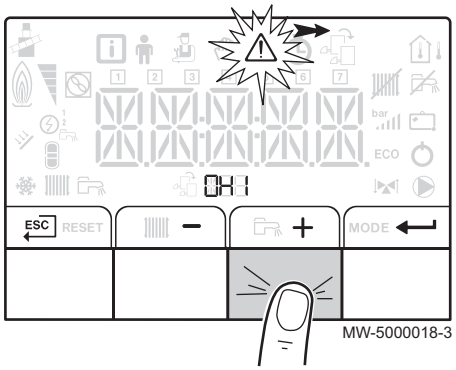
Note
The first time a key is pressed, the backlit screen is switched on. The name of the PCB is displayed: check that it is actually the PCB on which the setting must be made.

Fig.17 Accessing the menus



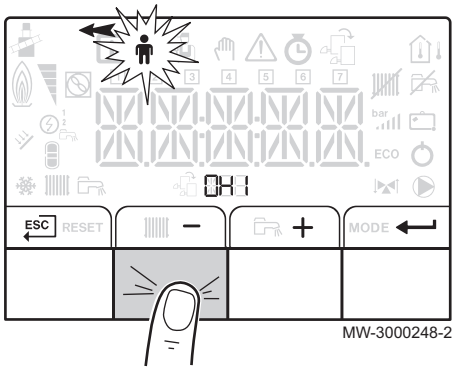
1. To access the menu level, press the two keys on the right simultaneously.
2. To go back to the main display, press the ESC key.

Fig.18 Navigating to choose the menu – To the right



3.

Fig.19 Navigating to choose the menu – To the left

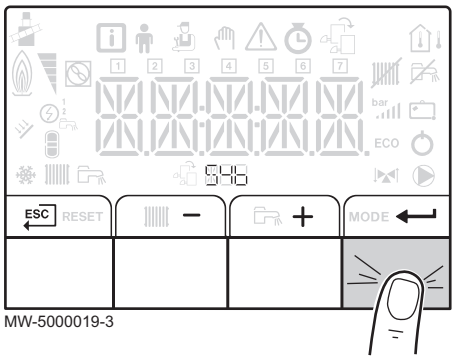


To select the desired menu, press the + or − key until the icon for the desired menu flashes.
The + key is used to move to the right.
The − key is used to move to the left.

Tab.9 Menus available

	Information menu
	User menu
	Installer menu
	Forcing Manual mode
	Failure menu
	Hour run meters sub-menu **Timer Program** sub-menu **Clock** sub-menu
	The icon is displayed only if an optional PCB has been installed

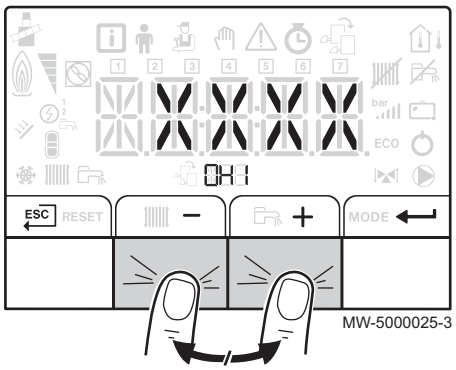
Fig.20 Confirming the menu or parameter



4. To confirm selection of the desired menu, sub-menu or parameter, press the ↵ key.

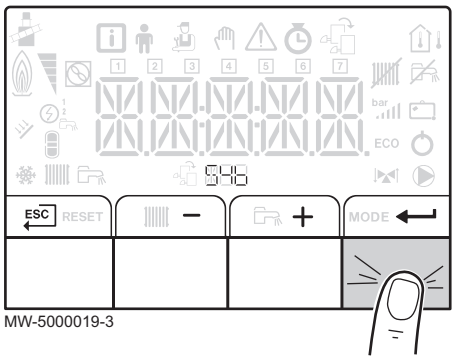
Note
If no keys are pressed for 3 minutes, the appliance returns to normal operating mode.
The display disappears after a few seconds' inactivity.

Fig.21 Modifying a value



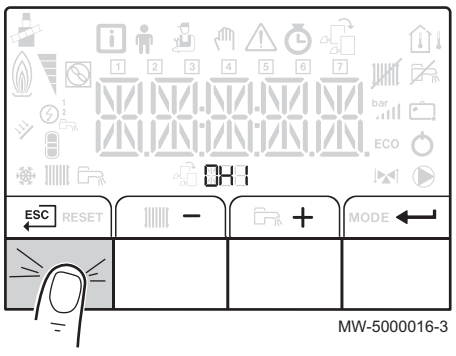
5. To modify the value of a parameter, press the + or − key until the desired value is displayed.

Fig.22 Confirming a new value



6. To confirm a new parameter value, press the ↵ key.

Fig.23 Back to the main display



7. To go back to the main display, press the ESC key.

For more information, see
Menu List, page 27
Information menu, page 27
User menu, page 27

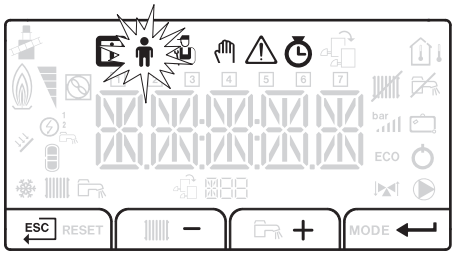
6.1.2 Accessing the User menu

The information and settings in the User menu can be accessed by everyone.

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

1. Access the menus by pressing the two keys on the right simultaneously.
2. Select the User menu by pressing the + or − key until the icon flashes.
3. Press ↵ to access the User menu.

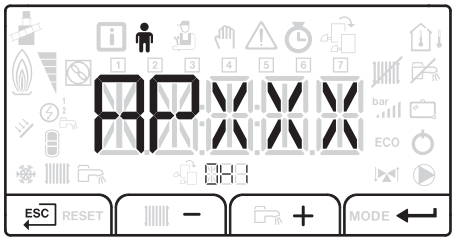
Fig.24 Accessing the User menu



MW-5000008-1

Note
The User menu is available only if the icon flashes.

Fig.25 Displaying the parameters of the User menu



MW-5000040-3

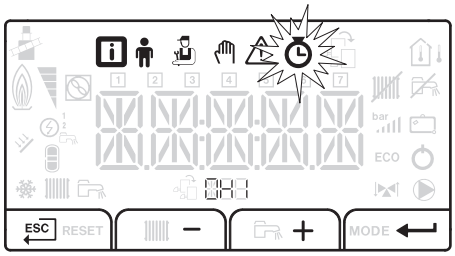
4. Press the + or − key until the desired parameter is displayed. The parameters available to the User are displayed.
5. Go back to the main display by pressing the ESC key.

6.1.3 Accessing the Hour Run Meters / Timer Program / Clock sub-menus

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

1. Access the menus by pressing the two keys on the right simultaneously.
2. Select the menu by pressing the + or − key until the icon flashes. Confirm the selection by pressing the ↵ key.

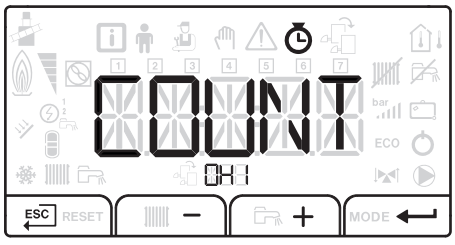
Fig.26 Accessing the Hour Run Meters / Timer Program / Clock sub-menus



MW-5000044-2

Note
The Hour Run Meters / Timer Program / Clock sub-menus can be accessed only if the icon flashes.

Fig.27 Displaying the parameters of the Hour Run Meters sub-menu



MW-5000045-2

3. Select the menu by pressing the + or − key until the desired sub-menu is displayed. Confirm the selection by pressing the ↵ key.
4. Go back to the main display by pressing the ESC key.

For more information, see
Browsing in the menus, page 19
Sub-menu COUNTERS, page 29

6.2 Start-up

1. Check that the heating system and the boiler are adequately primed with water.
2. Check that the storage tank is duly filled with fuel.
3. Check the water pressure in the heating system. The recommended water pressure is 0.15 MPa (1.5 bar).

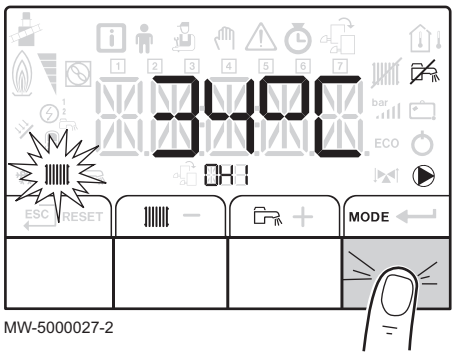
4. Open the oil inlet valve.
5. Switch on the boiler.
6. A venting cycle is run automatically.
7. The display shows the operating status of the boiler, the heating flow temperature and any error codes.

6.3 Shutdown

6.3.1 Switching off the heating

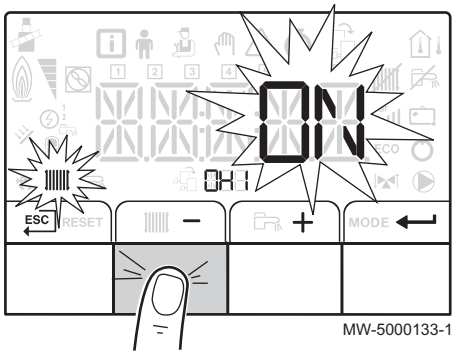
Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

Fig.28 Selecting the shut-down mode



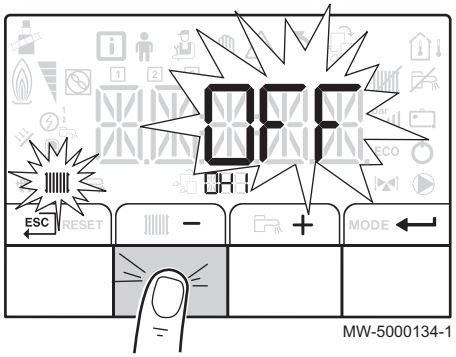
1. Select the shut-down mode by pressing the **MODE** key twice.

Fig.29 Confirming the heating mode



2. Select heating mode by pressing the − key. Confirm by pressing the ⟵ key.

Fig.30 Confirmation of heating shut-down



3. Select the heating shut-down pressing the − key. Confirm by pressing the ⟵ key. The screen displays **OFF**

Note
If you press the + key, the appliance starts up again (**ON** is displayed).

- The frost protection function continues to run.
- The heating has been shut down.

4. Go back to the main display by pressing the ESC key.

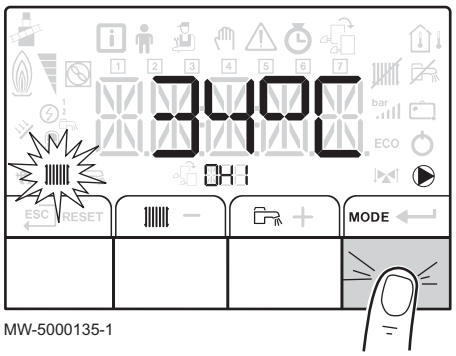
Note
The display disappears after a few seconds' inactivity.

For more information, see
Browsing in the menus, page 19

6.3.2 Stopping domestic hot water production

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

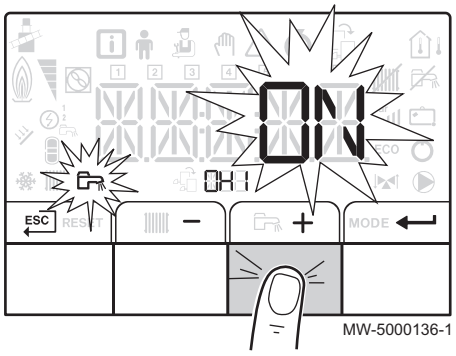
Fig.31 Selecting the shut-down mode



MW-5000135-1

1. Select the shut-down mode by pressing the **MODE** key twice.

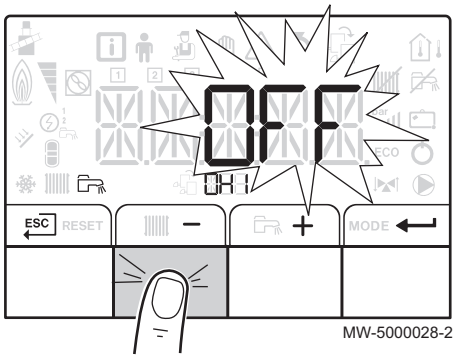
Fig.32 Confirming domestic hot water production mode



MW-5000136-1

2. Select domestic hot water production mode pressing the + key. Confirm by pressing the ⟵ key.

Fig.33 Stopping domestic hot water production



MW-5000028-2

3. Select domestic hot water production shut-down by pressing the − key. Confirm by pressing the ⟵ key.

Note
If you press the +key, the boiler starts up again (ON is displayed).

The frost protection function continues to run.
Production of domestic hot water has been shut down.

4. Go back to the main display by pressing the ESC key.

Note
The display disappears after a few seconds' inactivity.

For more information, see
Browsing in the menus, page 19

6.3.3 Shutting down the installation

If the central heating system is not used for a long period of time, we recommend switching off the boiler.

1. Switch the On/Off switch to Off.
2. Cut the electrical power to the boiler.
3. Close the oil inlet.
4. Have the boiler and the chimney carefully swept.
5. Close the door of the boiler to prevent air circulating inside it.

6. Remove the pipe connecting the boiler to the chimney and plug the flue gas nozzle.
7. Keep the area frost-free.

6.4 Frost Protection

If the central heating system is not in use and there is a risk of frost, we recommend activating the boiler's antifreeze protection function.

Caution
The frost protection does not work if the boiler is switched off.

Caution
The integrated protection system only protects the boiler, not the heating installation

Caution
If the home is unoccupied for a long period and there is a risk of frost, drain the boiler and the heating system.

1. Put the boiler in frost protection mode. The standby function will be deactivated.
   The boiler will then only start up to protect itself from frost.

Note
To prevent the radiators and the installation from freezing in places where that risk exists (e.g. in a garage or an equipment room), we recommend the connection of an outside temperature sensor to the boiler.

If the temperature of the water in the boiler falls too much, the integrated protection device switches itself on. This device functions as follows:

- If the water temperature is lower than 7°C, the circulation pump starts up.
- If the water temperature is lower than 4°C, the boiler starts up.
- If the water temperature is higher than 10°C, the boiler shuts down and the circulation pump continues to run for a short time.

7 Control panel settings B-Control

7.1 List of parameters

7.1.1 Information menu

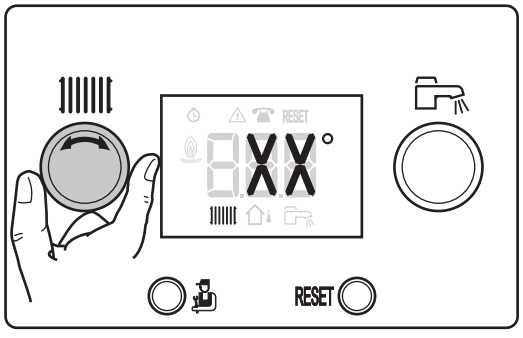
Tab.10 Information list

Information	Description
Ł X X	Status
υ X X	Sub-status
X X °C	Heating water temperature (°C) • The symbol flashes
X X °C	Domestic hot water temperature (°C) • The symbol flashes • If no domestic hot water sensor connected: display — — —
X X °C	Outside temperature (°C) • The symbol flashes.
X	Burner status
0.0.0.	Energy meter on the heating water circuit • The symbol flashes. • The displayed value flashes.
0.0.0.	Energy meter on the domestic hot water circuit • The symbol flashes. • The displayed value flashes.
0.0.0.	Information on the boiler not available

7.2 Setting the parameters

7.2.1 Setting the heating water temperature

Fig.34 Setting the heating



MW-3000243-1

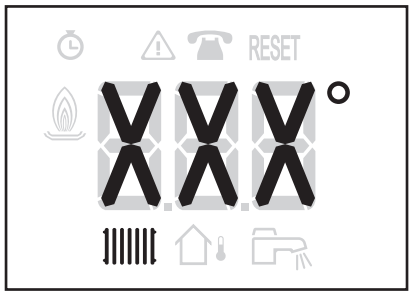
1. Turn the settings button .

Note
If the heating water temperature set point is lower than 16 °C, without an outside temperature sensor, the heating is switched off automatically.
The heating starts up again only to ensure frost protection if the outside temperature sensor shows a value of less than 3°C.

Note
This setting is possible regardless of the display.

- Set the heating water temperature set point if no temperature sensor is connected.
- Set the desired room temperature if an outside temperature sensor is connected.

Fig.35 Back to the main display



MW-3000244-1

2. Go back to the main display by pressing the key for two seconds.

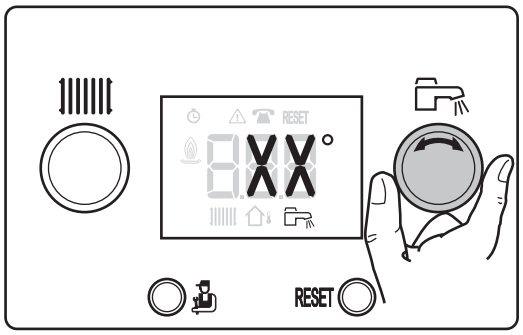
Note
After five seconds without pressing any keys on the control panel, the display goes back to the main display.

7.2.2 Modifying the domestic hot water temperature set point

A lower domestic hot water temperature may be sufficient to meet the needs of the system. You can lower the temperature of your warm tap water and save energy.

Note
This setting is available if a domestic hot water tank sensor is connected.

Fig.36 Setting the domestic hot water temperature set point

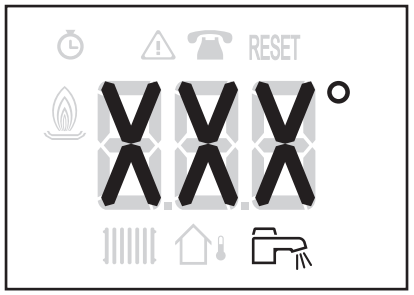


MW-3000246-1

1. Set the domestic hot water temperature set point by turning the setting button .

Note
This setting is possible regardless of the display.

Fig.37 Back to the main display



MW-3000245-1

2. Go back to the main display by pressing the key for two seconds.

Note
After five seconds without pressing any keys on the control panel, the display goes back to the main display.

8 Control panel settings IniControl 2

8.1 List of parameters

8.1.1 Menu List

	Information menu
	User menu
	Installer menu
	Manual Forcing menu
	Failure menu
	Hour run meters sub-menu **Timer Program** sub-menu **Clock** sub-menu

8.1.2 Information menu

Certain parameters are displayed:
- according to certain system configurations,
- according to the options, circuits or sensors actually connected.

Tab.11 List of parameters

Parameters	Description	Unit
AM010	Pump rotation speed	%
AM012	Status	
AM014	Sub-Status	
AM016	Boiler flow temperature	°C
AM018	Boiler return temperature	°C
DM001	Domestic hot water tank temperature	°C
AM027	Outside temperature	°C
PM002	Heating temperature set point	°C
AM101	Calculated boiler set point	
AM019	Hydraulic pressure	bar
AM051	Supplied relative output	%
AM091	Season mode: • 0: SUMMER • 1: WINTER	
CM030	Room temperature measured	°C
CM190	Temperature set point	°C

8.1.3 User menu

Certain parameters are displayed:
- according to certain system configurations,
- according to the options, circuits or sensors actually connected.

Tab.12 List of parameters

Parameters	Description	Factory setting	Customer setting
AP016	Central heating operation: • 0 = OFF • 1 = ON	1	

Parameters	Description	Factory setting	Customer setting
AP017	Domestic hot water tank operation: • 0 = OFF • 1 = ON	1	
AP073	SUMMER / WINTER set point switch: • Can be set from 15 to 30°C • Set to 30.5°C = function deactivated	22°C	
AP074	SUMMER override: • 0 = OFF • 1 = ON	1	
CP010	Heating water flow temperature set point for the area heated if an outside temperature sensor has not been connected Can be set from 7 to 90°C.	75°C	
CP040	Post-operation time of the generator pump Can be set from 0 to 20 minutes	3 minutes	
CP071	Room temperature set point in reduced mode Can be set from 5 to 30°C.	16°C	
CP072	Room temperature set point in comfort mode Can be set from 5 to 30°C.	20°C	
CP073	Not available in this version		
CP074	Not available in this version		
CP075	Not available in this version		
CP076	Not available in this version		
CP320	Circuit operating mode: • 0 = Timer program • 1 = Manual • 2 = Frost protection	0	
CP570	Not available in this version	0	
DP213	Post-circulation time of the pump after domestic hot water production • Can be set from 0 to 99 minutes • Set to 99 minutes = continuous running	1 minute	
DP060	Number of timer programs selected for domestic hot water production mode Can be set from 0 to 2	0	
DP070	Domestic hot water temperature set point in comfort mode Can be set from 40 to 65°C.	55°C	
DP080	Domestic hot water temperature set point in reduced mode Can be set from 10 to 60°C.	10°C	
DP200	Domestic hot water production mode: • 0 = Program • 1 = Manual • 2 = Frost protection mode	0	
AP103	Setting the **LANGUAGE**		
AP104	Setting the **CONTRAST**		
AP105	Choosing the **UNIT**		
AP106	Choosing the operating mode: **WINT/SUM**		

8.1.4 COUNTERS / TIME PROG / menus CLOCK

This menu contains the following sub-menus:
- **COUNTERS**
- **TIME PROG** : timer program
- **CLOCK**

■ Sub-menu COUNTERS

Tab.13 List of parameters

Parameters	Description	Unit
DC002	Number of reversal valve cycles	
DC003	Number of hours' reversal valve operation	hours
PC002	Number of burner start-ups	
DC004	Number of burner start-ups in domestic hot water production mode	
PC003	Number of hours' operation	hours
DC005	Number of hours' operation in domestic hot water production mode	hours
PC004	Number of safety lockdowns (E36)	
AC026	Number of hours' pump operation	hours
AC027	Number of pump start-ups	
AC005	Consumption in heating mode	kWh
AC006	Consumption in domestic hot water production mode	kWh
AC001	Number of hours' operation	hours
AC002	Number of hours' burner operation since the last service	hours
AC003	Number of hours' operation since the last service	hours
AC004	Number of burner start-ups since the last service	

■ Sub-menu TIME PROG

Tab.14 List of parameters

Parameters	Description	Factory setting	Customer setting
1	Timer program for Mondays	06:00 - 22:00	
2	Timer program for Tuesdays	06:00 - 22:00	
3	Timer program for Wednesdays	06:00 - 22:00	
4	Timer program for Thursdays	06:00 - 22:00	
5	Timer program for Fridays	06:00 - 22:00	
6	Timer program for Saturdays	06:00 - 22:00	
7	Timer program for Sundays	06:00 - 22:00	

■ Sub-menu CLOCK

Tab.15 List of parameters

Parameters	Description	Factory setting	Customer setting
HOURS	Time Can be set from 0 to 23		
MINUTE	Minute Can be set from 0 to 59		
DATE	Date Can be set from 1 to 31		
MONTH	Month Can be set from 1 to 12		
YEAR	Year Can be set from 0000 to 2100		

8.1.5 PCB parameters for the PCB + sensor kit for circuits with mixing valve

Certain parameters are displayed:
- according to certain system configurations,
- according to the options, circuits or sensors actually connected.

Tab.16 List of parameters accessible to the user

Parameters	Description	Factory setting	Customer setting
AP073	SUMMER / WINTER set point switch: • Can be set from 15 to 30°C • Set to 30.5°C = function deactivated	22°C	
AP074	SUMMER override: • 0 = OFF • 1 = ON	0	
CP010	Heating water flow temperature set point for the area heated Can be set from 7 to 100°C.	40°C	
CP040	Post-operation time of the generator pump Can be set from 0 to 20 minutes	4 minutes	
CP071	Room temperature set point in reduced mode Can be set from 5 to 30°C.	16°C	
CP072	Room temperature set point in comfort mode Can be set from 5 to 30°C.	20°C	
CP320	Circuit operating mode • 0 = Timer program • 1 = Manual • 2 = Frost protection	0	
CP350	Not available on this version		
CP360	Not available on this version		
CP540	Swimming pool water temperature set point • Can be set from 0 to 39°C • Set to 0: frost protection operation	20°C	
CP570	Not available on this version		

8.2 Setting the parameters

8.2.1 Modifying the User parameters

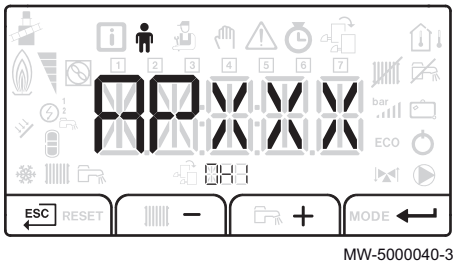
Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

The parameters in the User menu can be modified by the user to meet his central heating and domestic hot water comfort requirements.

Caution
Modification of the factory settings may impair operation of the appliance.

1. Access the User menu.

Fig.38 Displaying the User menu



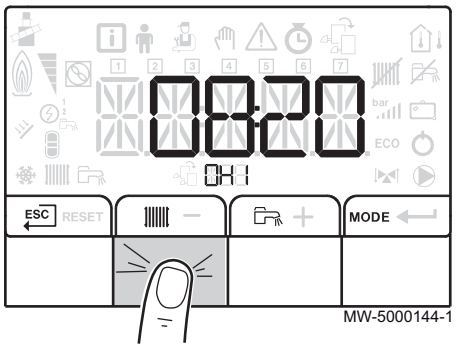
2. Select the desired parameter by pressing + or − to scroll through the list of parameters that can be adjusted.
3. Confirm the selection by pressing ↵.
4. Modify the value of the parameter by pressing + or −.
5. Confirm the new value of the parameter by pressing ↵.
6. Go back to the main display by pressing ESC.

For more information, see
Browsing in the menus, page 19
User menu, page 27

8.2.2 Setting the heating

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

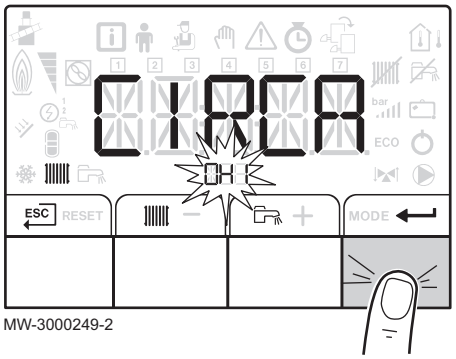
Fig.39 Accessing the heating parameters



1. Access the heating shut-down pressing the ||| key twice.

Note
If no outside temperature sensor is connected, this menu can be used to set the temperature of the heating water.
If an outside temperature sensor is connected, this menu can be used to set the set point.

Fig.40 Confirming the heating circuit



2. Display the parameters for the desired circuit by pressing the + or − key. Confirm by pressing the ↵ key.
   The name of the circuit and the heating water temperature set point are displayed alternately.
3. Access setting of the heating water temperature set point by pressing the ↵ key.
4. Set the heating water temperature set point by pressing + or − key.
5. Confirm the new temperature set point by pressing the ↵ key.

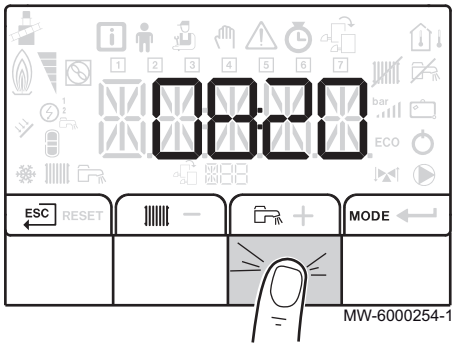
Note
Press the ESC key to cancel all input.

For more information, see
Browsing in the menus, page 19

8.2.3 Setting the domestic hot water temperature

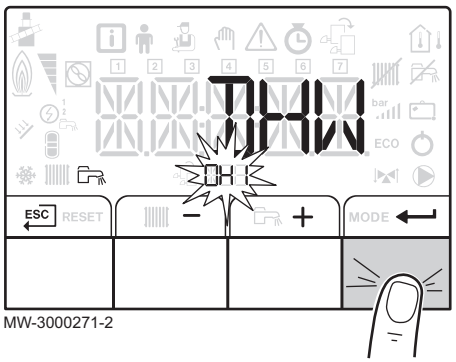
Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

Fig.41 Accessing the domestic hot water production parameters



1. Access the domestic hot water production parameters by pressing the key twice.

Fig.42 Confirmation of the domestic hot water circuit



MW-3000271-2

2. Display the domestic hot water production circuit parameters by pressing the ⟵ key.
   The name of the circuit and the domestic hot water temperature set point are displayed alternately.
3. Access setting of the domestic hot water temperature set point by pressing the ⟵ key.
4. Set the domestic hot water temperature set point by pressing + or − key.
5. Confirm the new temperature set point by pressing the ⟵ key.

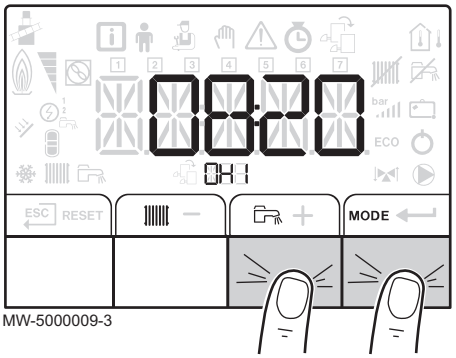
Note
Press the ESC key to cancel all input.

For more information, see
Browsing in the menus, page 19

8.2.4 Activating Manual Forcing

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

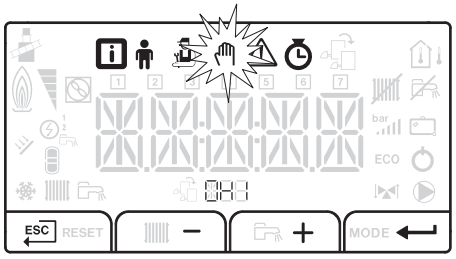
Fig.43 Accessing the menus



MW-5000009-3

1. Access the menus by pressing the two keys on the right simultaneously.

Fig.44 Accessing Manual Forcing

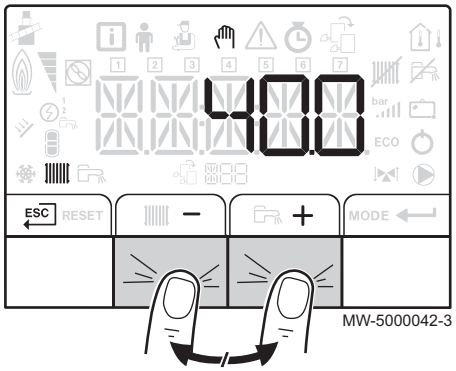


MW-5000010-2

2. Access Manual Forcing by pressing the + or − key. Confirm by pressing the ⟵ key.

Note
Manual Forcing is available only when the icon flashes.

Fig.45 Setting the set point



MW-5000042-3

3. Set the value of the heating water temperature set point by pressing + or − key. Confirm by pressing the ⟵ key.
4. Go back to the main display by pressing the ESC key.

For more information, see
Browsing in the menus, page 19

8.2.5 Setting the timer program

Note
The name of the PCB is displayed. Check that it is actually the PCB on which the setting must be made.

1. Access the Hour Run Meters / Timer Program / Clock menus.
2. Select the Timer Program sub-menu by pressing the + or − key. Confirm by pressing the ↵ key.

Fig.46 Accessing the Hour Run Meters / Timer Program / Clock menus

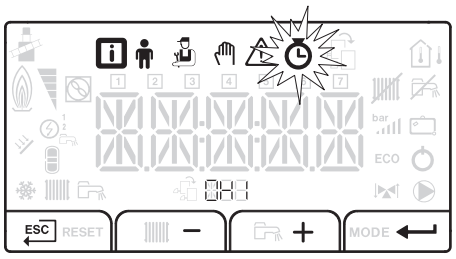
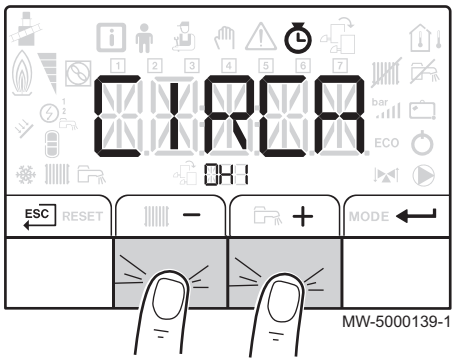


Fig.47 Selecting the circuit

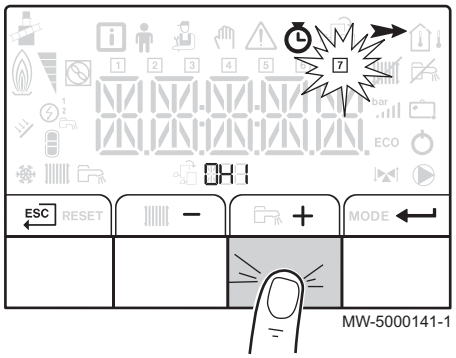


3. Select the circuit by pressing the + or − key. Confirm by pressing the ↵ key.

Note
At least two circuits are available:
- Heating
- Domestic hot water: **DHW**

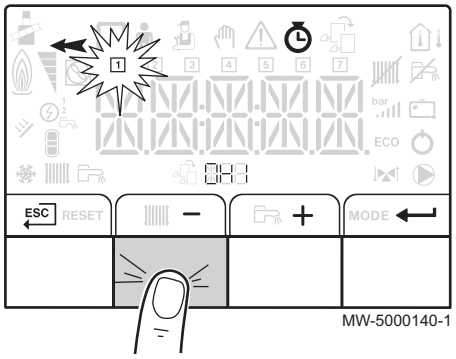
The icons dedicated to the days of the week all flash at the same time: 1 2 3 4 5 6 7

Fig.48 Selecting the day



4.

Fig.49 Selecting the day



Select the desired day number by pressing the + or − key until the icon dedicated to the desired day flashes. Confirm by pressing the ↵ key.

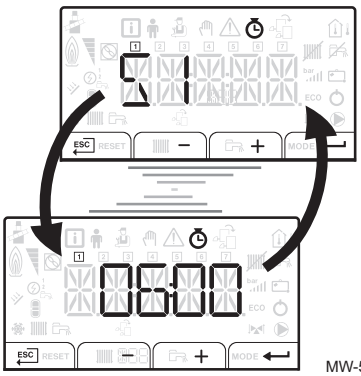
Day selected	Description
1, 2, 3, 4, 5, 6, 7	every day of the week
1	Monday
2	Tuesday
3	Wednesday
4	Thursday
5	Friday
6	Saturday

7	Sunday

Note
The + key is used to move to the right.

Note
The − key is used to move to the left.

Fig.50 Setting the time

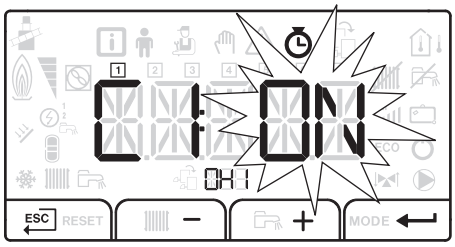


MW-5000142-1

5. Set the start time for the period **S1** by pressing the + or − key. Confirm by pressing the ↵ key.

Note
No setting: 10 minutes
The **END** setting determines the end time.

Fig.51 Selecting the status



MW-5000143-1

6. Select status **C1** corresponding to the **S1**period by pressing the + or − key. Confirm by pressing the ↵ key.

Statuses C1 to C6 for the periods S1 to S6	Description
ON	comfort mode activated
OFF	reduced mode activated

7. Repeat steps 3 to 5 to define the comfort periods **S1** to **S6** and the associated **C1** statuses to **C6**
8. Go back to the main display by pressing the ESC key.

Example:

Times	S1	C1	S2	C2	S3	C3	S4	C4	S5	C5	S6	C6
06:00-22:00	06:00	**ON**	22:00	**OFF**	**END**							
06:00-08:00 11:30-13:30	06:00	**ON**	08:00	**OFF**	11:30	**ON**	13:30	**OFF**	**END**			
06:00-08:00 11:30-14:00 17:30-22:00	06:00	**ON**	08:00	**OFF**	11:30	**ON**	14:00	**OFF**	17:30	**ON**	22:00	**OFF**

For more information, see
Browsing in the menus, page 19
Sub-menu COUNTERS, page 29

9 Maintenance

9.1 General

We recommend having the boiler inspected and serviced at regular intervals.

- Boiler maintenance and cleaning must be carried out at least once a year by a qualified professional.
- Have an inspection carried out and the flues swept **at least once a year** or more, depending on the regulations in force in your country.

Caution
Failure to service the appliance voids the warranty.

Caution
Maintenance work must be carried out by a qualified professional.

Caution
Only genuine spare parts may be used.

9.2 Maintenance instructions

1. Check the hydraulic pressure in the installation.

Note
If the hydraulic pressure is lower than 0.08 MPa (0.8 bar), more water should be added. Top up the water level in the heating installation to reach a hydraulic pressure of between 0.15 and 0.2 MPa (1.5 and 2.0 bar).

2. Carry out a visual check for any water leaks.
3. Open and close the radiator valves several times a year. This helps to prevent the valves from seizing up.
4. Clean the outside of the boiler using a damp cloth and a gentle detergent.

Fig.52 Beware of water leaks

9.2.1 Checking the water pressure

The water pressure must be a minimum of 0.08 MPa (0.8 bar).

1. If necessary, top up the water in the heating system.
   The recommended water pressure when cold is between 0.10 MPa (1.0 bar) and 0.15 MPa (1.5 bar).

9.2.2 Topping up the installation with water

If necessary, top up the water level in the heating system (recommended hydraulic pressure between 0.15 and 0.2 MPa (1.5 and 2 bar)).

1. Open the valves on all radiators connected to the heating system.
2. Set the room thermostat to as low a temperature as possible.
3. Put the boiler in shut-down/frost protection mode.
4. Open the fill valve.
5. Close the filling valve when the pressure gauge shows a pressure of 0.15 MPa (1.5 bar).
6. Put the boiler in heating mode.
7. When the pump has stopped, vent again and top up the water pressure.

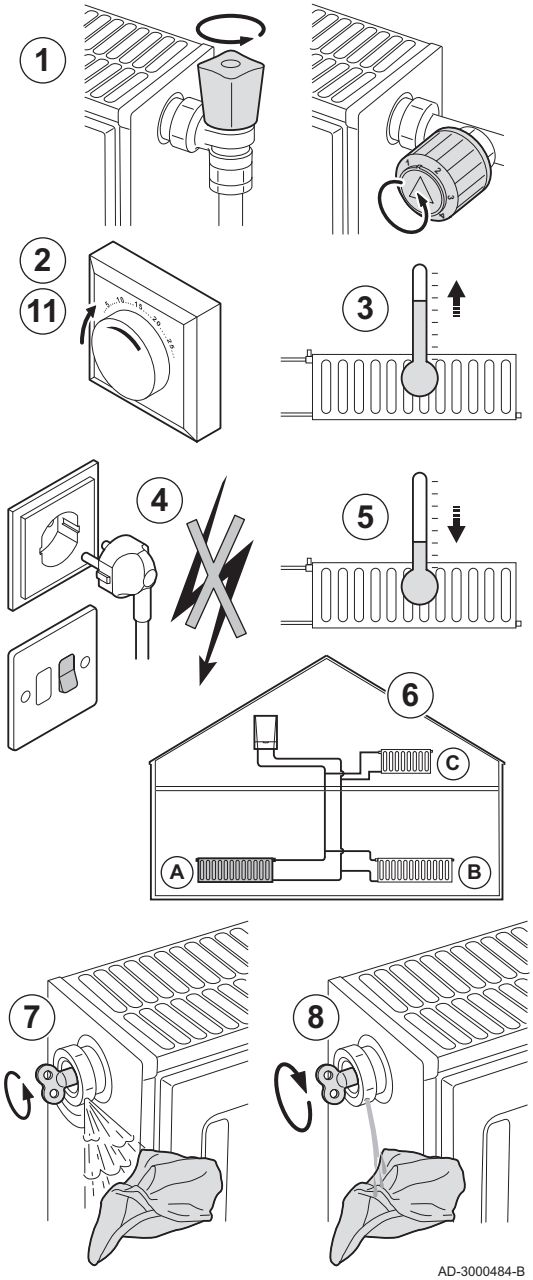
Note
Filling and venting the installation twice a year should be sufficient to obtain an adequate hydraulic pressure. If it is often necessary to top up the installation with water, contact your installer.

9.2.3 Chimney sweep instructions

Check the combustion each time the flues are swept.

9.3 Venting the installation

Fig.53 Venting the installation



Any air in the appliance, the pipes or the valves must be removed in order to prevent annoying noises that may occur during heating or when tapping water. Proceed as follows:

1. Open the valves of all the radiators connected to the installation.
2. Set the room thermostat to the highest possible temperature.
3. Wait until the radiators are warm.
4. Switch off the boiler.
5. Wait approximately ten minutes, until the radiators feel cold.
6. Vent the radiators. Work from the bottom to the top.
7. Open the venting valve with the bleed key, keeping a cloth pressed against the vent.
8. Wait until water comes out of the venting valve and then close the venting valve.

Warning
The central heating water may still be hot.

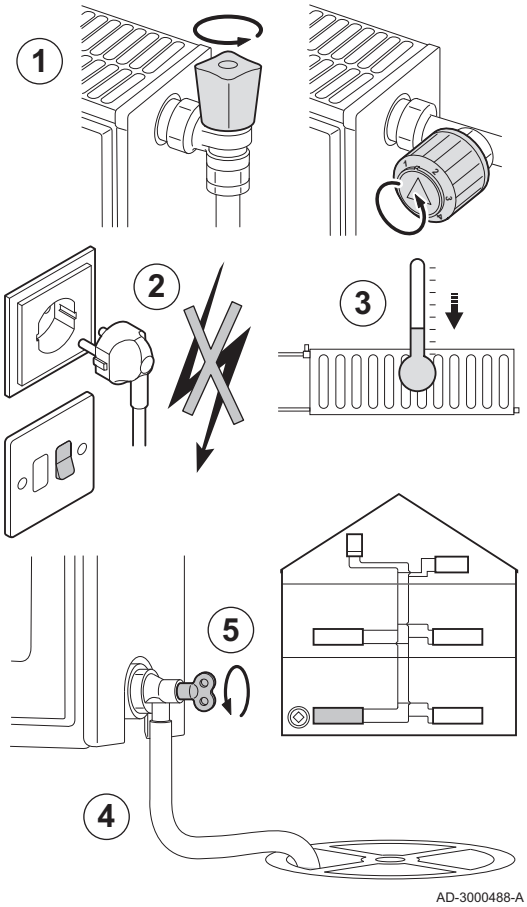
9. Turn the boiler on.
   A three-minute venting cycle is performed automatically.
10. After venting, check that the water pressure in the installation is still adequate.

Note
If the water pressure is lower than 0.8 bar, water must be added. If necessary, top the installation up (recommended water pressure between 1.5 and 2.0 bar).

11. Set the room thermostat or the control.

9.4 Draining the installation

Fig.54 Draining the installation



It may be necessary to drain the central heating installation if radiators need to be replaced, if there is a major water leak or if there is a risk of freezing. Proceed as follows:

1. Open the valves of all the radiators connected to the installation.
2. Switch off the boiler's electrical connection.
3. Wait approximately ten minutes, until the radiators feel cold.
4. Connect a drain hose to the lowest draining point. Place the end of the hose in a drain or at a place where drained pipe water will not cause any damage.
5. Open the central heating system fill/drain valve. Drain the installation.

Warning
The central heating water may still be hot.

6. When water stops flowing from the draining point, close the draining valve.

10 Troubleshooting

10.1 Error messages B-Control

10.1.1 Shutdown

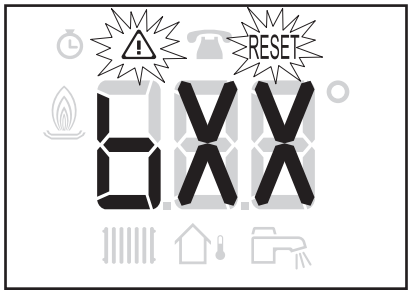
A shutdown is a (temporary) boiler status, resulting from an abnormal state. The display shows a shutdown code. The control unit makes a number of attempts to start the boiler again.

Note
The boiler automatically returns to operation once the cause of the shutdown has been removed.

10.1.2 Error code display

If an error is detected, the error code is displayed automatically.

Fig.55 Error code display



MW-3000240-2

Note
The ⚠ and RESET icons flash.

10.1.3 Lock-out

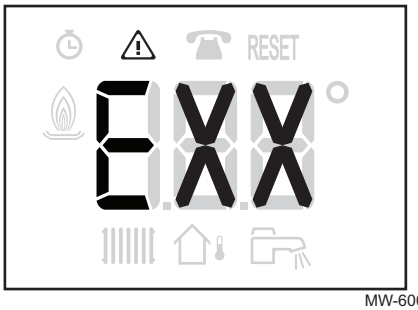
If the blocking conditions still exist after various start attempts, the boiler goes into lockout (also called fault).

Note
The boiler only returns to operation if the causes of the lockout have been removed and a user or service reset has been performed.

10.1.4 Fault code display

If a fault is detected, the fault code is displayed automatically.

Fig.56 Fault code display

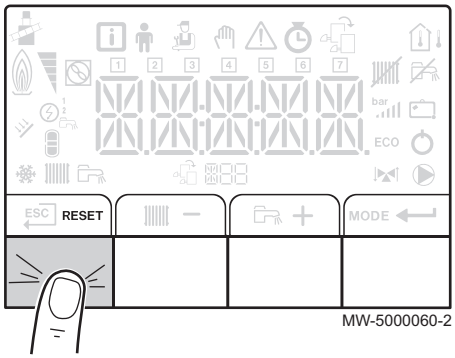


MW-6000210-2

10.2 Error messages IniControl 2

10.2.1 Error messages

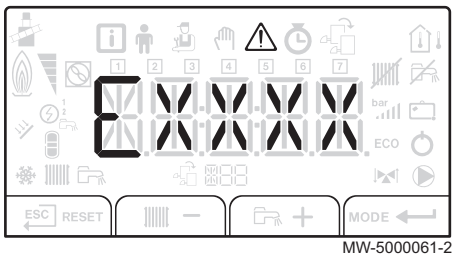
Fig.57 Restarting the appliance



MW-5000060-2

1. Press **RESET** for 3 seconds to restart the appliance.

Fig.58 Error code display



MW-5000061-2

Note
- The message **RESET** appears when a failure code is detected. After resolving the problem, pressing the **RESET** key resets the appliance's functions and thus eradicates the failure.
- If several failures occur, they are displayed one after the other.

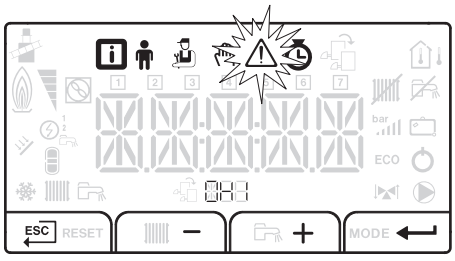
In economy mode, the appliance will not run a domestic hot water heating cycle after a central heating cycle.

2. Briefly press the ↵ key to display the current operating status on the screen.

For more information, see
Browsing in the menus, page 19

10.2.2 Accessing the Failure menu

Fig.59 Accessing the Failure menu

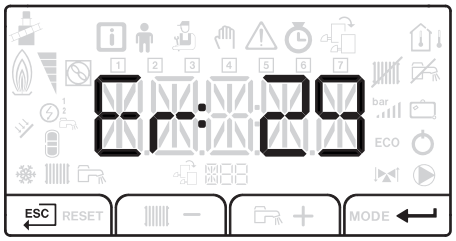


MW-5000011-1

1. Press ↵ to access the Failure menu.

Note
The Failure menu is available only if the ⚠ icon flashes.

Fig.60 Displaying the error messages



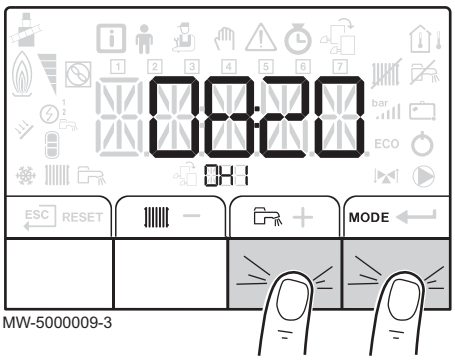
MW-5000043-1

2. Press the + or − key to scroll through the error and fault messages.

For more information, see
Browsing in the menus, page 19

10.2.3 Error history

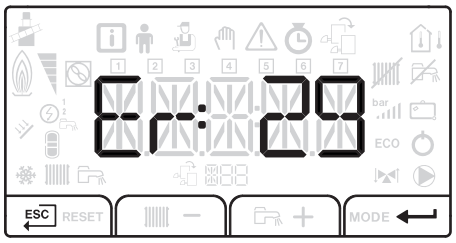
Fig.61 Accessing the menus



MW-5000009-3

1. Access the menu level by pressing the two keys on the right simultaneously.

Fig.62 Accessing the Failure menu



MW-5000043-1

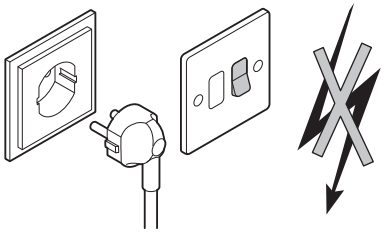
2. Select the Failure menu by pressing the ↵ key.
3. Press the + or − key to scroll through the error code history.
4. Press the ↵ key to access the details of the error code displayed.

For more information, see
Browsing in the menus, page 19
Accessing the Failure menu, page 39

11 Decommissioning

11.1 Decommissioning procedure

Fig.63 Cutting the mains power supply



MW-0000149-1

If you need to decommission the boiler, either temporarily or permanently, proceed as follows:

1. Switch the On/Off switch to Off.
2. Switch off the mains supply to the boiler.
3. Close the oil inlet.
4. Ensure that the boiler and system are protected against frost damage.
5. Have the boiler and the chimney carefully swept.
6. Close the door of the boiler to prevent air circulating inside it.
7. Remove the pipe connecting the boiler to the chimney and close the nozzle with a plug.
8. Drain the domestic hot water tank and the domestic water pipes (for systems with a domestic hot water tank).

11.2 Recommissioning procedure

Warning
Only qualified professionals are authorised to work on the boiler and the heating installation.

Should it prove necessary to carry out the recommissioning of the boiler, proceed as follows:

1. Re-establish electrical power to the boiler.
2. Remove the siphon.
3. Fill the siphon with water.
   The siphon must be filled up to the marker.
4. Put the siphon back in place.
5. Fill the central heating system.
6. Start up the boiler.

12 Disposal

12.1 Disposal and Recycling

Fig.64 Recycling

MW-3000179-03

Warning
Removal and disposal of the boiler must be carried out by a qualified installer in accordance with local and national regulations.

13 Energy savings

Tips on saving energy:

- Do not block ventilation outlets.
- Do not cover the radiators. Do not hang curtains in front of the radiators.
- Install reflective panels behind the radiators to prevent heat losses.
- Insulate the pipes in rooms that are not heated (cellars and lofts).
- Turn off the radiators in rooms not being used.
- Do not run hot (or cold) water pointlessly.
- Install a water-saving shower head to save up to 40% energy.
- Take showers rather than baths. A bath consumes twice as much water and energy.

14 Warranty

14.1 General

We would like to thank you for buying one of our appliances and for your trust in our product.

In order to ensure continued safe and efficient operation we recommend that the product is regularly inspected and maintained.

Your installer and our service department can assist with this.

14.2 Terms of warranty

The following provisions do not affect the application, in favour of the buyer, of the legal provisions with regard to hidden defects that are applicable in the buyer's country.

This appliance comes with a warranty that covers all manufacturing faults; the warranty period will commence on the date of purchase stated on the installer's invoice.

The warranty period is stated in our price list.

As a manufacturer, we can by no means be held liable if the appliance is used incorrectly, is poorly maintained or not maintained at all, or is not installed correctly (it is your responsibility to ensure that installation is carried out by a qualified installer).

In particular, we cannot be held liable for material damage, intangible losses or physical injury resulting from an installation that does not comply with:

- Legal or regulatory requirements or provisions laid down by the local authorities,
- National or local regulations and special provisions relating to the installation,
- Our manuals and installation instructions, in particular in terms of regular maintenance of the appliances,

Our warranty is limited to the replacement or repair of the parts found to be defective by our technical services team, excluding labour, transfer and transport costs.

Our warranty does not cover replacement or repair costs for parts that may become defective due to normal wear, incorrect usage, the intervention of unqualified third parties, inadequate or insufficient supervision or maintenance, a mains supply that is not appropriate or the use of unsuitable or poor quality fuel.

Smaller parts, such as motors, pumps, electrical valves etc., are guaranteed only if these parts have never been dismantled.

The rights established in European Directive 99/44/EEC, implemented by legal decree No. 24 of 2 February 2002 and published in Official Journal No. 57 of 8 March 2002, remain in force.

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