Operating instructions

for system users

Vitotron 100
Type VMN3, VLN3

Electric instantaneous water boiler for central heating

VITOTRON 100

Safety instructions

⚠ Please follow these safety instructions closely to prevent injury and material damage.

Safety instructions explained

⚠ **Danger**
This symbol warns against the risk of injury.

! **Caution**
This symbol warns against the risk of material losses and environmental pollution.

Note
Details identified by the word "Note" contain additional information.

Target group

These operating instructions are designed for heating system users.

This appliance can also be operated by children aged 8 and above, as well as by individuals with reduced physical, sensory or mental faculties or those lacking in experience and knowledge, provided such individuals are supervised or have been instructed in the safe use of this appliance as well as in any risks arising from it.

! **Caution**
Supervise children in the proximity of the appliance.
▪ Never permit children to play with the appliance.
▪ Cleaning and user maintenance must never be carried out by unsupervised children.

Connecting the appliance

▪ The appliance may be connected and commissioned only by authorised contractors.
▪ Observe the specified electrical connection requirements.
▪ Modifications to the existing installation may only be carried out by authorised contractors.

⚠ **Danger**
Incorrectly executed work on the heating system can lead to life threatening accidents.
▪ Work on electrical equipment must only be carried out by a qualified electrician.

6155063

Safety instructions (cont.)

Working on the appliance

- All settings and work on the appliance must be carried out as specified in these operating instructions. Further work on the appliance may be carried out only by authorised contractors.
- Do not open the appliance.
- Do not remove the casing.
- Never change or remove fitted accessories or attachments.
- Do not open or tighten pipe connections.

⚠ **Danger**
Hot surfaces can cause burns.
- Do not open the appliance.
- Do not touch the hot surfaces of uninsulated pipes and fittings.

Damage to the appliance

⚠ **Danger**
Damaged equipment poses a safety hazard. Check the appliance for external damage. Do not commission a damaged appliance.

Water escaping from the appliance

⚠ **Danger**
Water escaping from the appliance represents a risk of electric shock.
- Switch off the heating system at the external isolator (e.g. fuse box, domestic distribution board).
- Notify your local heating contractor.

If the heating system develops a fault

⚠ **Danger**
Fault messages indicate faults in the heating system. If faults are not rectified, they can have life threatening consequences.

Do not acknowledge fault messages several times in quick succession. Inform your heating contractor so the cause can be analysed and the fault rectified.

Installation room requirements

⚠ **Danger**
Do not make any subsequent modifications to the building characteristics that could affect safe operation (e.g. cable/pipework routing, cladding or partitions).

⚠ **Danger**
Never store or use such materials in the boiler room or in direct proximity to the heating system.

! **Caution**
Incorrect ambient conditions can lead to heating system damage and can put safe operation at risk.
- Ensure ambient temperatures above 0 °C and below 35 °C.
- Prevent air contamination by halogenated hydrocarbons (e.g. as contained in paints, solvents or cleaning fluids) and excessive dust (e.g. through grinding/polishing work).
- Avoid continuously high humidity levels (e.g. through continuous drying of laundry).

Auxiliary components, spare and wearing parts

! **Caution**
Components not tested with the heating system may damage the system or affect its function. Have all installation or replacement work carried out exclusively by qualified contractors.

6155063

Keyword index

Information

Symbols

Symbol	Meaning
	See other documents for more information
1.	Step in a diagram: The numbers correspond to the order in which the steps should be carried out.
!	Warning of material losses and environmental pollution

Intended use

The appliance is intended solely for installation and operation in sealed unvented heating systems that comply with EN 12828, with due attention paid to the associated installation, service and operating instructions. It is only designed for heating up heating water that is of potable water quality.

Intended use presupposes that a fixed installation in conjunction with permissible, system-specific components has been carried out.

Commercial or industrial usage for a purpose other than heating the building or DHW shall be deemed inappropriate.

Any usage beyond this must be approved by the manufacturer in each individual case.

Incorrect usage or operation of the appliance (e.g. the appliance being opened by the system user) is prohibited and will result in an exclusion of liability. Incorrect usage also occurs if the components in the heating system are modified from their intended function.

Terminology

To provide you with a better understanding of the functions of your Viessmann control unit, some terminology is explained.

The terms are marked as follows:

i Further information can be found in chapter Terminology in the Appendix.

Commissioning

The commissioning and matching of the control unit to local conditions and to building characteristics, plus the instruction of the user in operating the system, must be carried out by your heating contractor.

Your system is preset at the factory

Your heating system is preset at the factory and is therefore ready for operation.

Your heating contractor can make further settings for you during commissioning.

You can change the settings at any time to suit your individual requirements.

Power failure
All settings are retained if there is a power failure.

Energy saving tips

Central heating

■ **Room temperature:**
Never overheat your rooms. Every degree of room temperature reduction saves up to 6 % on your heating bills.
Set your room temperature no higher than 20 °C.
■ **Operating modes:**
If you do not require central heating, select one of the following operating modes:
– In summer, if you do not want to heat any rooms but do need DHW, set the boiler water temperature to **OFF**.
– If you do not require central heating or DHW for a long period of time, set the boiler water and DHW temperature to **OFF**.
■ **Roller shutters:**
Close roller shutters (where installed) at dusk.

■ **Thermostatic valves:**
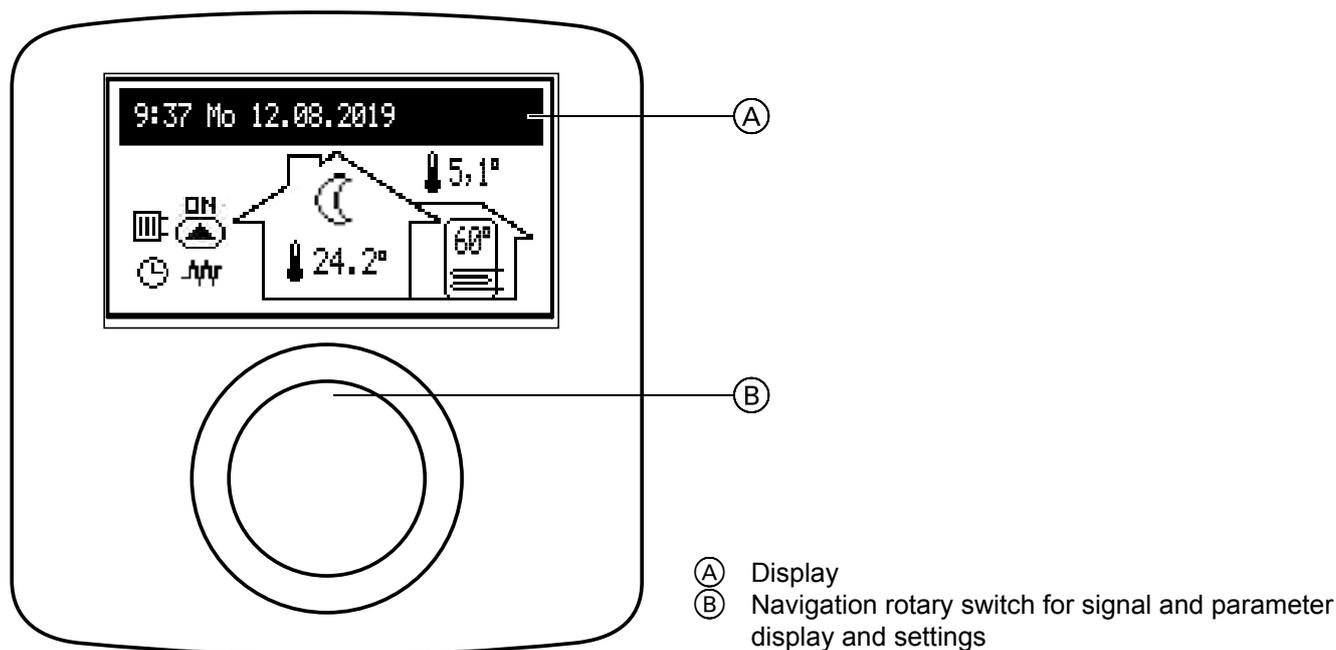Ensure that thermostatic valves are properly adjusted.
■ **Radiators:**
Never cover radiators or thermostatic valves.

DHW heating

■ **DHW temperature:**
Never set the DHW cylinder temperature excessively high (see page 15).
■ **DHW consumption:**
Consider showering instead of running a bath. A shower generally uses less energy than a full bath.
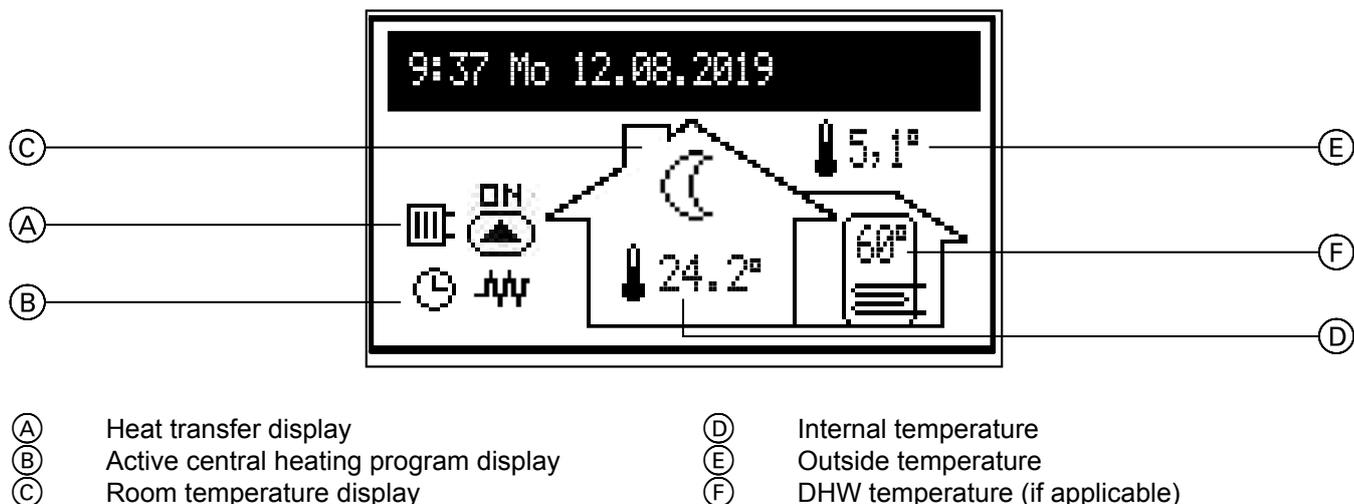
Control panel VMN3

9:37 Mo 12.08.2019
5,1°
ON
24.2°
60°

Ⓐ
Ⓑ

Ⓐ Display
Ⓑ Navigation rotary switch for signal and parameter display and settings

Turn button Ⓑ (right or left) during the active winter or summer program to switch between the function displays on LCD screen Ⓐ.
– Main display: Provides information on basic boiler parameters (see table for details)
– Information on the operating parameters of other heating circuits (if installed)
– Settings: Allows individual adjustment of the parameters of the boiler and other heating circuits according to the user's preferences
– Service/Configuration: Allows configuration of the heating system according to the structural conditions (available for the installation company and contractors after entering the access code) and displays the input and output signals for the boiler as well as the current parameters
– PARTY/HOLIDAY/MANUAL: Allows the operating algorithm to be changed quickly as required.
– Operating mode.

Individual functions can be called up after selecting the corresponding function display and pressing the rotary selector. If a fault occurs in the boiler, the message Err will be displayed on the main function screen. Press the rotary switch to display a list of faults.
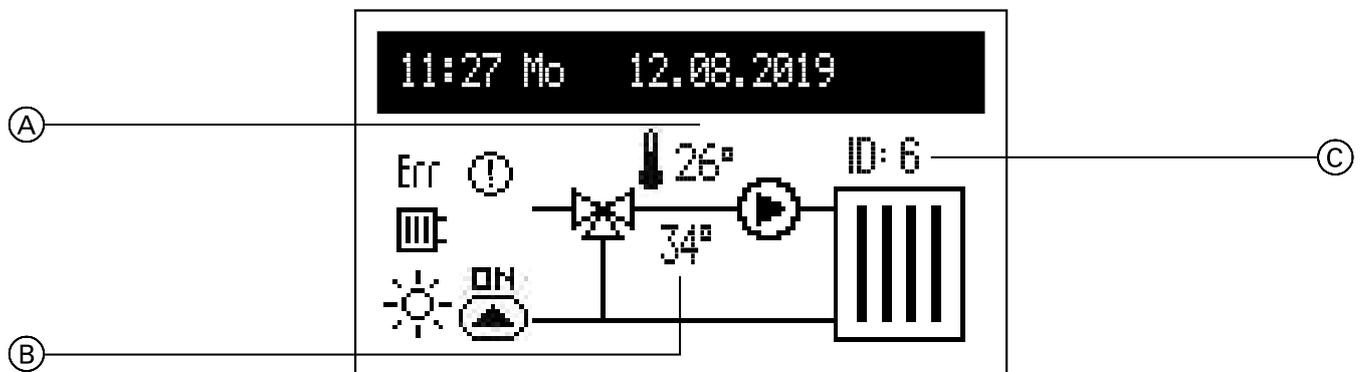
Control panel VMN3 (cont.)

Main display

Ⓐ	Heat transfer display	Ⓓ	Internal temperature
Ⓑ	Active central heating program display	Ⓔ	Outside temperature
Ⓒ	Room temperature display	Ⓕ	DHW temperature (if applicable)

Heat transfer	
⊥	DHW heating/cylinder heating
▥	Central heating
◯	Buffer charging

Current central heating program	
🕒	Time controlled (daily/weekly program)
🍸	PARTY – maintains a comfortable room and cylinder temperature
🧳	HOLIDAY – maintains an energy saving or frost-free room and cylinder temperature
✋	MANUAL – maintains the set room temperature
❋	TURBO – fastest possible heating to the set room temperature
❄	Frost protection program enabled
🔌	Cylinder pasteurisation
♨	Ventilation of the DHW circulation pump
MA	Heating function blocked by signal from master appliance

Operation

Control panel VMN3 (cont.)

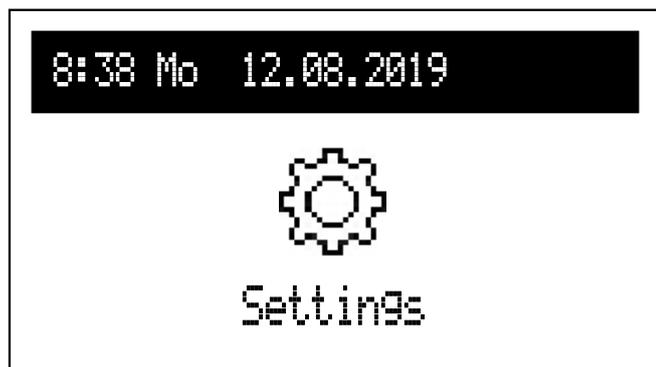|	Room temperature display
❄	Frost protection
☾	Energy saving temperature
☼	Comfort temperature
☼	Comfort temperature plus
☼	Comfort temperature minus
RT	Demand for heating energy via the room temperature controller (with the internal control unit)
◖	Displays the start of time-controlled buffer charging
Err	Appliance fault display
ᐁ ON	DHW circulation pump is running
ᨊ	Heating mode ON

Heating circuit parameter information

The screen shows flow temperature Ⓐ, set temperature Ⓑ and heating circuit identifier Ⓒ (assigned in the VCMG3 module configuration). If there is no heat demand, temperature Ⓑ is not displayed.

6155063

Control panel VMN3 (cont.)

Status display	
▥	Circulation heating
☷	DHW circulation pump is running
Err	Fault in the flow temperature sensor. In the event of a fault in the sensor that measures the flow temperature of heating circuit 1, "- -" is displayed
①	Heating circuit temperature too low. Appears when the set flow temperature in heating circuit 2 is not reached within 15 minutes
⑪	Heating circuit operation is interrupted

Active central heating program display	
🕓	Time controlled (daily/weekly program)
🍸	PARTY – maintains a comfortable room and DHW temperature
🧳	HOLIDAY – maintains a comfortable, energy saving or frost-free room and DHW temperature
✋	MANUAL – maintains the set room temperature
MA	Heating signal blocked by master appliance

Room temperature display	
❄	Frost protection
☾	Energy saving temperature
☀	Comfort temperature
☀	Comfort temperature plus
☀	Comfort temperature minus

Control panel VMN3 (cont.)

Settings:

```
8:38 Mo   12.08.2019

        ⚙

     Settings
```

If other heating circuits are installed in the system, these must be selected in the menu:
- Boilers
- Heating circuits.

If no other heating circuits are installed, the list of settings appears with a boiler.

Boiler settings
- Central heating flow temperature: Set flow temperature (only available in the basic module with fixed parameters for the room temperature control unit)
  [*Configuration > CH > Control > Fixed parameters*].
- Room temperature (only available when Tr sensor is active) [*Configuration > Room temp. > Room sensor > Tr*]:
  – Energy saving ☾, Comfort- ☼, Comfort ☼, Comfort+ ☼: Set room temperature available in the schedules
  – Party, Holiday: Selection of temperatures to be applied in the PARTY and HOLIDAY programs.
- DHW temperature|
  (only available in systems with a cylinder):
  – Energy saving ☾, Comfort ☼: Selection of DHW temperature available in the schedules.

- Central heating program (only available in the basic modules and with an active Tr sensor) [*Configuration > Room temperature > Room temperature sensor > Tr*]

```
CH Program              No.1
  1  6:00  -  9:15     ☼
  2 15:20  -  22:15    ☼
```

Ⓐ — Ⓓ
Ⓑ — Ⓒ
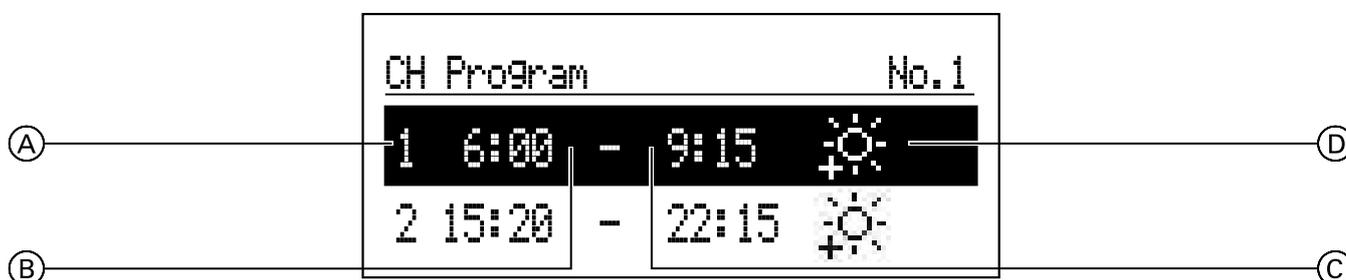
Ⓐ Period number (max. 5)
Ⓑ Start time of the selected program
Ⓒ End time of the selected program
Ⓓ Temperature selection: ❄, ☼, ☼, ☼

– Numbers 1 to 8 > Setting of 8 daily programs in each day program. There are 5 adjustable periods, each of which can be assigned a room temperature (❄, ☼, ☼, ☼).
  The process for setting daily programs is described in **Daily schedule**.
  Note: If no intervals are defined, an energy saving temperature is used. (☾).
– Weekly: A preset is assigned on each day of the weekly program.

6155063

Control panel VMN3 (cont.)

■ Buffer program
(only available in buffer mode).

```
Buffer program          No.1
1  6:00  -  8:00
2 18:30  - 23:00
```

Ⓐ Period number (max. 5)
Ⓑ Start time for buffer charging
Ⓒ End time for buffer charging

– Numbers 1 to 8 > Setting of 8 daily programs
each with 5 adjustable periods during which the
cylinder is charged.
The process for setting daily programs is
described in **Daily schedule**.
– Weekly: Assignment of one setting per day of the
week for the daily programs.

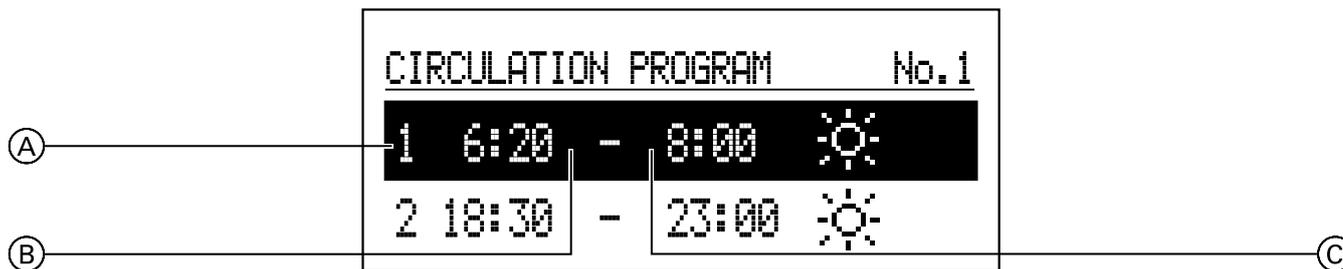■ DHW program (only available in systems with a DHW cylinder):

```
DHW TANK PROGRAM        No.1
1  6:00  -  8:00
2 18:30  - 23:00
```

Ⓐ Period number according to schedule (max. 5)
Ⓑ Start time for selected temperature
Ⓒ End time for selected temperature
Ⓓ Temperature selection: ❄, ☼

– Numbers 1 to 8 > Setting of 8 daily programs per
day program with 5 adjustable periods, each of
which can be assigned a cylinder temperature
(❄, ☼).
The process for setting daily programs is
described in **Daily schedule**.
**Note: If no temperature is defined, an
energy saving temperature is used** (☾).
– Weekly: Assignment of one setting per day of the
week for the daily programs.

6155063

13

Control panel VMN3 (cont.)

- DHW CIRCULATION PROGRAM (only available when DHW circulation is active):

```
┌────────────────────────────────────┐
│ CIRCULATION PROGRAM       No.1     │
│ 1  6:20  ─  8:00     ☼             │
│ 2 18:30  ─ 23:00     ☼             │
└────────────────────────────────────┘
```

Ⓐ Period number according to schedule (max. 5)
Ⓑ Start time for DHW circulation
Ⓒ End time for DHW circulation operation

- Numbers 1 to 8 > Setting of 8 daily programs per day program. There are 5 adjustable periods in which the DHW circulation pump runs.
  The process for setting daily programs is described in **Daily planning**.
- Weekly: Assignment of one setting per day of the week for the set daily programs.

- Pasteurisation (only available in systems with a DHW cylinder):
  - Temperature: Cylinder temperature during pasteurisation
  - Day of the week: Day for pasteurisation in the automatic program
  - Time: Time required for pasteurisation in the automatic program
  - Runtime: Time required for pasteurisation (calculated from the moment the pasteurisation temperature is reached)
  - Automatic mode:
    Yes – start pasteurisation automatically at the specified time (time, day of the week)
    No – automatic pasteurisation is disabled. Pasteurisation is only carried out at the request of the system operator.
  - DHW circulation: Pasteurisation can be activated for the entire system or only for DHW
  - Start now: Starts pasteurisation manually (regardless of set day and time).

- Date/time:
  - Sets the current system time (year, month, day of month, time).
  - Automatic time change:
    Yes – automatically changes the system time between summer and wintertime
    No – automatic time change is disabled.

- Language:
  - Menu language selection.
- User interface:
  - MIN. Brightness: Setting the brightness of the display in standby mode.

  - MAX. Brightness: Setting the brightness of the display during operation.
  - Tone:
    Yes – tone when operating the rotary power switch
    No – no tone when operating the rotary power switch
  - Sensitivity of the rotary switch:
    1 – high / 4 – low.

- System:
  - Type: VMx3 (ID).
  - MSK program: Program version for boiler control.
  - PW program: Version of the control panel program.
  - Maximum rated output: Set boiler output.
  - Reset: Start the boiler.
  - Default factory setting: Restore.

Heating circuit settings
If more than one heating circuit is installed, select the corresponding heating circuit from the list. If only one heating circuit is installed, a parameter list is displayed for it.

- Heating circuit program (only available with source and cylinder modules). The daily and weekly program settings are made in the same way as for the central heating program.
- System:
  - Stop:
    Yes – no heating circuit operation
    No – normal heating circuit operation.
  - Reset – restart the heating circuit control unit
  - Version of the heating circuit control unit

6155063

Control panel VMN3 (cont.)

Party/Holiday/Manual

```
8:38 Mo 12.08.2019


      ⛾/🧳


PARTY/HOLIDAY/MANUAL
```

Rapid change between operating algorithms as required.
- Party: Set operating mode duration (from 1 to 24 hours or until changed by the user).
- Holiday: Set operating mode duration (from 1 to 60 days or until changed by the user).
- Manual: Reach the room temperature set at the control unit – until changed by the user.
- Turbo: Switch on the heating function in the building with maximum parameters until the set room temperature is achieved.
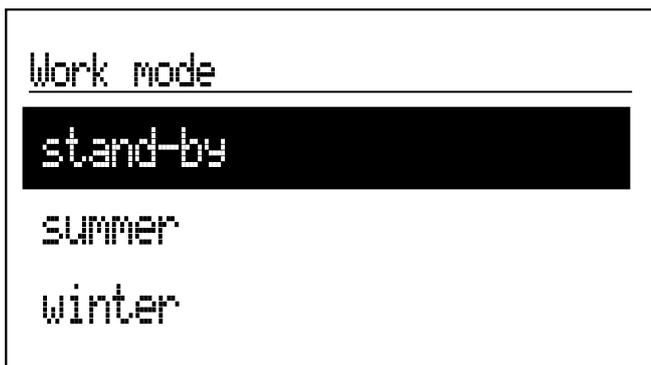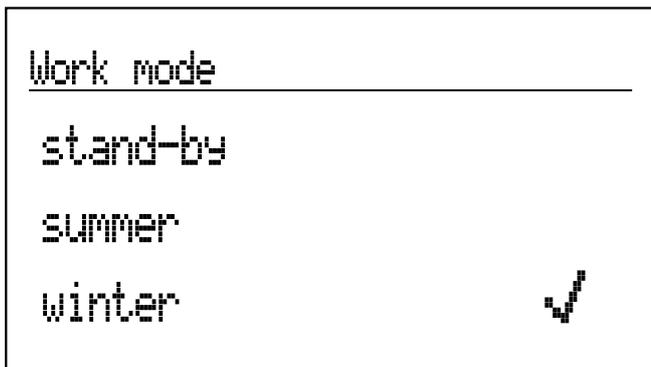 **Note: This option is only available when the room temperature drops below the temperature currently set in the schedule.**

* If one of the above operating modes is activated after calling up the Party/Holiday/Manual settings, it can be switched off. In manual mode, the set temperature can also be changed.
* The symbol for the active operating mode is shown on the main function display.

Operating mode

The current operating mode of the boiler is shown on the display. Depending on the boiler configuration, the following operating modes are available:

```
Work mode
─────────────────────
 stand-by

 summer

 winter              ✓
```
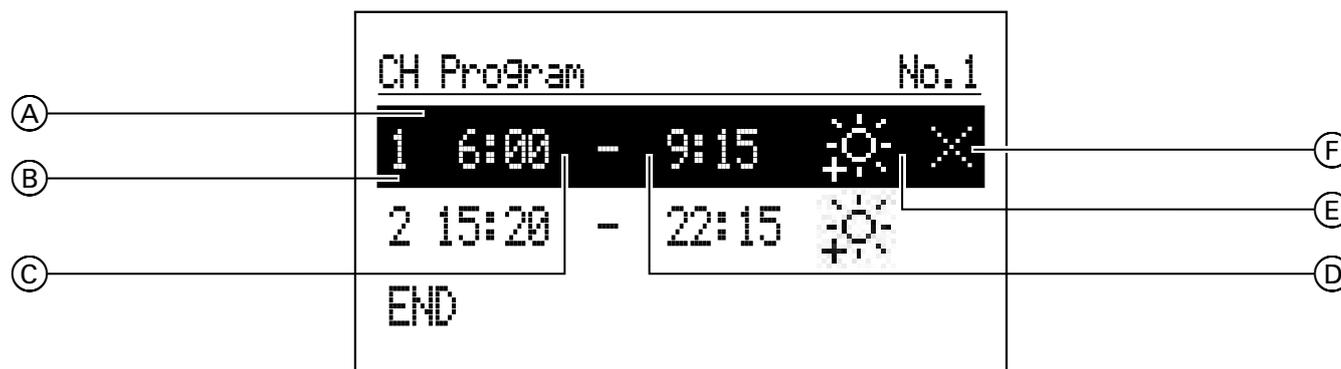
- Standby – central heating and DHW heating functions are switched off.
- Summer – heating function for DHW only.
  Note: This function is only available if a DHW cylinder is installed.
- Winter – heating function for central heating and DHW (if a DHW cylinder is installed).

If the boiler is in standby mode (display off), press the rotary switch to display the operating mode. To change the operating mode, press the navigation rotary switch and select the appropriate position. Select "End" to exit the settings without changing the operating mode.

Commissioning
If the boiler is being commissioned for the first time or has been reset to the factory settings, first select the menu language and then select the boiler output from the list. Boiler operation cannot be set correctly until this data has been entered. When commissioning for the first time with heating circuit modules, first configure the VCMG3 module (see Chapter 4.2 Configuration mode instructions for VCMG3). Ensure that a unique identification number is assigned.

```
Work mode
─────────────────────
 stand-by

 summer

 winter
```

6155063

Control panel VMN3 (cont.)

Daily schedule:

```
┌─────────────────────────────────────┐
│ CH Program              No.1         │
│ ─                                    │
│ █1  6:00  -  9:15    ☼  X           │
│ ─                         +          │
│  2 15:20  -  22:15   ☼              │
│                        +             │
│ END                                  │
└─────────────────────────────────────┘
```

Ⓐ Time program section
Ⓑ Periods 1 to 5
Ⓒ Starting time
Ⓓ End time
Ⓔ Operating status
Ⓕ Command (active during editing):
   ☑ Apply
    ☒ Delete
    ⊞ Add

For the central heating and the DHW cylinder, start time Ⓒ and end time Ⓓ are defined in the daily schedule so that selected operating status Ⓔ is maintained in the room (central heating program) or DHW cylinder (DHW program). Between these times, the energy saving temperature (energy saving operating status) is active. The times during which the DHW circulation pump runs constantly are set in the time program for the DHW circulation pump. The periods for maintaining selected operating status Ⓔ are set in the time program for the buffer cylinder. To change the parameters for the daily schedule, select the time program and press the navigation rotary switch. The first parameter(start time) flashes. Turn the navigation rotary switch left/right to set the new period (hours and minutes separately) and press it again to confirm. The next display starts to flash so that the next parameter (end time) can be edited. The last editable position is a command. To save the changes, select the "Save" ☑ command and press the rotary switch to complete editing. To delete the selected switching time, select the corresponding switching time for editing. Press the rotary switch to call up the "Command" position, select "Delete" ☒ and press the rotary switch again. To add a new period, select the last defined period, press the rotary switch to call up the "Command" position, select "Add" ⊞ and press the rotary switch again to add the new period (the process for editing a new period is described above).

6155063

Control panel VMN3 (cont.)

```
CH Program              No.3

1  0:00  -  23:59      ☼
```
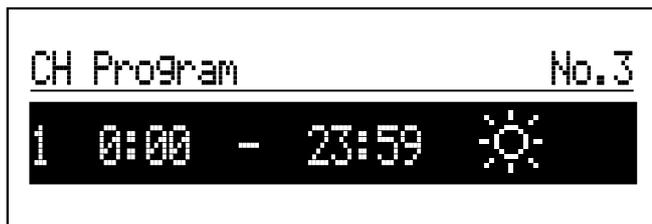
If no switching times have been defined, the period 00:00 to 23:59 is set after selecting "New". This should be edited according to the user's requirements.

```
CH Program              No.1

1  6:00  -   9:15      ☼

2 15:20  -  22:15      ☼

END
```
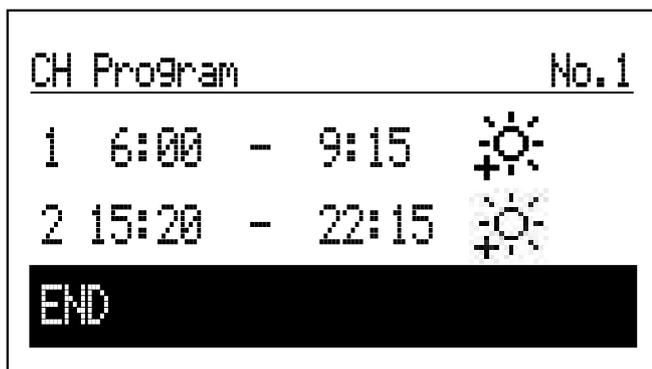
Press the "END" command to save the daily program in the boiler settings.

TURBO function

If the building is cold and needs to be heated up quickly, the TURBO function can be activated. Provided that the conditions for switching on the heating are met, this function starts the central heating with maximum parameters and maintains these until the required temperature has been reached in a room. This function can be started automatically when the room temperature falls by the hysteresis of the set room temperature.

Automatic mode is set in the *[Configuration > Turbo]* menu. Selecting "DHW cylinder – NO" switches off DHW priority for the duration of Turbo operation. In the "Party/Holiday/Manual" menu, it is possible to switch on this function automatically (without DHW heating priority), provided the room temperature is lower than programmed. Sensor Tr is required to switch on the Turbo function.

Frost protection

If the room temperature drops below 7 °C and the outside temperature drops below 2 °C in standby mode and summer operation, central heating is activated. Sensor Tr is required for activation.

The function is inactive when the boiler is controlled by an external room temperature controller connected to the room temperature input. In this case, activate frost protection mode on the external controller. The boiler then maintains the set temperature manually.
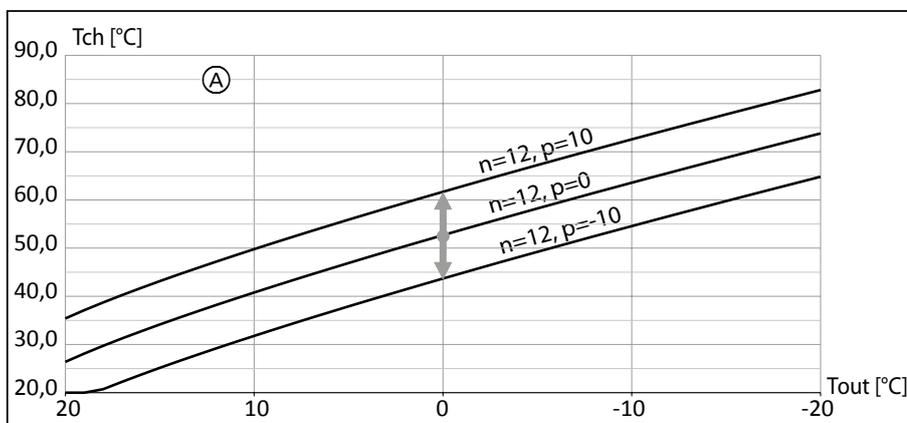
Control panel VMN3 (cont.)

Heating curve

The boiler control unit ensures that the correct temperature is maintained in the central heating installation depending on the outside temperature. When there is a low outside temperature, the heat demand inside the building is higher. On the other hand, when there is a high outside temperature, it is not necessary to maintain a high temperature inside the installation. The correlation between the outside temperature and the temperature of the heating installation can be represented graphically with a heating curve. The diagram below shows a summary of the heating curves for a set room temperature of 22 °C. The corresponding heating curve must be selected according to the building properties, climate zone and type of heating installation.
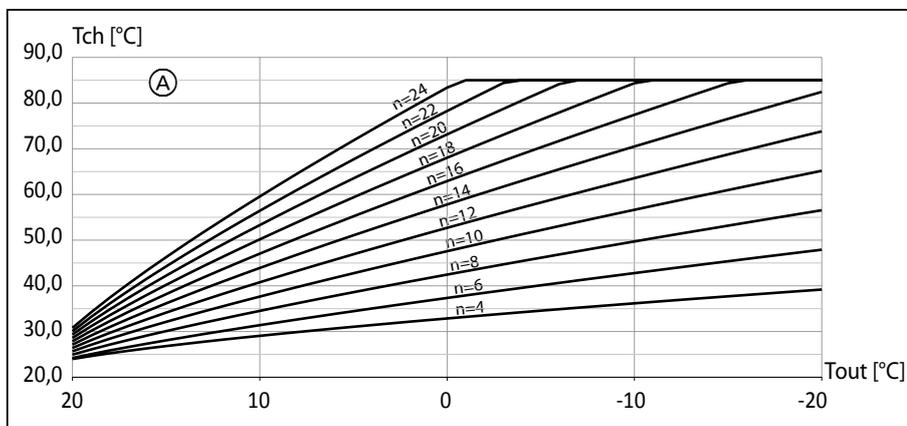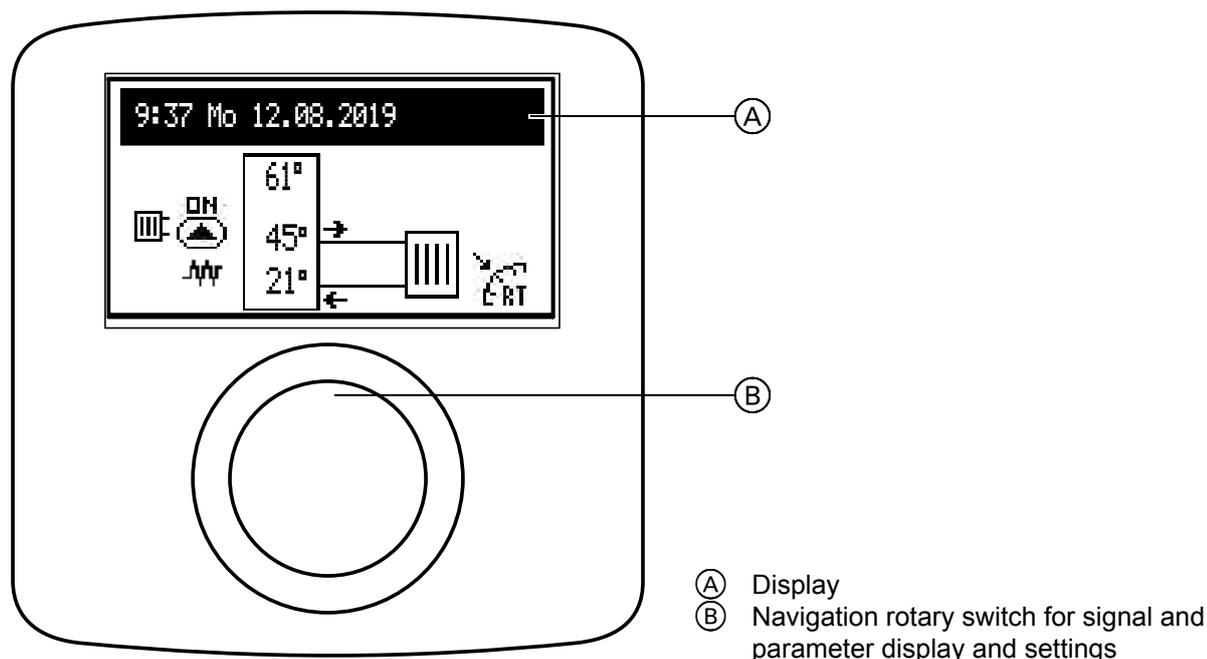

Ⓐ Heating curve no. (p = 0)

If an offset of the heating curve is required, the parameter [heating curve] must be changed. The diagram below shows heating curve no. 12 with an offset of -10 °C and 10 °C.

Ⓐ p – heating curve offset

6155063

Control panel VLN3

Ⓐ Display
Ⓑ Navigation rotary switch for signal and parameter display and settings

Turn button Ⓑ (right or left) during the active winter or summer program to switch between the function displays on LCD screen Ⓐ.
– Main display: Provides information on basic boiler parameters (see table for details)
– Settings: Allows individual adjustment of the parameters of the boiler and other heating circuits according to the user's preferences
– Service/Configuration: Allows configuration of the heating system according to the structural conditions (available for the installation company and contractors after entering the access code) and displays the input and output signals for the boiler as well as the current parameters
– PARTY/HOLIDAY: Allows the operating algorithm to be changed quickly as required.
  Note: The display is active while the DHW cylinder is available.
– Operating mode.

Individual functions can be called up after selecting the corresponding function display and pressing the rotary selector. If a fault occurs in the boiler, the message Err will be displayed on the main function screen. Press the rotary switch to display a list of faults.

Control panel VLN3 (cont.)

Main display
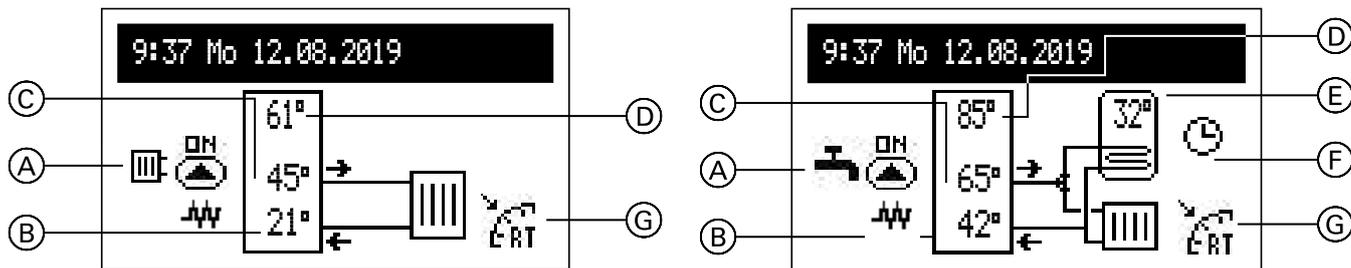
A   Heat transfer display
B   Return temperature
C   Flow temperature
D   Preset flow temperature or symbol MA
     (if heating is blocked by a signal from
     the higher ranking appliance)

E   DHW temperature
F   Active DHW program
G   Display for room temperature control contact
     sealed unvented (central heating command)

Err	Fault in appliance
⟨pump⟩	Circulation pump in operation (flashing means that the minimum flow rate has not been reached)
⟨vent⟩	Circulation pump is being vented
MA	Heating signal blocked by master appliance
-W-	Central heating enabled
⟨RT⟩	Heat demand from room thermostat (with internal controller switched off)
Heat transfer	
⟨tap⟩	DHW heating
⟨radiator⟩	Central heating
Central heating program version display:	
⟨clock⟩	According to the daily/weekly schedule
⟨glass⟩	PARTY – maintain a pleasant DHW temperature
⟨case⟩	HOLIDAY – maintain a pleasant, energy saving DHW temperature or frost protection
⟨pasteur⟩	Pasteurisation of DHW heating

6155063

Control panel VLN3 (cont.)

Settings:

```
8:38 Mo  12.08.2019

       ⚙

     Settings
```
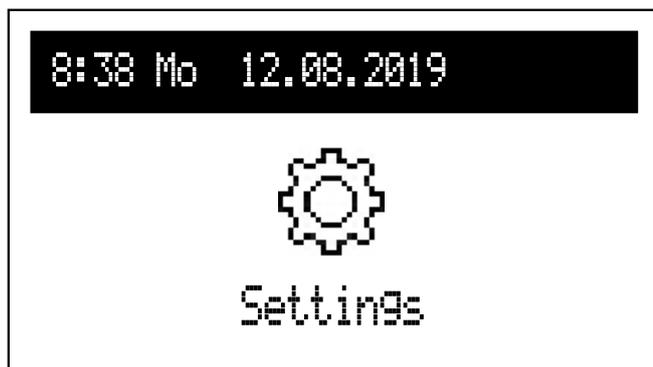
Match the boiler parameters according to the user's
requirements.

Boiler settings
- Flow temperature central heating: Set temperature
  central heating
- DHW temperature
  (only available in systems with a cylinder):
  – Energy saving ☾, Comfort ☀: DHW temperature
    control as set in the schedules.

- DHW program (only available in systems with a DHW cylinder):

```
DHW TANK PROGRAM      No.1

 1  6:00 - 8:00

 2 18:30 - 23:00
```

Ⓐ — DHW TANK PROGRAM display (top row)
Ⓑ — (bottom left)
Ⓒ — (bottom right)
Ⓓ — (top right)

Ⓐ Period number according to schedule (max. 5)
Ⓑ Start time for selected temperature
Ⓒ End time for selected temperature
Ⓓ Temperature selection: ❄, ☀

- Numbers 1 to 8 > Setting of 8 daily programs per
  day program with 5 adjustable periods, each of
  which can be assigned a cylinder temperature
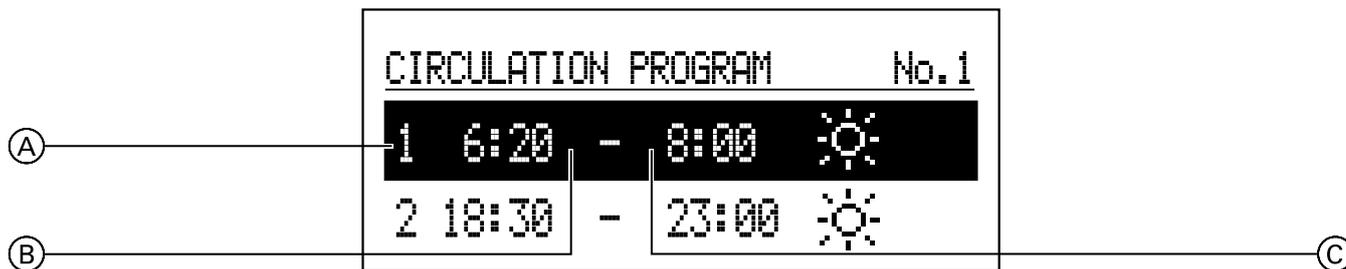 (❄, ☀).
  The process for setting daily programs is
  described in **Daily schedule**.
  **Note: If nothing else is defined, the
  energy saving temperature is controlled** (☾).
- Weekly: Assignment of one setting per day of the
  week for the daily programs.

6155063

Control panel VLN3 (cont.)

■ DHW circulation program (only available in active DHW circulation):

```
┌─────────────────────────────────────────┐
│  CIRCULATION PROGRAM        No.1         │
│  ██████████████████████████████          │
│  █1  6:20  -  8:00   ☼█                  │
│                                          │
│  2 18:30  -  23:00   ☼                   │
└─────────────────────────────────────────┘
```

(A) Period number according to schedule (max. 5)
(B) Start time for DHW circulation
(C) End time for DHW circulation operation

– Numbers 1 to 8 > Setting of 8 daily programs per day program. There are 5 adjustable periods in which the DHW circulation pump runs.
The process for setting daily programs is described in **Daily schedule**.
– Weekly: Assignment of one setting per day of the week for the set daily programs.

■ Pasteurisation (only available in systems with a DHW cylinder):
  – Temperature: Cylinder temperature during pasteurisation
  – Day of the week: Day for pasteurisation in the automatic program
  – Time: Time required for pasteurisation in the automatic program
  – Runtime: Time required for pasteurisation (calculated from the moment the pasteurisation temperature is reached)
  – Automatic mode:
    Yes – start pasteurisation automatically at the specified time (time, day of the week)
    No – automatic pasteurisation is disabled. Pasteurisation is only carried out at the request of the system operator.
  – DHW circulation: Pasteurisation can be activated for the entire system or only for DHW
  – Start now: Starts pasteurisation manually (regardless of set day and time).

■ Date/time:
  – Sets the current system time (year, month, day of month, time).
  – Automatic time change:
    Yes – automatically changes the system time between summer and wintertime
    No – automatic time change is disabled.

■ Language:
  – Menu language selection.

■ User interface:
  – MIN. Brightness: Setting the brightness of the display in standby mode.
  – MAX. Brightness: Setting the brightness of the display during operation.
  – Tone:
    Yes – tone when operating the rotary power switch
    No – no tone when operating the rotary power switch
  – Sensitivity of the rotary switch:
    1 – high / 4 – low.

■ System:
  – Type: VLx3 (ID).
  – MSK program: Program version for boiler control.
  – PW program: Version of the control panel program.
  – Maximum rated output: Set boiler output.
  – Reset: Start the boiler.
  – Default factory setting: Restore.

6155063

Control panel VLN3 (cont.)

Party/Holiday (only for DHW heating)

```
8:38 Mo 12.08.2019



      Y/📦

  PARTY/HOLIDAY
```

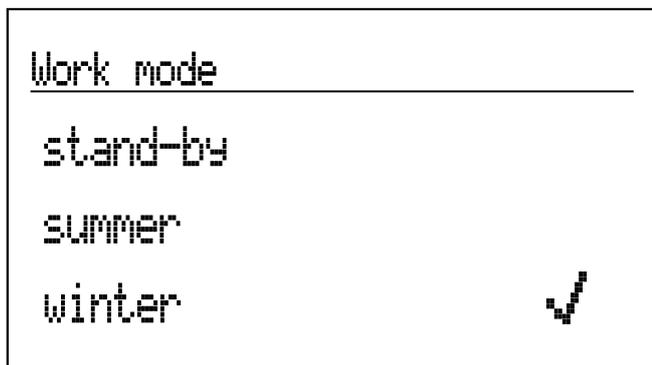Rapid change between operating algorithms as required.
- Party DHW heating: Set operating mode duration (from 1 to 24 hours or until changed by the user).
- Holiday DHW heating: Set operating mode duration (from 1 to 60 days or until changed by the user).

* If one of the above operating modes is switched on, it can be switched off by selecting "Party/Holiday".
* The symbol for the active operating mode is shown on the main function display.

Operating mode

The current operating mode of the boiler is shown on the display. Depending on the boiler configuration, the following operating modes are available:

```
Work mode
_____

 stand-by

 summer

 winter              ✓
```

```
Work mode
_____

 stand-by

 summer

 winter
```
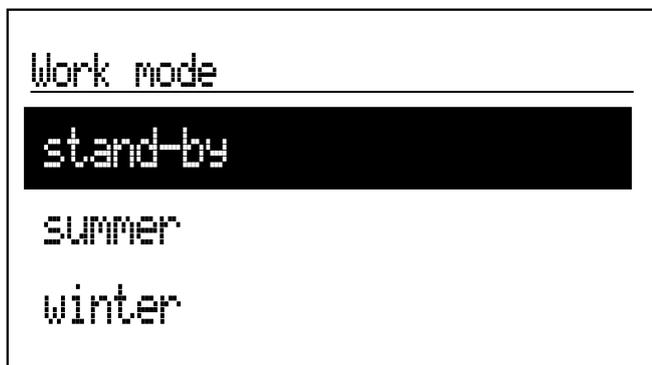
- Standby – central heating and DHW heating functions are switched off.
- Summer – heating function for DHW only.
  Note: This function is only available if a DHW cylinder is installed.
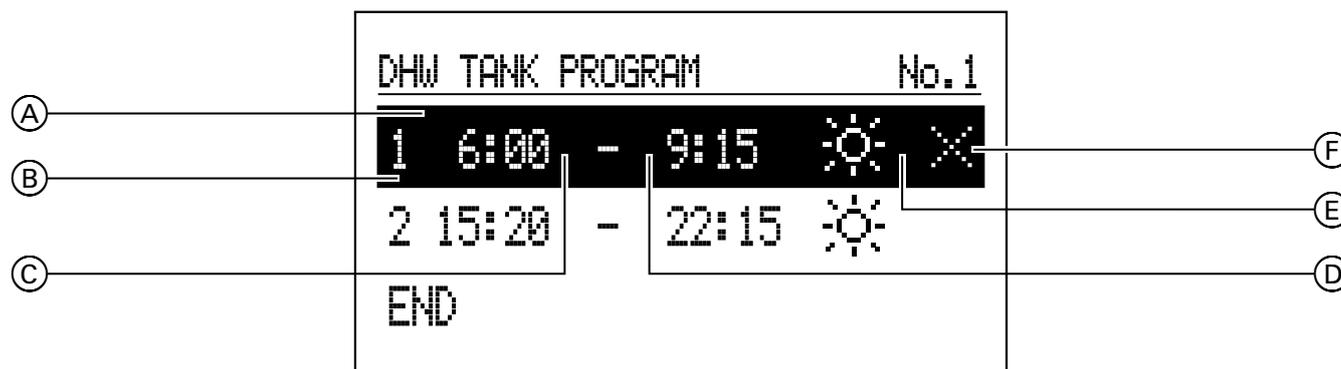- Winter – heating function for central heating and DHW (if a DHW cylinder is installed).

If the boiler is in standby mode (display off), press the rotary switch to display the operating mode. To change the operating mode, press the navigation rotary switch and select the appropriate position. Select "End" to exit the settings without changing the operating mode.

Commissioning
If the boiler is being operated for the first time or has been reset to the factory settings, first select the menu language and then select the boiler output from the list. Boiler operation cannot be set correctly until this data has been entered.

6155063

Control panel VLN3 (cont.)

Daily schedule:

```
┌─────────────────────────────────────┐
│ DHW TANK PROGRAM          No.1       │
│ ▁                                    │
│ █1  6:00  ─  9:15    ☼    ╳█        │
│ ▔                                    │
│  2 15:20  ─  22:15   ☼               │
│                                      │
│ END                                  │
└─────────────────────────────────────┘
```

(A) Time display
(B) Period number according to schedule (max. 5)
(C) Starting time
(D) End time
(E) Temperature selection (applies to DHW cylinder)
(F) Command (active during editing):
  ☑ Apply
  ☒ Delete
  ⊞ Add

For the DHW heating circuit, start time (C) and end time (D) for set cylinder temperature (E) are defined in the daily schedule. Outside the set times, the cylinder is controlled to an energy saving temperature. The start time and end of DHW circulation pump operation are set in the heating circuit plan. To change the parameters for the daily schedule, select the number of the chosen program and press the navigation rotary switch.

The first parameter(start time) flashes. Turn the navigation rotary switch left/right to set the new switching time (hours and minutes separately) and press it again to confirm. The next display starts to flash so that the next parameter (end time) can be edited. The last entry is a command. To save the changes, select the "Save" ☑ command and press the rotary switch to complete editing. To delete the selected switching time, select the corresponding switching time for editing. Press the rotary switch to call up the "Command" position, select "Delete" ☒ and press the rotary switch again. To add a new period, select the last defined period, press the rotary switch to call up the "Command" position, select "Add" ⊞ and press the rotary switch again to add the new period (the process for editing a new period is described above).

Control panel VLN3 (cont.)

```
DHW TANK PROGRAM        No.3
1  0:00  -  23:59   ☼
```
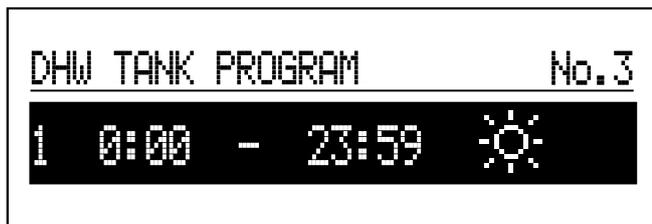
If no switching times have been set in the daily program, select "New" to set times for the entire day.

```
DHW TANK PROGRAM        No.1
1  6:00  -   9:15   ☼
2 15:20  -  22:15   ☼
END
```
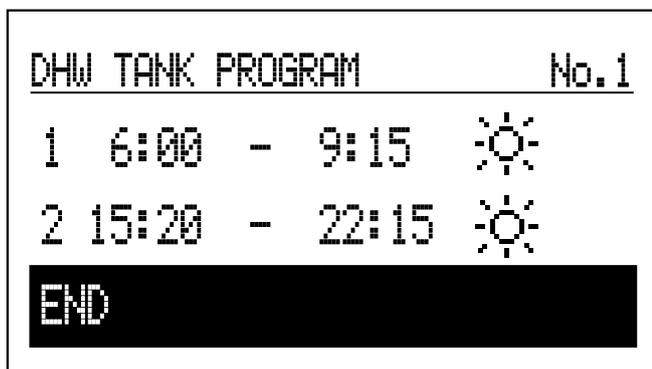
To save the entire day program in the control unit, press the "END" command to exit the day program.

Troubleshooting

Rooms are too cold

Cause	Remedy
The heating system is switched off.	■ Switch ON the mains isolator, if installed (outside the boiler room). ■ Switch ON the MCB in the power distribution board (main domestic MCB).
Control unit or room temperature controller is incorrectly set.	■ Operation with room temperature controller VLN3: Setting a higher boiler water temperature (See page 20). ■ Weather-compensated operation of the VMN3: Setting a higher room temperature (See page 12).
Only when operating with DHW heating: DHW priority is enabled ("⊐" is displayed).	Wait until the DHW cylinder has been heated up ("⊐" disappears).
"Fault" is shown on the display.	Notify your heating contractor of the fault code shown. (Press the rotary selector to view a description of the fault)
Air in the heating system.	Bleed radiators.

Rooms are too hot

Cause	Remedy
Control unit or room temperature controller is incorrectly set.	Check and correct the room temperature or boiler water temperature Operating instructions Room temperature controller
"Fault" is shown on the display.	Notify your heating contractor of the fault code shown. (Press the rotary selector to view a description of the fault)

No DHW installed

Cause	Remedy
The heating system is switched off.	■ Switch ON the mains isolator, if installed (outside the boiler room). ■ Switch ON the MCB in the power distribution board (main domestic MCB).
Control unit is incorrectly set.	Check and correct the DHW temperature (see page 12 for VMN3 or page 20 for VLN3)
"Fault" is shown on the display.	Notify your heating contractor of the fault code shown. (Press the rotary selector to view a description of the fault)

DHW is too hot

Cause	Remedy
Control unit is incorrectly set.	Check and correct the DHW temperature (see page 12 for VMN3 or page 20 for VLN3)

"Fault" is shown on the display

Cause	Remedy
Heating system fault	Inform your heating contractor of the fault code.

6155063

Terminology

Constant temperature operating mode for VLN3

In constant temperature mode, the heating water is constantly heated to the selected boiler water temperature.

Heating water temperature

The temperature of the heating water that flows to the radiators (roughly equal to boiler water temperature).

Boiler water temperature

The heating water in the boiler (boiler water) is heated to the temperature set at the control unit. This temperature is referred to as boiler water temperature.

Room temperature-dependent operation

A room temperature controller captures the room temperature and compares this with the required room temperature you set. If the room temperature is lower than the required value, the boiler is switched on; if the room temperature is higher than the required value, the boiler is switched off.

Make any settings on the connected room temperature controller using the relevant operating instructions.

Note
The heating water temperature must be set high enough in order to achieve the required room temperature.

Safety valve

Safety equipment that must be installed in the cold water line by your heating contractor. The safety valve opens automatically to prevent excess pressure in the DHW cylinder.

Drinking water filter

A device that removes solids from potable water.

Flow temperature

The temperature of the heating water that flows to the radiators (in the flow line). Accordingly, the temperature of the heating water that flows from the radiators to the boiler (in the return line) is referred to as return temperature.

Weather-compensated operation of the VMN3

In weather-compensated operation, the flow temperature is controlled according to the outside temperature. This means that no unnecessary heat is generated in order to heat the rooms to the required room temperature you selected.

The outside temperature is captured and transmitted to the control unit by a sensor fitted outside the building.

Information on disposal

Disposal of packaging

Your heating contractor will dispose of the packaging for your Viessmann product.

DE Packaging waste is sent to a certified disposal contractor for recycling in line with statutory regulations.

AT: Packaging waste is sent to a certified disposal contractor for recycling in line with statutory regulations. Use the ARA statutory disposal system (Altstoff Recycling Austria AG, licence number 5766).

Final shutdown and disposal of the heating system

Viessmann products can be recycled. Components and fluids from your heating system do not belong in ordinary domestic waste.

Please contact your heating contractor regarding the correct disposal of your old system.

DE: Operating fluids (e.g. heating medium) can be disposed of at municipal collection points.

AT: Operating fluids (e.g. heating medium) can be disposed of at municipal collection points (ASZ).

6155063

The used product cannot be treated as domestic waste. The dismantled appliance must be sent to a collection point for electrical and electronic waste for recycling. Proper disposal of the used product prevents potentially harmful effects on the environment, which can occur due to the improper handling of waste.

For more information on recycling this product, please contact your local government, a waste disposal service, or the store where this product was purchased.