

Weather-compensated controller with solar control

# FW 100



**BOSCH**

Operating instructions for the user

**Dear Customer,**

This controller is the “cool head” of your heating system. At the factory, we have set it up to suit most requirements. As a result, daily operation is very easy. The large and clear display of the controller offers you “plain text” and shows you all relevant information.

**Program your heating**

The controller allows you to determine when you want it to be what temperature. We have already set up various scenarios to choose from.

One example: You work and are away from home during the day. You may then like to have the full heating comfort in the morning and evening. During the daytime, you'll save energy in “economy mode”, whilst at night, the heating system will go further into setback. You may, of course, have very different demands, perhaps because you're at home all day. No matter what your lifestyle and habits, the heating system will adjust perfectly to your requirements.

**Even in unforeseen circumstances: 100 % comfort**

Perhaps you arrive home earlier than planned one day and would like to have your home warm right away, even though your heating appliance is working in “economy mode” right now. In such cases, the controller can change over to “heating mode” at the push of a button. In next to no time you'll have it as cosy as you want.

Another example: You want to take a shower although your heating appliance is operating in “economy mode” right now. Here too, the solution is available at the push of a button. The water is heated and within the shortest time, you'll be able to enjoy a hot shower. Subject to the type of DHW heating, “economy mode” starts again automatically after 30 or 60 minutes.

**Consideration of the outside temperature**

This controller is a so-called weather-compensated controller. It increases or reduces the output of your heating system subject to the prevailing outside temperature.

The controller can be integrated into your heating appliance or mounted directly on a wall in your living space. If the controller is installed in your living space, it can also capture the room temperature to optimise the control accuracy, if set up accordingly.

**Solar optimisation for DHW heating**

With our patented process “SolarInside-ControlUnit” you can save up to 15 % additional energy during DHW heating. You will find details regarding the solar yield in the info menu of the controller.

**These operating instructions**

These operating instructions contain the most important information on the daily operation of the controller.

You can find a list of further interesting controller functions in Chapter 6

If you wish to “go deeper”, you will find detailed descriptions of all available functions in the full installation and operating instructions.

Technical terms are explained at the end of these operating instructions.

We hope you will enjoy your new Bosch product!  
Your Bosch team.

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# 1 Key to symbols and safety precautions

## 1.1 Key to symbols

### Warnings



Warnings in this document are framed and identified by a warning triangle printed against a grey background.



If there is a danger due to electricity, the exclamation mark in the warning triangle is replaced by a lightning symbol.

Keywords at the start of a warning indicate the type and seriousness of the ensuing risk if measures to prevent the risk are not taken.

- **NOTE** indicates that material losses may occur.
- **CAUTION** indicates that minor to medium injury may occur.
- **WARNING** indicates that severe injury may occur.
- **DANGER** indicates a risk to life.

### Important information



Important information where there is no risk to people or property is indicated with the adjacent symbol. It is bordered by lines above and below the text.

### Additional symbols

Symbol	Explanation
▶	Action step
→	Cross-reference to other parts of this document or to other documents
•	List/list entry
–	List/list entry (second level)

Tab. 1

## 1.2 Safety precautions

- ▶ These instructions must be observed to ensure correct operation.
- ▶ Risk of scalding during thermal disinfection: Apply thermal disinfection with DHW temperatures in excess of 60 °C only when all occupants have been informed of the risk of scalding during this period. During this period, avoid drawing off DHW if possible.
- ▶ If there is a risk of frost, leave the boiler switched on and follow the frost protection information.

### Damage due to operator error

Incorrect operation can cause injury and/or damage to property:

- ▶ Ensure that children never operate this controller unsupervised or play with it.
- ▶ Ensure that only individuals who can operate this controller correctly have access to it.

## 2 Information about the controller

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### 2.1 Disposal

- ▶ Dispose of packaging in an environmentally responsible manner.

### 2.2 Cleaning the casing

- ▶ If required, use a damp cloth to wipe the controller casing; never use harsh or corrosive cleaning agents.

### 3 Display

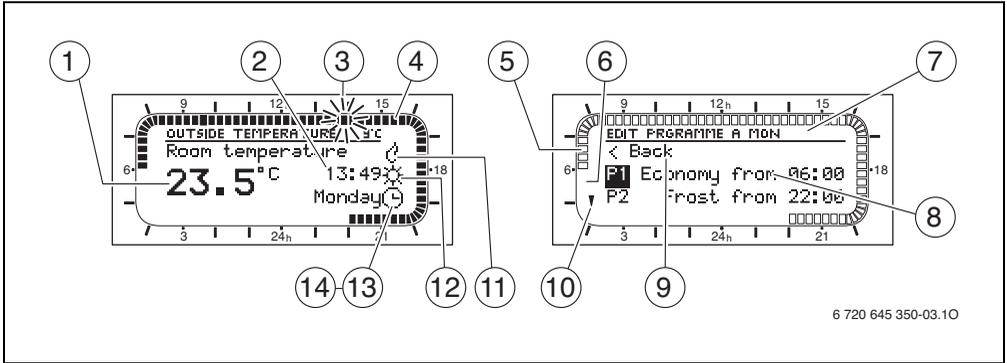
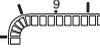
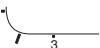
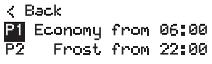
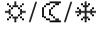


Fig. 1 Symbols in the display (examples)

Item	Symbol	Designation	Explanation
1		Temperature display	<ul style="list-style-type: none"> <li>The current room temperature is displayed if the controller has been mounted on the wall and set up correctly.</li> <li>The current flow temperature is displayed if the controller has been fitted in the heating appliance or has been mounted on the wall and set up correctly.</li> </ul>
2		Time and day	Current time and day.
3		Flashing segment	Current time (1 segment = 15 minutes, here 13:45 h to 14:00 h) or switching time in the heating program.
4		Full segments	Period for Comfort mode (high room temperature) or DHW heating (high DHW temperature), 1 segment = 15 minutes.
5		Empty segments	Period for mode (average room temperature) or DHW heating (average DHW temperature), 1 segment = 15 minutes.
6		No segment	Period for Frostmode (low room temperature) or DHW heating (low DHW temperature).
7		Header	Title of the higher menu level, program etc.
8		3 Text lines	Menu points, info texts, setting values etc.
9		Back	Return to the higher menu level.
10		Further text	An arrow indicates if the displayed text is longer than 3 lines. Turning the rotary selector makes the additional text visible.
11		Burner operation	The heating appliance heats.
12		Operating mode	Current operating mode Comfort/Economy/Frost.
13		Automatic mode	Automatic changeover of the operating mode at the selected switching times in accordance with the heating program.
14		Holiday	The holiday program is active.

Tab. 2 Symbols in the display

## 4 Operation with closed flap

### 4.1 Controls

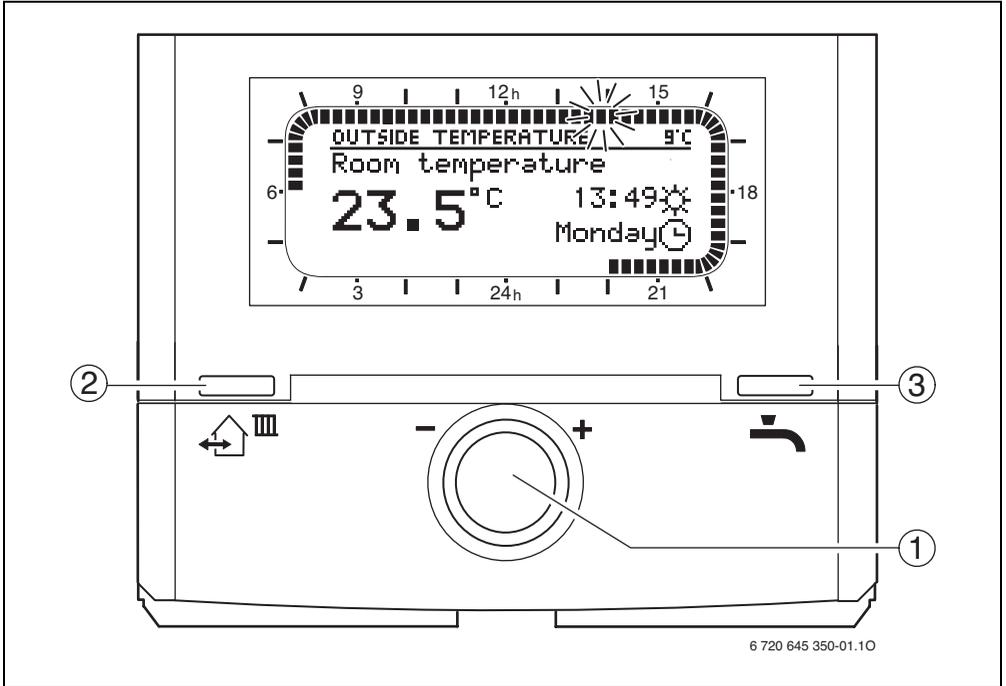
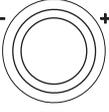


Fig. 2 Controls with closed flap

Item	Element	Designation	Explanation
1		Rotary selector	<ul style="list-style-type: none"> <li>• Turn the rotary selector: Change the room temperature temporarily.</li> <li>• Press rotary selector: Confirm setting.</li> </ul>
2		Keys "Coming/Going"	Immediately start the next Comfort/ Economy/ Frost mode of the heating program. This changes the heating program temporarily.
3		Key "Immediate DHW"	Start DHW heating immediately. This changes the DHW program temporarily.

Tab. 3 Controls with closed flap

## 4.2 If you feel too cold or too hot



The required room temperature is a guide value which the weather-compensated controller tries to reach. Deviations from the actual room temperature that is achieved can, therefore, occur.

You can check the current temperature on the display. Subject to the installation location (on the wall or in the heating appliance) and the chosen settings, the display either shows the room temperature or the flow temperature.

### Displaying temperature settings

- ▶ Turn rotary selector  one click.

### Changing the temperature settings temporarily

With the flap closed, you can change the room temperature temporarily with rotary selector



You can also permanently change the room temperature (→ Chapter 5.2).

If the controller indicates the room temperature:

- ▶ Turn the rotary selector until the required room temperature is displayed. The temperature display flashes.
- ▶ Push the rotary selector. The change applies until the next switching time in your heating program is reached. Afterwards, the settings of your heating program will apply again.

If the controller indicates the flow temperature:

- ▶ Turn the rotary selector to set your heating system **WARMER** or **COOLER**. The position arrows on the display bar flash.
- ▶ Push the rotary selector. The change applies until the next switching time in your heating program is reached. Afterwards, the settings of your heating program will apply again.

### 4.3 If you want to change the heating program temporarily

If you decide to go to bed earlier than usual, leave your home for longer or return earlier, you can start the next operating mode **Comfort** / **Economy** / **Frost** of the heating system with immediate effect by pressing . This changes the heating program temporarily until the next switching time has been reached.



The operating mode switch under the flap must be set to **auto** (→ Fig. 3 [2], page 12).

#### Start “Coming/Going”

- ▶ Briefly press . The next operating mode **Comfort** / **Economy** / **Frost** of the heating program starts immediately. The change is reflected in the display.

#### Terminating “Coming/Going” early

- ▶ Briefly press . “Coming/Going” is terminated and the controller operates again according to the heating program.

### 4.4 If you want to change the DHW program temporarily

If you want to take a shower although your heating appliance is operating in “economy mode” right now, you can start DHW heating immediately by pressing . This changes the DHW program temporarily.

#### Starting “DHW immediately”

- ▶ Briefly press . The change is reflected in the display.
  - For DHW heating with a DHW cylinder, the cylinder is heated for 60 minutes to the selected DHW temperature.
  - For DHW heating with a combi boiler, comfort mode is active for 30 minutes.



See the operating instructions of the heating appliance for further information regarding comfort mode.

#### Terminating “Immediate DHW” early

- ▶ Briefly press . “Immediate DHW” is terminated and the controller operates again according to the DHW program.

## 5 Operation with flap open

### 5.1 Controls

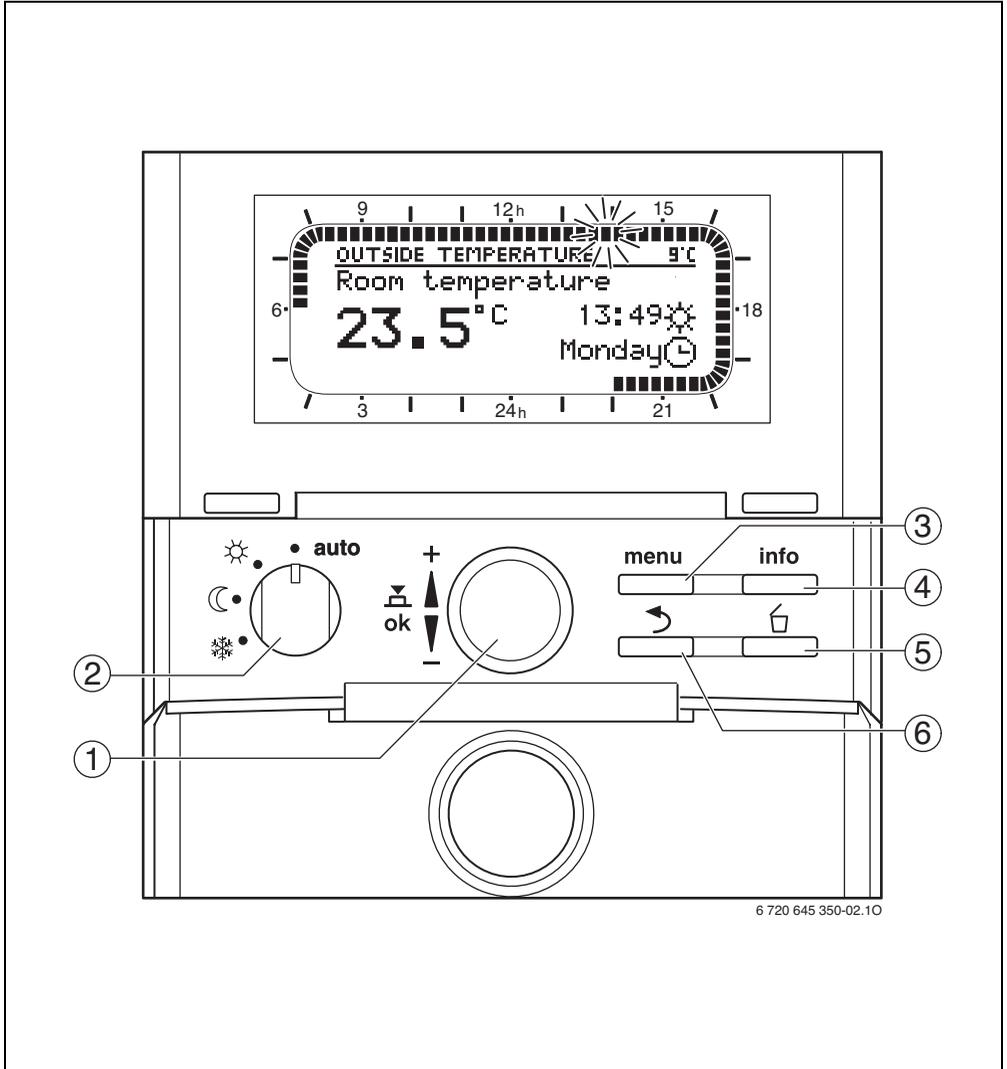


Fig. 3 Controls with flap open

Item	Element	Designation	Explanation
1		Rotary selector	<ul style="list-style-type: none"> <li>• Turn the rotary selector: <ul style="list-style-type: none"> <li>– Change the room temperature temporarily.</li> <li>– Scroll through the menu and change the value.</li> </ul> </li> <li>• Push the rotary selector: <ul style="list-style-type: none"> <li>– Open the menu.</li> <li>– Confirm the setting.</li> </ul> </li> </ul>
2		Operating mode selector	<ul style="list-style-type: none"> <li>• auto: Heating according to the heating program.</li> <li>• ☀ / ☾ / ❄ : Heating constantly according to operating mode Comfort/Economy/ Frost (the heating program is disabled).</li> </ul>
3	menu	Menu key	Open and close the main menu.
4	info	Info key	Open and close the info menu. Display of current information regarding the heating system, e.g. heating, DHW, solar.
5		“Delete” key	Delete / reset a value in the menu.
6		“Back” key	Return to the higher menu level.

Tab. 4 Controls with flap open

## 5.2 Changing the room temperatures for the heating program permanently

The controller offers 3 temperature levels for regulating the room temperature:

- **☀ Comfort:** 21 °C (factory setting)  
Setting range 0.0 °C ... 30.0 °C, but higher than economy
- **☾ Economy:** 15 °C (factory setting)  
Setting range 0.0 °C ... 30.0 °C, but higher than frost and lower than comfort
- **❄ Frost:** 5 °C (factory setting)  
Setting range 0.0 °C ... 30.0 °C, but lower than economy

If you want to change the room temperature for a longer period, proceed as follows.

### Display the set temperature level

Displaying the set temperature level by turning the operating mode selector only works if the room temperature is currently being displayed.

- ▶ Open flap.
  - ▶ Turn the operating mode selector in sequence to positions ☀ / ☾ / ❄.
- The set room temperatures are displayed.



Then turn the operating mode selector back to its original position **auto**. Only at this point can the automatic change of temperature level in a heating program be implemented.

### Changing the selected temperature levels

- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.

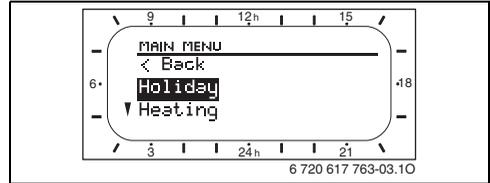


Fig. 4 Menu point **Holiday**

- ▶ Turn the rotary selector to highlight menu point **Heating**.



Fig. 5 Menu point **Heating**

- ▶ Push the rotary selector.  
Menu **HEATING** is displayed; menu point **Programme** is highlighted.

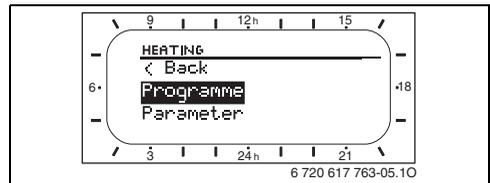


Fig. 6 Menu point **Programme**

- ▶ Turn the rotary selector to highlight menu point **Parameter**.

- ▶ Push the rotary selector.  
Menu **HEATING PARAMETERS** is displayed;  
menu point **Heating levels** is highlighted.

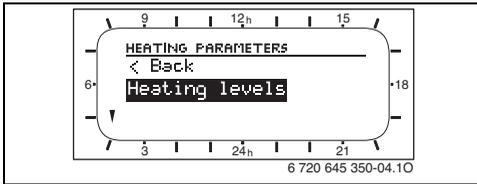


Fig. 7 Menu point **Heating levels**

- ▶ Push the rotary selector.  
Menu **TEMPERATURE LEVELS** is displayed;  
menu point **Comfort** is highlighted.

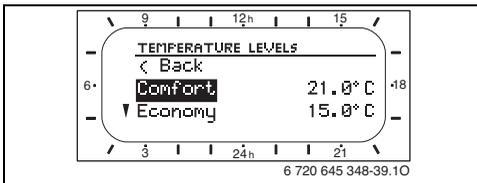


Fig. 8 Menu point **Comfort**

Example: Changing the economy temperature level

- ▶ Turn the rotary selector to highlight menu point **Economy**.
- ▶ Push the rotary selector.  
The input field for the required room temperature flashes.

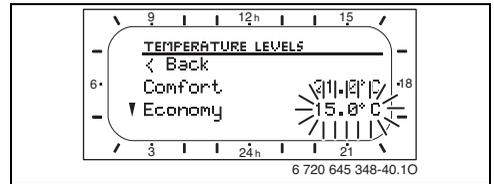


Fig. 9 Input field, required temperature

- ▶ Turn the rotary selector to set the required room temperature.
- ▶ Push the rotary selector to confirm the setting.  
Menu point **Economy** is highlighted again.
- ▶ Turn the rotary selector to change the settings for **Comfort** and **Frost** in the same way.

**-or-**

- ▶ Press the menu key to exit the menu.  
The controller operates with the modified settings.

### 5.3 Constant room temperature



If at all possible, leave the operating mode selector set to **auto**. Only that way can you enjoy the full comfort of the heating program.



You can change the set temperature with the rotary selector (→ Chapter 4.2). Turning the operating mode selector cancels the modified temperature again.

However, if you want to specify a constant room temperature for a longer period, you can select so-called constant operation using the operating mode selector.

The following constant room temperature settings are possible:

- : **Comfort** in constant operation  
The controller regulates constantly to the room temperature (high) set for **Comfort** mode. Factory setting: 21 °C
- : **Economy** in constant operation  
The controller regulates constantly to the room temperature (average) set for **Economy** mode. Factory setting: 15 °C
- : Frost protection in constant operation  
The controller regulates constantly to the room temperature (low) set for **Frost** mode. Factory setting: 5 °C. The system is protected against frost if heating is switched on at the heating appliance. Observe the further information in the heating appliance operating instructions.



**NOTICE:** Check the suitability of a low room temperature for plants and pets.

- ▶ Open flap.
- ▶ Turn the operating mode selector to the required positions.

## 5.4 Selecting and adjusting the heating program

At the factory, several heating programs are set up that will suit most applications. Program A (e.g. for families) has already been enabled.

In this chapter you will discover how to activate a different heating program and how to adapt the activated heating program to individual needs.

Program	Factory settings for program points P1 to P6									
	Day	Switching time P1	Switching time P2	Switching time P3	Switching time P4	Switching times P5 and P6				
<b>Program A</b> (e.g. for families); factory-set	Monday to Thursday	06:00	22:00	-	-	-				
	Friday	06:00	23:30	-	-	-				
	Saturday	07:00	23:30	-	-	-				
	Sunday	08:00	22:00	-	-	-				
<b>Program B</b> (e.g. for those who are at work all day)	Monday to Thursday	06:00	8:00	17:00	22:00	-				
	Friday	06:00	8:00	17:00	23:30	-				
	Saturday	07:00	23:30	-	-	-				
	Sunday	08:00	22:00	-	-	-				
<b>Program C</b> (e.g. for senior citizens)	Every day	07:00	23:00	-	-	-				

Tab. 5 Factory settings of heating programs A, B and C

- Comfort** 21 °C (factory setting)
- Economy** 15 °C (factory setting)
- Frost** 5 °C (factory setting)



The setting options for a heating program are explained using **Program A** as an example.

### 5.4.1 Activating a heating program

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Heating**.
- ▶ Push the rotary selector.  
Menu **HEATING** is displayed; menu point **Programme** is highlighted.
- ▶ Push the rotary selector.  
Menu **HEATING PROGRAMME** is displayed; menu point **Activate** is highlighted.



Fig. 10 Menu point **Activate**

- ▶ Push the rotary selector.  
The input field for the heating program flashes.
- ▶ Turn the rotary selector to select a heating program, e.g. **A:Programme A** or **B:Program B**.
- ▶ Push the rotary selector to confirm the selection.  
Menu point **Activate** is highlighted again.
- ▶ Press the menu key to exit the menu.  
The controller operates with the selected heating program.

### 5.4.2 Adapting the heating program to individual requirements

If the settings (temperature or switching times) of a heating program do not meet your needs, you can change the heating program.

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Heating**.
- ▶ Push the rotary selector.  
Menu **HEATING** is displayed; menu point **Programme** is highlighted.
- ▶ Push the rotary selector.  
Menu **HEATING PROGRAMME** is displayed; menu point **Activate** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Edit**.



Fig. 11 Menu point **Edit**

- ▶ Push the rotary selector.  
Menu **EDIT HEATING PROGRAMME** is displayed; menu point **A:Programme A** is highlighted.
- ▶ Turn the rotary selector to select a different heating program.

**-or-**

- ▶ Push the rotary selector.  
Menu **EDIT PROGRAMME A** is displayed; menu point **Copy from preset programme** is highlighted.

- ▶ Turn the rotary selector to highlight the required days, e.g. **Monday**.  
The following groups of days are available:
  - **All days** (every day the same)
  - **Mon - Fri** (all working days the same)
  - **Sat + Sun** (Saturday and Sunday the same)
  - **Monday, Tuesday ...** (every day individually)
- ▶ Push the rotary selector.  
Menu **EDIT PROGRAMME A MON** is displayed; program point **P1** is highlighted.

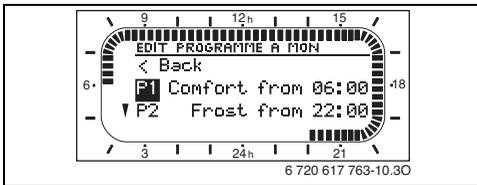


Fig. 12 Change program A for Monday (P1)

- ▶ Turn the rotary selector to select a different program point, e.g. **P3**.

-or-

- ▶ Push the rotary selector.  
The segment display and the input field for the switching time of **P1** flash.
- ▶ Turn the rotary selector to set the required switching time, e.g. **06:30**.

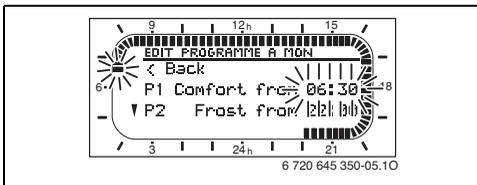


Fig. 13 Setting the switching time

- ▶ Push the rotary selector to confirm the setting.  
The segment display and the input field for the operating mode of **P1** flash.

- ▶ Turn the rotary selector to select a different operating mode, e.g. **Economy**.

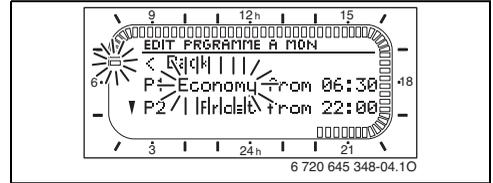


Fig. 14 Setting the operating mode

- ▶ Push the rotary selector to confirm the setting.  
Program point **P1** is highlighted.
- ▶ Turn the rotary selector to select a different program point, e.g. **P3**.

-or-

- ▶ Press the menu key to exit the menu.  
The controller operates with the modified settings.



If you have changed a heating program that was not already active (factory setting is **A:Programme A**), select the relevant heating program in menu **HEATING** together with menu point **Activate** and activate it (→ Chapter 5.4.1).

### 5.4.3 Resetting a heating program to its factory settings

If you require a heating program to be returned to its original settings, you can implement a reset to the factory settings.

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Heating**.
- ▶ Push the rotary selector.  
Menu **HEATING** is displayed; menu point **Programme** is highlighted.
- ▶ Push the rotary selector.  
Menu **HEATING PROGRAMME** is displayed; menu point **Activate** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Edit**.
- ▶ Push the rotary selector.  
Menu **EDIT HEATING PROGRAMME** is displayed; menu point **A:Programme A** is highlighted.
- ▶ Turn the rotary selector to select a different heating program.

-or-

- ▶ Push the rotary selector.  
Menu **EDIT PROGRAMME A** is displayed; menu point **Copy from preset programme** is highlighted.

- ▶ Turn the rotary selector to highlight menu point **Reset factory settings**.

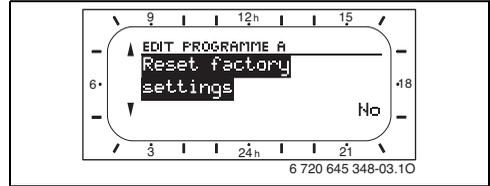


Fig. 15 Menu point **Reset factory settings**

- ▶ Push the rotary selector.  
The input field **No** flashes.
- ▶ Turn the rotary selector to set **Yes**.
- ▶ Push the rotary selector to confirm the setting.  
The message **The heating programme A has been reset to factory settings** will be displayed.
- ▶ Push the rotary selector.  
Menu point **Reset factory settings** is highlighted again.
- ▶ Press the menu key to exit the menu.  
The controller then operates again with the factory settings of that heating program.

## 5.5 Selecting and adapting a DHW program

At the factory, a DHW program is set that will suit most applications. The DHW program comprises:

- a program for DHW heating
- a program for a DHW circulation pump

Both programs have already been matched to each other and are enabled.

In this chapter you will discover how to either disable programs and combine them with the active heating program, or how to adjust them individually.

### Factory settings of the DHW heating program

Day	Program points					
	P1		P2		P3 to P6	
	°C / On/Off	Switching time	°C / On/Off	Switching time	°C / On/Off	Switching time
Monday to Friday	60 °C <sup>1)</sup> / On <sup>2)</sup>	05:00	15 °C <sup>1)</sup> / Off <sup>2)</sup>	23:00	–	–
Saturday	60 °C <sup>1)</sup> / On <sup>2)</sup>	06:00	15 °C <sup>1)</sup> / Off <sup>2)</sup>	23:00	–	–
Sunday	60 °C <sup>1)</sup> / On <sup>2)</sup>	07:00	15 °C <sup>1)</sup> / Off <sup>2)</sup>	23:00	–	–

Tab. 6 Factory settings of the DHW heating program

- 1) DHW heating with a DHW cylinder
- 2) DHW heating with a combi boiler

### Factory settings of the DHW circulation pump program

Day	Program points					
	P1		P2		P3 to P6	
	On/Off	Switching time	On/Off	Switching time	On/Off	Switching time
Monday to Friday	On	06:00	Off	23:00	–	–
Saturday	On	07:00	Off	23:00	–	–
Sunday	On	08:00	Off	23:00	–	–

Tab. 7 Factory settings of the DHW circulation pump program (the DHW circulation pump program is only available for DHW heating with a DHW cylinder)

### 5.5.1 Combining a DHW program with the active heating program

If the heating program has already been adjusted to suit your individual requirements, it may be appropriate to use these settings also for DHW heating.

The DHW program is disabled and operates according to the active heating program.

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Domestic hot water**.



Fig. 16 Menu point **Domestic hot water**

- ▶ Push the rotary selector.  
The **DHW** menu is displayed; menu point **DHW and DHW circulation pump** is highlighted.
- ▶ Push the rotary selector.  
The input field **Separate programmes** flashes.
- ▶ Turn the rotary selector to set **As heating programme**.
- ▶ Push the rotary selector to confirm the setting.  
Menu point **DHW and DHW circulation pump** is highlighted again.
- ▶ Press the menu key to exit the menu.  
DHW heating operates in accordance with the active heating program.



For further details regarding the operation of DHW heating in conjunction with the heating program, see the detailed installation and operating instructions.

### 5.5.2 Activating a DHW program

If you wish to modify the DHW program independently of the heating program, you can re-enable the DHW program.

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **Domestic hot water**.
- ▶ Push the rotary selector.  
Menu **DHW** is displayed; menu point **DHW and DHW circulation pump** is highlighted.
- ▶ Push the rotary selector.  
The input field **As heating programme** flashes.
- ▶ Turn the rotary selector to set **Separate programmes**.
- ▶ Push the rotary selector to confirm the setting.  
Menu point **DHW and DHW circulation pump** is highlighted again.
- ▶ Press the menu key to exit the menu.  
The DHW program will then operate again independently of the heating program.

### 5.5.3 Adjusting a DHW program individually

You can change the DHW program if its settings (e.g. switching times) do not meet with your requirements. Ensure that the programs for DHW heating and the DHW circulation pump are synchronised.

#### Adjusting a program for DHW heating

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight the menu point **Domestic hot water**. Push the rotary selector.  
Menu **DHW** is displayed; menu point **DHW and DHW circulation pump** is highlighted.



If, at this point, **As heating programme** is displayed, change the setting to **Separate programmes** (→ Chapter 5.5.2). Only then will the next steps become available.

---

- ▶ Turn the rotary selector to highlight menu point **DHW programme**.
- ▶ Push the rotary selector.  
The **DHW PROGRAMME** menu is displayed; menu point **Edit** is highlighted.
- ▶ Push the rotary selector.  
Menu **EDIT DHW PROGRAMME** is displayed.



Generally, the steps correspond to the setting of program points P1 ... P6 of a heating program (→ Chapter 5.4.2). Subject to your type of DHW heating, in addition to the switching times either the DHW temperatures can also be set or DHW heating can be switched on or off.

---

### Adapting the DHW circulation pump program

---



This menu is only displayed if a DHW circulation pump is available.

---

- ▶ Open flap.
  - ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
  - ▶ Turn the rotary selector to highlight the menu point **Domestic hot water**. Push the rotary selector.  
Menu **DHW** is displayed; menu point **DHW and DHW circulation pump** is highlighted.
- 



If, at this point, **As heating programme** is displayed, change the setting to **Separate programmes** (→ Chapter 5.5.2). Only then will the next steps become available.

---

- ▶ Turn the rotary selector to highlight menu point **DHW circ pump prog** .
  - ▶ Push the rotary selector.  
Menu **DHW CIRC PUMP PROGRAMME** is displayed; menu point **Edit** is highlighted.
  - ▶ Push the rotary selector.  
Menu **EDIT DHW C. PUMP PROGRAMME** is displayed.
- 



Generally, the additional steps correspond to the setting of program points **P1 ...P6** of a heating program (→ Chapter 5.4.2). In addition to the switching times, the DHW circulation pump can be switched on or off.

---

### 5.5.4 Resetting a DHW program to the factory settings

If you wish to return the DHW program to its original settings, you can reset the DHW program to its factory settings.

- ▶ Carry out the steps up to menu point **Edit** (→ Chapter 5.5.3).
- 



Generally, the additional steps for resetting the DHW program correspond to those for resetting a heating program (→ Chapter 5.4.3).

---

## 5.6 Setting a holiday program

If you are leaving your home for several days, you can set a holiday program so that neither heating nor DHW heating are provided during that time.

This does not alter any of the heating and DHW programs that would otherwise apply. Frost protection will still be assured when the holiday program applies.

The holiday program operates with the following factory settings:

- **Heating: Frost** ❄️
- **Domestic hot water: 15 °C<sup>1)</sup> / Off<sup>2)</sup>**
- **DHW circulation pump: Off**
- **Thermal disinfection: Off.**



The factory settings ensure energy efficient and reliable operation during your holiday.

If, nevertheless, you wish to change the factory settings, you will find all possible settings in the full installation and operating instructions.

### 5.6.1 Setting the start of the holiday



The holiday program starts immediately if you select the current date.

Otherwise the holiday program will start at 00:00 h on the selected day.

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.



Fig. 17 Menu point **Holiday**

- ▶ Push the rotary selector.  
The holiday menu is displayed; menu point **Start** is highlighted.
- ▶ Push the rotary selector.  
The input field for the year flashes.
- ▶ Turn the rotary selector to set the year.
- ▶ Push the rotary selector to confirm the setting.  
The input field for the month flashes.
- ▶ Set the month and day in the same way as the year.  
After confirming the day, menu point **Start** is highlighted again.

- 1) DHW heating with DHW cylinder
- 2) DHW heating with a combi boiler

### 5.6.2 Setting the end of the holiday



The holiday program ends at 23:59 h on the selected day.

- ▶ Turn the rotary selector to highlight menu point **End**.
- ▶ Push the rotary selector.  
The input field for the year flashes.
- ▶ Turn the rotary selector to set the year.
- ▶ Push the rotary selector to confirm the setting.  
The input field for the month flashes.
- ▶ Set the month and day in the same way as the year.  
After confirming the day, menu point **End** is highlighted again.

### 5.6.3 Starting the holiday program

- ▶ Press the menu key to exit the menu.  
The holiday program starts on the selected date.
- Whilst the holiday program is active, the display shows  and the selected end of the holiday, e.g. **HOLIDAY UNTIL 30.09.2010**.
- After expiry of the holiday program, the controller operates again with the selected heating and DHW programs.

### 5.6.4 Terminating the holiday program early

- ▶ Open flap.
- ▶ Press the menu key.  
The main menu is displayed; menu point **Holiday** is highlighted.
- ▶ Push the rotary selector.  
The holiday menu is displayed; menu point **Start** is highlighted.
- ▶ Push the rotary selector.  
The input field for the year flashes.
- ▶ Press  to delete the date for the start of the holiday.  
The display shows --.?.----.
- ▶ Push the rotary selector to confirm the setting.  
This also deletes the date for the end of the holiday.
- ▶ Press the menu key to exit the menu.  
The holiday program is terminated.

## 5.7 Changing the time and date



After a prolonged power failure, the time and date will need to be set again.

In this chapter you will see how to set the time and date.

### 5.7.1 Changing the time

- ▶ Open flap.
- ▶ Press the menu key.  
The **MAIN MENU** is displayed; menu point **Holiday** is highlighted.
- ▶ Turn the rotary selector to highlight menu point **General settings**.
- ▶ Push the rotary selector.  
Menu **GENERAL SETTINGS** is displayed; menu point **Time and date** is highlighted.

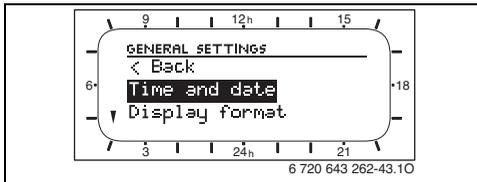


Fig. 18 Menu point **Time and date**

- ▶ Push the rotary selector.  
Menu **TIME AND DATE** is displayed; menu point **Time** is highlighted.
- ▶ Push the rotary selector.  
The input field for hour flashes.
- ▶ Turn the rotary selector to set the hour.
- ▶ Push the rotary selector to confirm the setting.  
The input field for minutes flashes.
- ▶ Set the minutes in the same way as the hour.  
After confirming the minutes, menu point **Time** is highlighted again.

### 5.7.2 Changing the date

- ▶ Turn the rotary selector to highlight menu point **Date**.
- ▶ Push the rotary selector.  
The input field for the year flashes.
- ▶ Turn the rotary selector to set the year.
- ▶ Push the rotary selector to confirm the setting.  
The input field for the month flashes.
- ▶ Set the month and day in the same way as the year.  
The current day of the week is determined automatically.  
After confirming the day, menu point **Date** is highlighted again.
- ▶ Press the menu key to exit the menu.  
The controller operates with the modified settings.

## 6 Information on further functions

These operating instructions contain the most important information on the daily operation of the controller.

If you wish to “go deeper”, you will find detailed descriptions of all available functions in the full installation and operating instructions.

For example, you can find details on the following topics:

- Display of current information regarding your heating system.
- Temporarily changing the next switching time of the heating program.
- Using further setting options for heating and DHW programs, e.g. changing the title of programs, setting the heat-up speed, matching parameters for DHW heating etc.
- Using thermal disinfection with DHW temperature in excess of 60 °C. Observe the safety instructions regarding the risk of scalding if you use this function.
- Adjusting the displayed information, e.g. solar yield in the display header, display contrast, date format, language etc.
- Enabling the key lock against accidental operation. This prevents unintentional temperature changes and unwanted access to your individual settings.
- Optimising the settings for your solar thermal system.

## 7 Environmental protection

Environmental protection is a fundamental corporate strategy of the Bosch Group.

The quality of our products, their economy and environmental safety are all of equal importance to us and all environmental protection legislation and regulations are strictly observed.

We use the best possible technology and materials for protecting the environment taking account of economic considerations.

### **Packaging**

Where packaging is concerned, we participate in country-specific recycling processes that ensure optimum recycling.

All packaging materials are environmentally compatible and can be recycled.

### **Used appliances**

Used appliances contain materials that should be recycled.

The relevant assemblies are easy to separate, and all plastics are identified. This allows the various assemblies to be appropriately sorted for recycling or disposal.

## 8 Troubleshooting

### 8.1 Troubleshooting “perceived” faults

“Perceived” faults may have different causes that can, in most cases, be remedied with simple steps.

For example, if you feel too cold or hot, the following table will assist you in removing these “perceived” faults.

Problem	Cause	Remedy
Required room temperature not achieved.	Thermostatic radiator valves set too low.	Set thermostatic valve(s) higher.
	Heating levels set too low.	Set required room temperature higher in menu point Heating levels for "Comfort".
	Flow temperature controller <sup>1)</sup> set too low on heating appliance.	Set flow temperature controller <sup>1)</sup> higher.
	Air lock in heating system.	Possibly reduce solar optimising influence <sup>2)</sup> Bleed radiators and vent heating system.
Heating up takes too long.	Heating up speed set too low.	Set Heating up speed e.g. to "Fast".
Required room temperature greatly exceeded.	Radiators become too hot.	Set thermostatic valve(s) lower. Set required room temperature lower in menu point Heating levels for "Comfort".
	Installation location of controller unfavourable, e.g. external wall, close to window, in a draught etc.	Contact authorised contractor or customer service.
Excessive room temperature fluctuations.	Temporary influence of external heat on room, e.g. through solar radiation, lighting, TV, fireplace etc.	Contact authorised contractor or customer service.

Tab. 8 Troubleshooting, part 1

- 1) Further information in the operating instructions of the heating appliance.
- 2) Further details in the full installation and operating instructions of the controller.

Problem	Cause	Remedy
Temperature rises instead of dropping.	Time incorrectly set.	Set the time.
Room temperature too high during "Economy" and/or "Frost" mode.	Building retains a lot of heat.	Set earlier switching time for "Economy" and/or "Frost".
Incorrect or nocontrol.	For example, connection between controller and heating appliance faulty.	Contact authorised contractor or customer service.
Only automatic mode can be selected.	Operating mode selector faulty.	Contact authorised contractor or customer service.
DHW cylinder does not heat up.	DHW temperature controller <sup>1)</sup> set too low on heating appliance.	Set DHW temperature controller <sup>1)</sup> higher. Possibly reduce solar optimising influence <sup>2)</sup>
	Flow temperature controller <sup>1)</sup> on heating appliance set too low.	Set flow temperature controller <sup>1)</sup> fully clockwise.
	DHW program incorrectly set.	Set DHW program.
	The set System configuration for DHW heating does not suit this heating system.	Contact authorised contractor or customer service.

Tab. 9 Troubleshooting, part 2

- 1) Further information in the operating instructions of the heating appliance.
- 2) Further details in the full installation and operating instructions of the controller.

## 8.2 Removing displayed faults

Any faults in your heating system are indicated on the controller display. The cause could be a fault in the heating appliance or a controller fault.

### Heating appliance fault

If the fault is caused by the heating appliance, the displayed fault will include at least one letter, e.g. **Fault EA** or **Fault b1**.

See the operating instructions of the heating appliance for additional information about these faults.

### Controller fault

If the controller or any other control component is the cause of the fault, then the displayed fault code comprises two digits, e.g. **Fault 11**.

- ▶ Call your authorised contractor or customer service department and inform them of the fault code as well as the controller details.



You can find the controller details inside the controller flap.

---

Controller details:

Type:

.....

Part number:

.....

Date of manufacture (FD...):

.....

## 9 Energy saving tips

### Heating economically

- Set the required room temperatures for the three "Temperature levels" in accordance with your personal temperature preferences, and adjust the heating program to suit your lifestyle.
  - **Comfort** ☀️ = Comfortable living environment
  - **Economy** ☾ = Active living environment
  - **Frost** ❄️ = Away from home or asleep
- Set the thermostatic radiator valves in all rooms so that the required room temperatures can be achieved. Raise the "Temperature levels" only if the required room temperature is not achieved after a prolonged period.
- If the controller is installed in your living space and is hooked up accordingly, it can also capture the room temperature to optimise the control accuracy. Prevent any influence from other sources of heat (e.g. insulation, tiled stoves etc.). Otherwise undesirable fluctuations of the room temperature may result.
- If you reduce the room temperature by 1 K (1 °C), you can save up to 5 % energy. However, allowing the rooms to drop down to below +15 °C is not recommended. This would permit the walls to cool down too much. During the heat-up phase, the ambient climate would be disturbed by the cool walls that would still radiate the cold. If you then raised the room temperature further, more energy would be spent than with a regular supply of heat.
- If your building has good thermal insulation, the required room temperature for **Economy** ☾ may not be achieved after a heating phase. However, you would still save energy, as the heating system remains switched off. You would save even more energy if you set the switching time for **Economy** ☾ earlier.

### Venting

Briefly open the windows fully instead of only a little. If windows are permanently open a little, heat is drawn from the room constantly without noticeably improving the ambient air quality. During airing, fully close the thermostatic radiator valves or turn the operating mode selector on the controller to position **Frost** ❄️.

### DHW

Set the DHW program to suit your individual DHW demand.

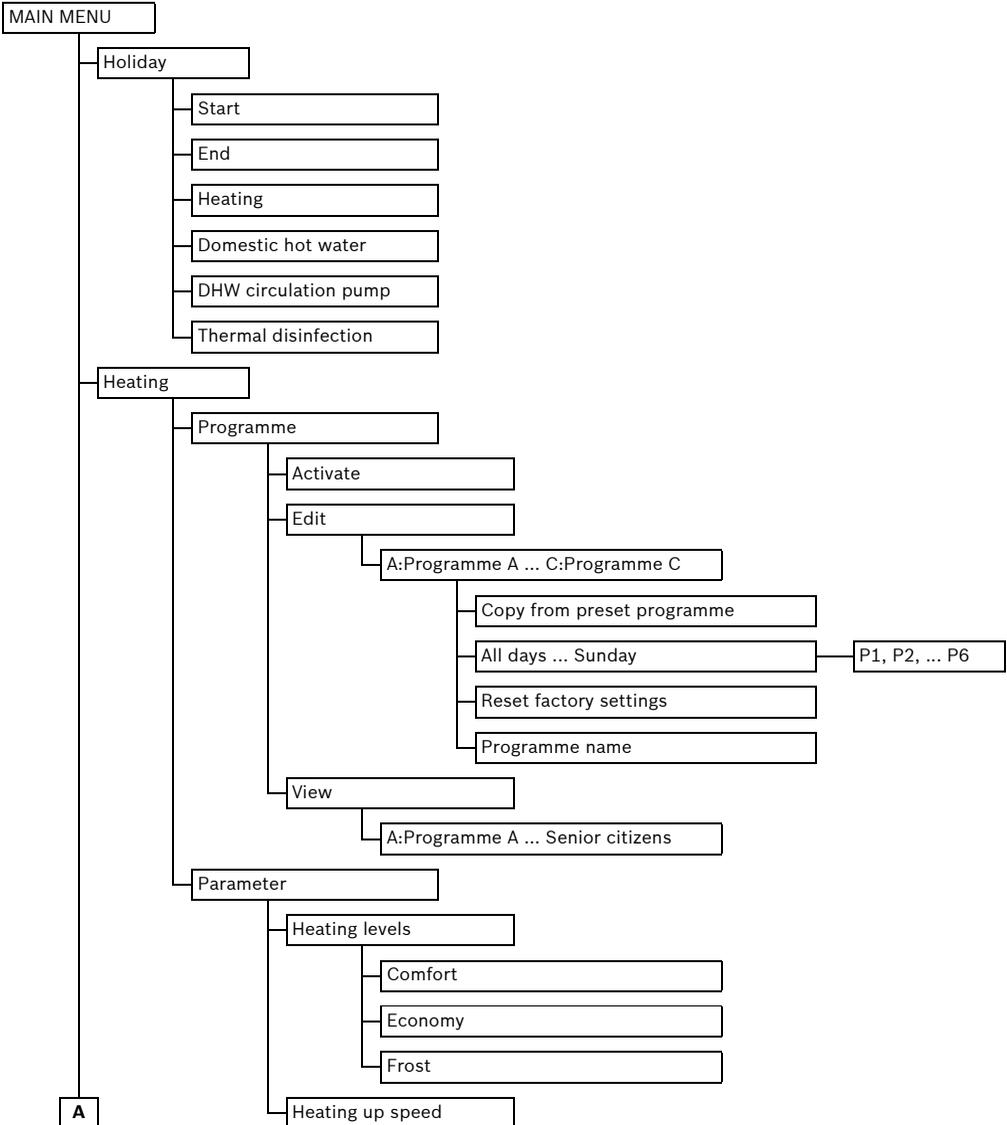
This saves a lot of energy without impairing the DHW convenience.

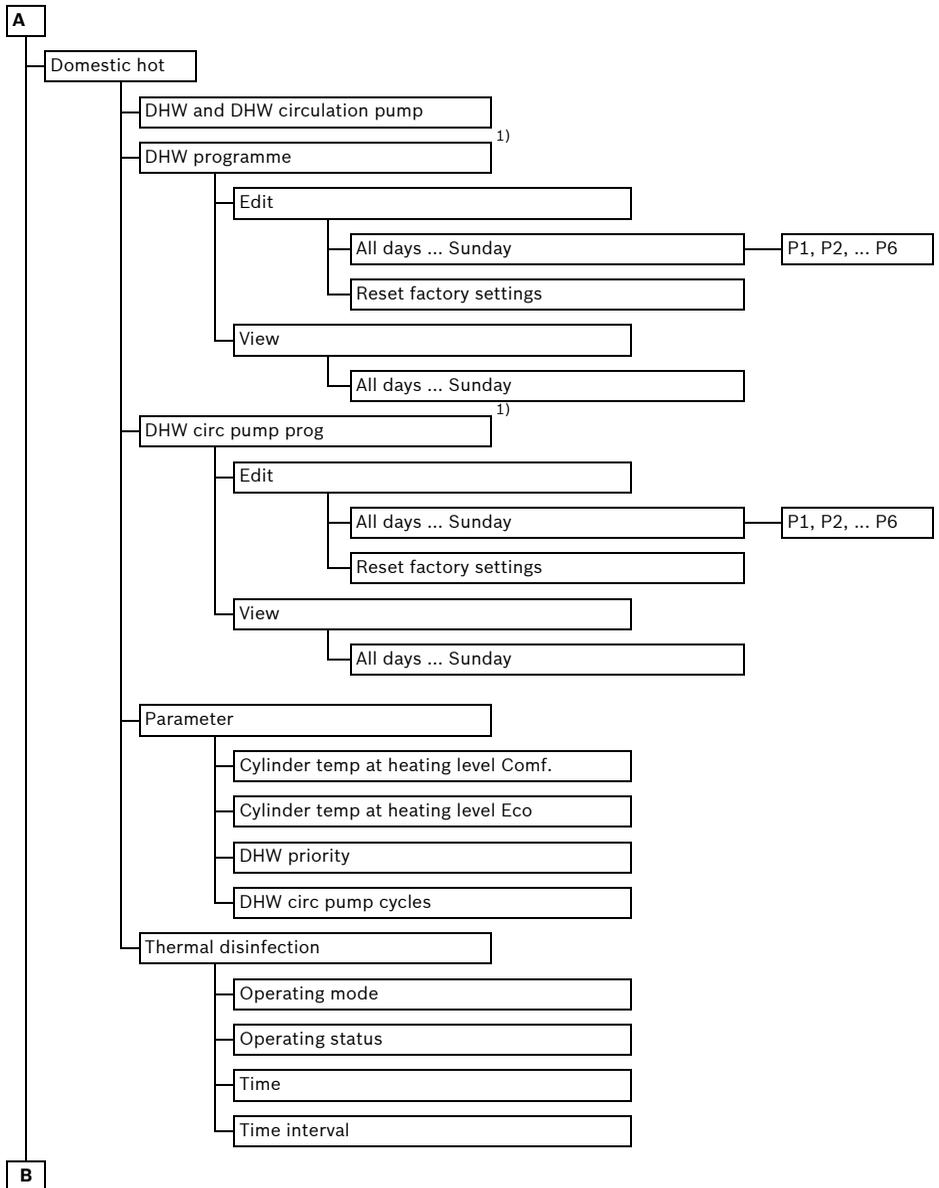
### Solar optimisation

The controller is equipped with "Solar optimisation". For further information, see the detailed installation and operating instructions of the controller.

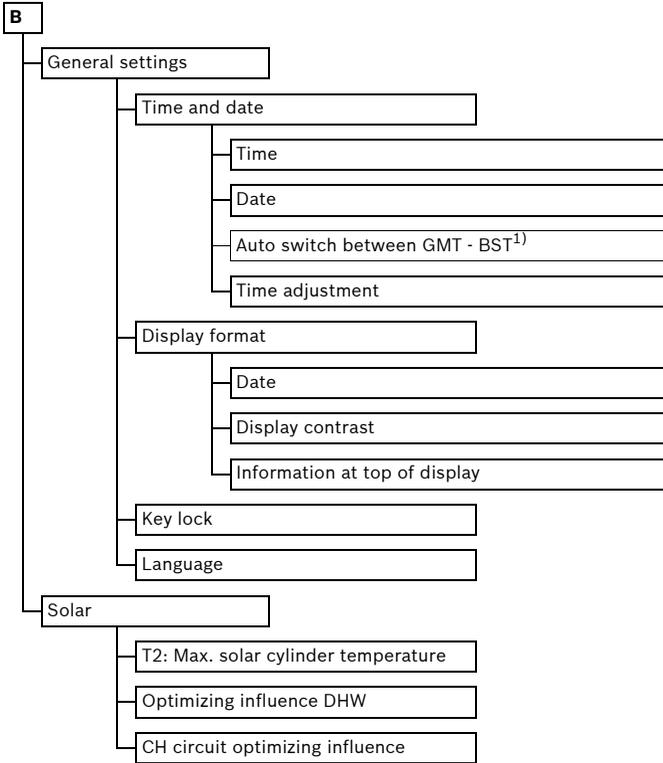
# 10 Menu structure

- ▶ Briefly push the menu key to open or close the main menu.
- ▶ Turn the rotary selector to select the required menu point.
- ▶ Push the rotary selector to open the selected menu point.





1) This menu point will only be displayed if the DHW program has been activated (→ Chapter 5.5.2).



1) This menu point must be set to “No.”

# Technical terms

## Automatic mode

The heating system is heated up in accordance with the heating program and changes automatically between the operating modes

 **Comfort** /  **Economy** /  **Frost**.

## Combi boiler

A heating appliance that can heat DHW and heating water simultaneously.

## Constant operation

In constant operation, automatic operation or the heating program is interrupted and the heating system heats in accordance with the relevant "required" room temperature.

## DHW circulation pump

A DHW circulation pump circulates DHW between the DHW cylinder and the draw-off point (e.g. hot tap). This makes hot water available more quickly.

## DHW cylinder

A DHW cylinder stores large volumes of heated potable water (e.g. 120 litres), and thereby makes sufficient hot water available at the draw-off points (e.g. hot taps). This is ideal for taking a longer shower, for example.

## DHW program

The DHW program specifies at what switching times DHW should be heated and when a DHW circulation pump should run. If the DHW program is associated with the heating program, the heating program also determines the switching times for DHW heating and the operation of the DHW circulation pump.

## Factory settings

Values permanently saved in the controller (e.g. complete heating programs) that are available at any time and that can be reinstated according to demand.

## Flow temperature

Temperature with which the heated water circulates in the central heating system, i.e. from the heating appliance to the heating surfaces (radiators, underfloor heating system etc.) in the various rooms. To reduce heat losses and save energy, today's designs provide for significantly lower flow/return temperatures, e.g. 60/40 °C, whereas in the past 90/70 °C was common.

## Frost protection

Frost protection is the lowest setting permitted by the controller. Frost protection prevents the heating system from freezing up.

## Groups of days

Groups of days are available for the convenient setting of heating or DHW programs (e.g. Monday to Friday, Saturday and Sunday etc.). In conjunction with the selected group of days, settings can be applied to several days simultaneously.

**Heating program**

A heating program provides an automatic changeover between operating modes at fixed switching times. If the DHW program is associated with the heating program, the heating program also determines the switching times for DHW heating and the operation of the DHW circulation pump.

**Holiday program**

The holiday program enables an interruption of the otherwise applicable controller settings over several days. After the holiday program has expired, the controller operates with the previously applicable settings.

**Operating mode**

The operating modes are **Comfort/Economy/Frost**. They are identified by the symbols  /  / .

A "required" room temperature (temperature level) that can be adjusted is assigned to each of these operating modes.

**Operating mode selector**

The operating mode selector lets you change between the heating program and constant operation.

**Switching time**

A certain time at which the heating system starts to heat, or DHW is produced, for example. The switching time is part of the heating program or the DHW program.

**Temperature level**

The "required" room temperature that is assigned to an operating mode. The "required" room temperature can be changed. See the explanations on operating mode.

**Thermal disinfection**

This function heats up the DHW to a temperature in excess of 60 °C, which is sufficient to kill pathogens (e.g. legionella bacteria). Observe the anti-scalding safety instructions.

**Weather-compensated controller**

A weather-compensated controller automatically regulates the flow temperature subject to the outside temperature and in conjunction with a time program.



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