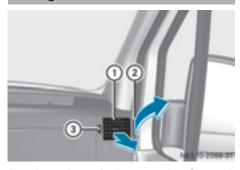
#### Setting the side air vents



Side air vent (example: right-hand side of the vehicle)

- ▶ To open: turn thumbwheel (3) of side air vents (1) upward.
- ► To close: turn thumbwheel (3) of side air vents (1) downward.
- 1 If the 🔞 symbol can be seen on thumbwheel (3), defroster vent (2) is open.

# Adjusting air vents for the passenger compartment



Air vents (example: right-hand side of the vehicle)

You can use the air vents to ventilate the vehicle interior on the left and right, in the rear and the headroom.

- ► To open: for the right-hand side of the vehicle, turn thumbwheel (2) to the left or for the left-hand side of the vehicle, thumbwheel (1) to the right.
- ► To close: for the right-hand side of the vehicle, turn thumbwheel (2) to the right or for the left-hand side of the vehicle, thumbwheel (1) to the left.

#### Adjusting the air vents in the roof duct

Always leave at least one air vent open. If the rear-compartment air conditioning is switched on and all the air vents are closed, the air-conditioning system may be damaged.



On vehicles with rear-compartment air conditioning, adjustable air vents are integrated into the roof duct.

- ► To adjust the airflow: open or close the air flap in air vents (1) as needed.
- ▶ To adjust the air distribution: turn air vent (1) to the desired position.

#### Operating the auxiliary heating system

#### Important safety notes



♠ DANGER

If the exhaust pipe is blocked or adequate ventilation is not possible, poisonous gases such as carbon monoxide (CO) may enter the vehicle. This is the case, for example in enclosed spaces or if the vehicle gets stuck in snow. There is a risk of fatal injury.

Switch the auxiliary heating off in enclosed spaces without extraction systems, e.g. in garages. If the vehicle is stuck in snow and you have to leave the auxiliary heating running, keep the exhaust pipe and the area around the vehicle free of snow. To ensure an adequate supply of fresh air, open a window on the side of the vehicle that is not facing into the wind.

#### **↑** WARNING

When the auxiliary heating is switched on, parts of the vehicle can become very hot, e.g. the exhaust system.

Flammable materials such as leaves, grass or twigs may ignite if they come into contact with:

- hot parts of the exhaust system
- the exhaust gas itself

There is a risk of fire.

When the auxiliary heating is switched on, make sure that:

- no flammable materials come into contact with hot vehicle components
- the exhaust gas can escape from the exhaust pipe unhindered
- the exhaust gas does not come into contact with flammable materials.
- Turn on the auxiliary heating at least once a month for approximately 10 minutes. The auxiliary heating could otherwise be damaged.
- Make sure that the flow of hot air is not blocked. The auxiliary heating will otherwise overheat and switch off.

Your vehicle may be equipped with either an auxiliary hot-water heater or an auxiliary warmair heater. Adjustment and operation of the:

- hot-water auxiliary heater is done via the onboard computer and with the auxiliary heating button in the control panel (▷ page 108) or with the remote control (▷ page 109).
- auxiliary warm-air heater is done via the timer above the overhead control panel (⊳ page 114).

The auxiliary heating works independently of the engine and supplements the climate control system in the vehicle. The auxiliary heating heats the air in the vehicle interior to the temperature set.

If your vehicle is equipped with a hot-water auxiliary heater, the auxiliary heating also keeps the coolant warm. This way, the load on the engine is minimized and fuel is saved.

The heater booster function (▷ page 111) of the auxiliary heating supports the climate control

system when the engine is running and the outside temperature is low.

You can use the auxiliary heating at an outside temperature of up to 39 °F (4 °C). At an outside temperature above 39 °F (4 °C) the auxiliary heating system and the heater booster function switch off automatically.

## Hot-water auxiliary heating

## Heating time

The heating time when operating the auxiliary heating with the vehicle is stationary without the engine running depends on the outside temperature and the electrical consumers switched on.

Outside tempera- ture	Heating time	Possible startup procedures
Above 23 °F (-5 °C)	Approx. 20 minutes	6
23 °F (-5 °C) to 5 °F (-15 °C)	Approx. 40 minutes	3
Below 5 °F (-15 °C)	Approx. 50 minutes	2

You can then switch on the auxiliary heating

If you do not start the engine for a while, the total duration of heating is limited to a maximum of 120 minutes to protect the starter battery. Switching on the auxiliary heating is then automatically disabled. You can, for example, switch on the auxiliary heating without the engine running if the outside temperature is -5 °F (-20 °C) a maximum of two times. If you try it again, the indicator lamps in the still button

(▷ page 108) flash alternately for approximately 2 minutes to signal switch-on interlock. The auxiliary heating cannot be switched on without starting the engine.

When the condition of charge of the starter battery is sufficient again, the switch-on interlock will be deactivated. To charge the starter battery, let the engine run. The engine run time required to reach the necessary condition of charge depends on the outside temperature and on the electrical consumers switched on.

Outside temperature	Engine runtime
Above 32 °F (0 °C)	at least 10 minutes
32 °F (0 °C) to 14 °F (-10 °C)	at least 15 minutes
Below 14 °F (-10 °C)	at least 20 minutes

# Before switching on

- ► Check the fuel level and top up if necessary. The auxiliary heating is operated directly using the vehicle's fuel. The tank must be at least a quarter full to ensure that the auxiliary heating functions.
- ▶ Switch on climate control (▷ page 101).
- ► Set the temperature control to the desired temperature (> page 102).
- ➤ Set the air distribution as required (> page 102).
- ▶ Open the center (▷ page 105) and side air vents (▷ page 106) and set them to the middle position.
- The auxiliary heating automatically switches to heater booster mode after the engine is started.

# Operating with the button (control panel)



- i Switch the heater booster function on or off with the the button (▷ page 111).
- ➤ To activate the auxiliary heating system:

  press and hold the upper section of the 
  switch for longer than 2 seconds.

  The red indicator lamp in the button lights up.

  The auxiliary heating heats or ventilates the

- interior to the temperature that you have set. The blower switches to the first level.
- ► To deactivate the auxiliary heating: press the upper section of the 555 switch.

or

► Turn the key in the ignition lock to position 0. The red indicator lamp in the button goes out. The auxiliary heating operates for another 2 minutes and then switches off automatically.

### Selecting a switch-on time

#### Important information

You can use the on-board computer to define up to three switch-on times, one of which can be selected.

The yellow indicator lamp in the \_\_\_\_\_ button goes out after 30 minutes, if you:

- · have selected the switch-on time and
- turn the key to position **0** in the ignition lock

# On-board computer without steering wheel buttons

- ► Turn the key to position 2 in the ignition lock.
- ► Press the \_\_\_\_\_\_ button.
  The \_\_\_\_\_\_ symbol flashes in the display.

or

- ► Press the (M) menu button on the instrument cluster repeatedly until the [55] symbol flashes in the display.
- ► Use the ⊕ or buttons on the instrument cluster to select the switch-on time 1 to 3.
  The switch-on time selected is displayed.
- ► Wait 10 seconds for the standard display to appear.

The switch-on time is selected. The yellow indicator lamp in the \( \) button lights up. If you do not preselect a switch-on time, and \( - \cdot - \cdot - \cdot \) is shown in the display, this means that the automatic switch-on mode is switched off. The yellow indicator lamp in the \( \) button goes out.

# On-board computer with steering wheel buttons



- ► Turn the key to position 2 in the ignition lock.
- Press the <a href="fff">fff</a> button.
  The Aux. heat submenu is shown in the display.

If no switch-on time has been selected, the selected switch-on time is highlighted or Timer off is highlighted.

- 1 You can also access the Aux. heat. submenu via the Settings (⊳ page 168) menu.
- ▶ Use the + or button on the steering wheel to select the desired switch-on time.
  Use the Timer off setting to deactivate automatic switch-on.
- ► Press the □ button on the steering wheel. The switch-on time is selected. The yellow indicator lamp in the □ 555 button lights up.

# Setting the switch-on time

Use the same method to select a switch-on time as described in the "Preselecting a switch-on time" section.

# On-board computer without steering wheel buttons

- ► Press the ⊚ reset button on the instrument cluster.
  - The hour display flashes.
- ▶ Use the → and → buttons on the instrument cluster to set the hours.
- ► Press the ① reset button The minute display flashes.
- ▶ Use the ♠ and ♠ buttons to set the minutes. The switch-on time is set and selected.

# On-board computer with steering wheel buttons

- ► Press the ▲ button on the steering wheel. The display shows the Hours menu.
- ▶ Use the + and buttons on the steering wheel to set the hours.

- ► Press the ▲ button.
  The display shows the Minutes menu.
- ► Use the + and buttons to set the minutes.
- ► Press the □ button.
  The switch-on time is set and selected.

#### Operation with the remote control

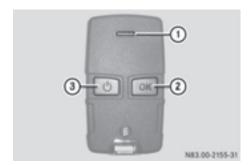
### Important information

You can switch the auxiliary heating on/off and set the operating duration using the remote control. You can use up to 4 remote control units on the vehicle. These must be synchronized for the receiver in your vehicle (> page 110).

The remote control has a maximum range of approximately 600 meters. This range is reduced by:

- sources of interference
- solid objects between the remote control and the vehicle
- the remote control being in an unfavorable position in relation to the vehicle
- transmitting from an enclosed space

#### Overview of the remote control



- 1 Indicator lamp
- ② To confirm settings
- 3 To switch the remote control on/off, set the operating duration or end or cancel settings

Indicator lamp ① lights up in various ways to show different operating modes:

Signaling	Meaning
Lights up red	Remote control switched on
	Data transfer

Signaling	Meaning	
Flashes red	Auxiliary heating switched off	
Lights up green	Auxiliary heating switched on	
Flashes green	Change operating duration active	
Flashes alter- nately red and green	Remote control in synchro- nizing mode	

When the remote control battery is weak, indicator lamp ① flashes red rapidly. Replace the remote control battery (▷ page 111).

You can find information on further lamp statuses in the "Problems with the hot-water auxiliary heater" section (▷ page 113).

### Switching the remote control on/off

The remote control switches to standby mode after 10 seconds. Indicator lamp (1) goes out.

- ► To switch on: press and hold the button until indicator lamp lights up red. If a connection between the remote control and the receiver in the vehicle has been established and indicator lamp :
- flashes red, the auxiliary heating is switched off.
- lights up green, the auxiliary heating is switched on.
- ► To switch off: press and hold the button until indicator lamp (1) goes out.

# Switching the auxiliary heating on/off

- Switch on the remote control.
- ► To switch on: when indicator lamp ① flashes red, press the OK button.

  During data transmission, indicator lamp ① lights up red.

When indicator lamp ① lights up green, the auxiliary heating is switched on.

► To switch off: when indicator lamp ① lights up green, press the OK button.

During data transmission, indicator lamp ① lights up red.

When indicator lamp ① flashes red, the auxiliary heating is switched off.

### Changing the operating duration

- Switch on the remote control.
- When indicator lamp ① flashes red, press
   ☑ and OK simultaneously.
   Indicator lamp ① flashes green.
- ▶ Press the button repeatedly until the desired operating duration is shown.
  - 20 minutes
     Indicator lamp (1) flashes green twice.
  - 30 minutes
     Indicator lamp ① flashes green three times.
- 40 minutes Indicator lamp (1) flashes green four times.
- ► Press the OK button.

  During data transmission, indicator lamp ① lights up red.

If indicator lamp ① emits two long, green flashes, the selected operating duration is stored.

1 If no adjustment is made, indicator lamp (1) flashes six times and the remote control goes into standby mode.

### Synchronizing the remote control

- Press the auxiliary heating button in the control panel (▷ page 108) for longer than 10 seconds.
  When you press and hold the button, the red indicator lamp lights up in the button.
  When the red indicator lamp in the button flashes, the receiver in the vehicle is ready for synchronizing.
- ▶ Press and hold the 付 remote control button until indicator lamp ① lights up red. If there is an active connection between the remote control and the receiver, indicator lamp ① flashes alternately red and green. The remote control is in synchronizing mode.
- If you press the 💍 button again on the remote control after starting synchronization, you will only synchronize this remote control unit with the receiver. Any other remote control units that were synchronized will be cleared. Indicator lamp ① flashes alternately red and green (very slowly).
- ► Press the ok button on the remote control.

  During data transmission, indicator lamp ①
  lights up red.

When remote control indicator lamp ① emits two long green flashes, the selected operat-

ing time is synchronized. The indicator lamp in the still auxiliary heating button goes out.

# Switching the heater booster function on/off



Vehicles with auxiliary heating



Vehicles with heater booster function

At outside temperatures of up to 39 °F (4 °C) the fuel-fired heater booster system heats the vehicle interior as quickly as possible when the engine is running.

The auxiliary heating automatically switches to heater booster mode after the engine is started.

At an outside temperature above 39 °F (4 °C) the auxiliary heating system and the heater booster function switch off automatically.

If you switch off the engine without switching off the heater booster function, the system will be switched on the next time the engine is started (memory function).

- 1 Switch the auxiliary heating on or off with
- ► To switch on/off: press the tit button. If the indicator lamp in the button lights up, the heater booster function is switched on.

After switching off, the auxiliary heating operates for about another 2 minutes and then switches off automatically.

### Replacing the remote control battery

#### **↑** WARNING

Batteries contain toxic and corrosive substances. If batteries are swallowed, it can result in severe health problems. There is a risk of fatal injury.

Keep batteries out of the reach of children. If a battery is swallowed, seek medical attention immediately.



#### Environmental note



Batteries contain dangerous substances. It is against the law to dispose of them with the household rubbish. They must be collected separately and recycled to protect the environment.



Dispose of batteries in an environmentally friendly manner. Take discharged batteries to a qualified specialist workshop or a special collection point for used batteries.

If the indicator lamp on the remote control flashes red rapidly, the remote control battery is discharged. You should replace the remote control battery.

You need a battery of the type CR2430, which can be obtained at any qualified specialist workshop.



- Remove battery cover ② using a suitable implement, e.g. a coin, by turning it counterclockwise.
- ► Check the seal on battery cover ② for damage and, if necessary, replace.
- ► Remove old batteries ③.
- ► Insert new, clean battery ③ into the battery tray with the positive pole facing upwards. Use a lint-free cloth to do so.
- ► Position battery cover ② so that mark ① on the raised area points between two recesses ④.
- ► Turn battery cover ② using a suitable implement, e.g. a coin, clockwise to the stop.
- ► Check all the functions of the remote control (> page 109).

# Problems with the hot-water auxiliary heating

Problem	Possible causes/consequences and ▶ Solutions
The indicator lamp on the remote control flashes red rapidly.	The remote control battery is discharged. Data transmission is not possible.
naonoo roa rapiary.	▶ Replace the remote control battery (▷ page 111).
The indicator lamp on the remote control flashes red and green in rapid succession.	<ul> <li>There is no connection between the remote control and the receiver in the vehicle.</li> <li>Change your position in relation to the vehicle, e.g. hold the remote control higher or to the side.</li> <li>Move closer.</li> </ul>
	If you cannot establish a connection and the auxiliary heating is switched on, it can then only be deactivated using the button (> page 108).
	Several remote controls are being used at the same time.  ▶ Switch on the remote control again after a short while (> page 110).  or
	The remote control is not synchronized.  ▶ Synchronize the remote control (▷ page 110).
The indicator lamp on the remote control slowly flashes red and green alternately.	The remote control is being synchronized.  ▶ Wait until the remote control synchronization process is complete (> page 110).
The remote control for the auxiliary heating cannot be switched on.	The remote control battery is discharged.  ▶ Replace the remote control battery (▷ page 111).
The auxiliary heating does not switch on.	The outside temperature is above 39 °F (4 °C). The auxiliary heating switches off automatically.
The auxiliary heating switches off automatically and/or cannot be switched on.	The fuel tank is less than ¼ full. The auxiliary heating switches off automatically.  ▶ Refuel at the nearest gas station.  ▶ Then, start the auxiliary heating several times until the fuel lines are full.  or
	The low-voltage protection system integrated in the control unit switches off the auxiliary heating because the on-board voltage is less than 10 V.  ▶ Have the alternator and battery checked.  or

Problem	Possible causes/consequences and ▶ Solutions	
	The fuse is blown.  ➤ Replace the fuse; see the "Fuse allocation" supplement.  ➤ Have the cause of the blown fuse determined at a qualified specialist workshop.  or	
	<ul> <li>A malfunction has occurred.</li> <li>▶ Switch the ignition on and off twice.</li> <li>If the auxiliary heating still cannot be switched on, the heating device is faulty.</li> <li>▶ Have the auxiliary heating checked at a qualified specialist workshop.</li> </ul>	
The auxiliary heating is overheated.	The coolant level is too low.  ► Check the coolant level and add more coolant if necessary (> page 222).	

#### Auxiliary warm-air heater

#### Operation with the timer

## Important safety notes



#### DANGER

If a switch-on time has been selected, the auxiliary heating switches on automatically.

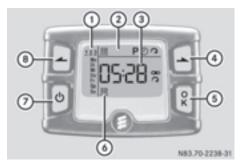
- If the ventilation is insufficient, poisonous exhaust gases can collect, in particular carbon monoxide. This is the case in enclosed spaces, for example. There is a risk of fatal injuries.
- · If highly flammable substances or flammable materials are nearby, there is a risk of a risk of fire and explosion.

Always deactivate the preselected switch-on times if you stop the vehicle in such or similar situations.

#### Use the timer to:

- · activate and deactivate immediate heating mode
- · set up to three switch-on times
- set the operating duration to between 10 and 120 minutes or to continuous operation
- · set the heating level (preselected temperature) to a range between 10 and 30

#### Timer overview



Timer above the overhead control panel

1 Program column

Sets preselection memory 1 – 3 (⊳ page 115)

Sets weekday (Mon. - Sun.) (⊳ page 115)

2 Menu bar

Switches immediate heating mode  $\overline{\text{on/off}}$  ( $\triangleright$  page 115)

**P** Sets the program times (⊳ page 115)

 Sets the day, time and the operating duration (⊳ page 115)

Sets the heating level (▷ page 116)

3 Display panel for: time, heating level and operating duration

Continuous operation mode active

Heating level set

- (4) Selects options in program column (1) or menu bar (2) (forwards) Increases values
- (5) Confirms a selection or setting
- 6 Status bar
  - Heating mode activated
- (7) Activates the timer
  - Cancels or ends settings in a menu
- (8) Selects options in program column (1) or menu bar (2) (backwards) Reduces values

### Activating the timer

The timer switches to standby mode after 10 seconds. The display goes off.

▶ Press and hold the 🖒 button until the menu bar appears in the display and the time is shown.

#### Setting the day, time and operating duration

You must reset the day, time, and default value for the operating duration:

- during initial operation
- after a voltage supply interruption (e.g. if the battery has been disconnected)
- · after a malfunction.

You can find information on malfunctions in the "Problems with the auxiliary warm-air heater" section (⊳ page 117).

- ▶ Press the or button until the ① symbol in menu bar (2) flashes.
- ▶ Press the ok button. In program column (1), the day selected
- ▶ Press the or button to set the desired day.
- ▶ Press the **ok** button. The day selected is stored. The hour setting of the clock flashes.
- ▶ In the same way, set the hour and subsequently the minutes, then confirm by pressing the **ok** button.

The time is stored. Program column (1) disappears and the operating duration flashes.

1 The operating duration set is the default setting for immediate heating mode. You can set the operating duration from 10 to 120 minutes or activate continuous operation.

- ▶ Using the or button, set the minute value or select the symbol for continuous operation.
- ▶ Press the **ok** button. The operating duration is stored. The time is

### Switching immediate heating mode on/off

- ▶ To switch on: press the ← or → button until the symbol in the menu bar flashes.
- ▶ Press the **ok** button. The operation duration flashes in the display.
- 1 You can preset the default value that is shown (⊳ page 115).
- ▶ Using the 🚄 or 🛋 button, set the minute value (10 to 120) or select the symbol for continuous operation.
- ▶ Press the **ok** button. Immediate heating mode is activated. The time and the symbol appear.
- ▶ To switch off: press the or button until the symbol flashes in the menu bar, and then press the **OK** button. Immediate heating mode is deactivated. The symbol disappears.

The auxiliary heating operates for another 2 minutes and then switches off automatically.

1 If you switch off the ignition during immediate heating (operating duration 10 to 120 minutes), you also switch off the immediate heating mode. The auxiliary heating operates for another two minutes and then switches off automatically.

If you have set continuous operation as the operating duration and you switch off the ignition, the auxiliary heating switches off automatically after about 15 minutes. If, in the remaining time, the ignition is switched on again, continuous operation of the auxiliary heating continues.

# Setting the preselection time

# **↑** WARNING

The auxiliary heating must not be operated if there are highly flammable substances nearby or in enclosed spaces without an extraction system. Make sure that the auxiliary heating is not switched on automatically by the timer in such places. If this possibility

exists, deactivate the respective programmed time

You can set three preselection times using the timer.

After a malfunction or if the battery has been disconnected, you must set the preselection times again. You can find information on malfunctions in the "Problems with the auxiliary warm-air heater" section (> page 117).

- ▶ Press the or button until the P symbol in the menu bar flashes.
- ► Press the OK button.
  In the program column, the 123 preselection memory numbers appear. The selected preselection memory flashes.
- ▶ Press the \_\_\_ or \_\_\_ button to select the desired preselection memory.
- ► Press the OK button.
  The preselection memory is selected. The days are shown.
- ► Set the day and time as described in the "Setting the day, time and operating duration" section (▷ page 115).

  The preselection time is stored. The program column disappears. In the display panel, the

on message and the 💯 symbol appear.

- ► Press the **OK** button. The operating duration flashes.
- ▶ Press the \_\_\_\_ or \_\_\_ button to set the minute value (10 to 120).
- ► Press the OK button.

  The operating duration for the preselection time is saved. The time and number of the selected preselection memory are shown.
- 1 The preselection memory that will be activated next is underlined. Additionally, the day that is set appears.

### Deactivating the preselection time

► Carry out the steps as described in the "Setting the preselection time" section.

If the  $\frac{155}{2}$  symbol in the status bar is shown:

- ▶ Press the \_\_\_ or \_\_\_ button until the off message in the display panel is shown.
- ► Press the OK button.

  The preselection time is deactivated. The time is shown.

#### Setting the heating level

You can set the heating level to a range between 10 and 30.

The heating level corresponds to a preselection temperature for the vehicle interior. This is a guide value and may, depending on the outside temperature, differ from the interior temperature.

- ▶ Press the or button until the ymbox
  symbol in the menu bar flashes.
- ► Press the OK button.

  The heating level display flashes.
- ▶ Using the \_\_\_ and \_\_\_ buttons, set the desired heating level to a range between 10 and 30.
- ► Press the OK button.
  The heating level is set and the ∰ symbol appears.