

**Model** all (4xWD)

**Model** all (CAR)

### Overview

This document contains the following information:

- **General**
- **Function requirement**

### General

The rear window heater heats the rear window. This allows ice or snow on the rear window to be defrosted and counteracts fogging of the rear window. Depending on the vehicle, the rear window heater is controlled by the central signal acquisition and actuation module or the rear signal acquisition and actuation module.

When the rear window heater is switched on, the outside mirror heating is also activated.

### Function requirement

- Circuit 15 ON (except pre-entry climate control for hybrid, electric vehicles)

### Function

The rear window heater can be operated manually via the rear window heater switch on the air conditioning control panel and via the voice control system (VCS). The function of the rear window heater is indicated visually.

### ● Function

- **Heat rear window**
  - Shutoff conditions

The rear window heater is automatically activated/deactivated during the pre-entry climate control (hybrid, electric vehicles) or in order to reach the operating temperature of the combustion engine more quickly. The automatically activated rear window heater is not indicated visually.

In vehicles with combustion engines, the actuation of the rear window heater is interrupted or not permitted while the engine is being started.

The rear window heater is affected by the following factors:

- Outside temperature and vehicle interior temperature
- Coolant temperature
- Vehicle speed

The duty cycle of the rear window heater is stored in the system and varies between 2 and 26 min.

Variable	Duty cycle	Additional information
-	15 min	Normal duty cycle
Outside temperature above 50 °C	2 min	To protect the rear window
After start: Coolant temperature < operating temperature	Maximum 15 min	Only with combustion engines, to increase the engine load
Outside temperature between 5 and -7 °C	+30 s added to the normal duty cycle for each 1 °C below 5 °C	Down to -7 °C corresponds to a maximum of +6 min
Outside temperature below 0 °C at 60 km/h	+1 min added to the determined duty cycle	-
Outside temperature below 0 °C at 70 km/h	+2 min added to the determined duty cycle	-
Outside temperature below 0 °C at 80 km/h	+3 min added to the determined duty cycle	-
Outside temperature below 0 °C at 90 km/h	+4 min added to the determined duty cycle	-
Outside temperature below 0 °C at 100 km/h	+5 min added to the determined duty cycle	At -7 °C, this results in the max. duty cycle of 26 min.

### Shutoff conditions

The rear window heater is deactivated by the energy management via the consumer reduction in the case of undervoltage of the on-board electrical system.

In vehicles with a combustion engine, the rear window heater is switched off when the combustion engine is switched off.

### Special case: Traffic light stop

If circuit 15 R remains switched on after the combustion engine has been shutoff, the actuation of the rear window heater is interrupted for a certain time. This time is stored in the system and can be adjusted via the vehicle diagnosis system. If the ignition is switched on within the stored time, the rear window heater is activated for the duty cycle that remained before the interruption. After the stored time has passed, the rear window heater must be switched on again as necessary.

	Function schematics		
	Function schematic, heat rear window	Model 118, 177, 243, 247 Model 167, 293 Model 213, 238, 257, 290 as of model year 2021 Model 206, 223, 232, 254, 295, 296, 297 Model 464	PE67.29-P-2500-97A PE67.29-P-2500-97B PE67.29-P-2500-97C PE67.29-P-2500-97D
	<b>Additional basic functions</b>		
	Reduce consumers, basic function		GF54.10-P-1011A
	Heating of mirror glass of outside mirror, basic function		GF88.79-P-1001A
	<b>Control units</b>		
	Basic function of signal acquisition and actuation module	Model 118, 177, 243, 247	GF54.21-P-9895A
	Basic function of signal acquisition and actuation module at front	Model 167, 206, 223, 232, 254, 293, 295, 296, 297 Model 213, 238, 257, 290 as of model year 2021	GF54.21-P-9896A
	Basic function of signal acquisition and actuation module at rear	Model 167, 206, 223, 232, 254, 293, 295, 296, 297 Model 213, 238, 257, 290 as of model year 2021	GF54.21-P-9897A

	<b>Components</b>		
	Rear window heater, basic function		GF67.29-P-2006A