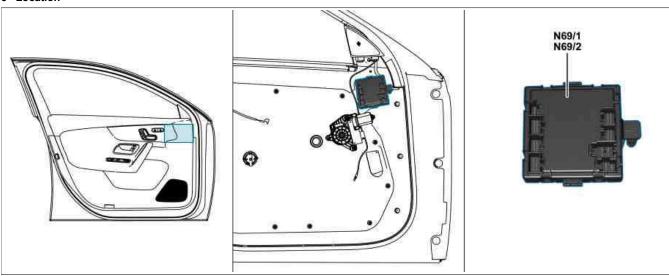
Model all (CAR)

Overview

This document contains the following information:

Location

- Networking
- Controlling functions



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N69/1 Driver door control unit

Location

The front door control units are located in each case in the door module behind the door trim.

Networking

The front door control units are connected to the network architecture of the vehicle.

The driver's door control unit is connected to the following component parts:

- Power window and outside mirror adjustment switch group
- Seat adjustment switch group (vehicles with memory function)
- Seat climate control switch group (vehicles with seat heating and/or seat climate control)
- Left rear door control unit

The front passenger door control unit is connected to the following component parts:

- Seat adjustment switch group (vehicles with memory function)
- Seat climate control switch group (vehicles with seat heating and/or seat climate control)
- Right rear door control unit

Controlling functions

The front door control units control the following functions:

- Power windows
- Outside mirror glass adjustment
- Outside mirror glass heater
- Outside mirror glass dimming
- Central locking
- Power closing function (vehicles with power closing function)
- Outside mirror fold in/out (vehicles with electric foldable outside mirrors)

For the implementation of the respective function, the front door control units evaluate - among other things - the following information:

- Terminal status of terminal 15
- Reverse gear engaged' signal
- Rear window heater activated signal
- Lock/unlock central locking system request
- PRE-SAFE® adjustment request (vehicles with PRE-SAFE® system)

N69/2 Front passenger door control unit

- Adopt memory position request (vehicles with memory function)
- Convenience feature request
- Rain closing function request
- Outside mirror fold in/out request (vehicles with electric foldable outside mirrors)
- Crash signal
- Operating requests via respective control elements
- Status of microswitches in door locks
- Status of power closing function microswitches (vehicles with power closing function)
- Blind Spot Assist warning output request (vehicles with Blind Spot Assist)

The front door control units actuate different actuators in the respective front door and/or transmit the corresponding information and requests to the respectively affected systems. This includes:

- Door status (open/closed)
- Adjust front passenger outside mirror request (driver's door control unit)
- Other power window actuation request (driver's door control unit)
- Open/close side window roller sunblind request (driver's door control unit, vehicles with roller sunblinds in rear doors)
- Convenience feature (vehicles with KEYLESS-GO)
- Seat heating and/or seat climate control request (vehicles with seat heating and/or seat climate control)
- Seat adjustment request (vehicles with electrical seat adjustment)
- Unlock trunk lid or tailgate request (driver's door control unit)
- Power window actuation
- Power closing motor actuation (vehicles with power closing function)
- Outside mirror glass adjustment actuator motor actuation (driver's door control unit)
- Outside mirror fold in/out actuator motor actuation (vehicles with electric foldable outside mirrors)

The front door control units also protect the respective power window motor against overheating.

The software simulates temperature characteristics depending on the operating time. The parameters required for this purpose were determined in tests and are stored in the respective front door control unit.

If the overheating protection is triggered, the actuation of the affected power window motor is blocked for a min. cooling time. Exception:

The overheating protection function does not operate during roof reversal (after a blockage is detected).