

## Air distribution

### Air distribution programs

In addition to the automatic air distribution program, the driver has available three and the passenger two manual air distribution programs. They are used to open and close the ventilation and footwell flaps independent from each other and separately on the driver's and passenger's side and independent of the set temperature value. For safety reasons, operation of the defrost function on the driver's and passenger's side is reserved for the driver.

With the aid of these programs, cooled air can be blown out of the defroster and footwell ducts in A/C mode and warm air can be blown out of the ventilation grilles in winter mode.

In this way situations are covered in which the automatic program no longer fulfils the set requirements.

### Actuator drives

10 electrical actuator drives are installed in the system to provide infinitely variable operation of the air outlet flaps during automatic climate control (IHKA). They consist of stepper motors and step-down gear systems.

A stepper motor driven via 4 lines operates the fresh air flaps. New bus-controlled motors are used to operate all other flaps. Each of these motors features its own electronic circuitry and is electrically coded, i.e. the motor must be installed in its intended position.

#### Note

Each of these motors features its own electronic circuitry and is electrically coded, i.e. the motor must be installed on its own specific flap.

The design of several components in the electronic circuitry of the motors has made it possible to reduce the size of the control electronics to such an extent that it can be housed in the operating unit. An additional control unit is therefore no longer necessary.

A further advantage is that up to 5 motors are connected to a common 3-core lead (instead of the previous 6 connections per motor). Two motor variants with connector output are used on the electronics unit on the left or right.