

Air conditioning

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The **air conditioning system** is switched on by pressing the **air conditioning** button. The **function LED** lighting indicates that the **air conditioning system is in standby mode** .

The **compressor** only cuts in if the **switch-on conditions** are fulfilled. The **evaporator** then produces cold air which is raised to the required temperature in **reheat mode** with the aid of the heat exchanger.

If a mechanically **controlled compressor** is installed, the **evaporator cut-out temperature** will be dependent on the **outside temperature** . The cut-out temperature drops by 1 degree Celsius if the outside temperature increases above 20 °C.

To **protect the evaporator from icing up** , the **outlet temperature** is monitored by means of a sensor (**evaporator sensor**) and the **compressor** is controlled by means of an **electromagnetic clutch** .

Switching conditions for the electromagnetic clutch

ON (all conditions must be fulfilled)	OFF (one of the conditions must be fulfilled)	Remarks
Air conditioning button ON	Air conditioning button OFF	
Air flow control wheel _{driver} out of zero position	Air flow control wheel _{driver} in zero position	
Evaporator temperature > 3 ° C	Evaporator temperature < 2 ° C	Dependent on outside temperature: The cut-out threshold drops by 1 °C at temperatures above 20 °C
Enable sent from DME (DME-KOREL)	Full throttle signal from DME initiates shut-down with respect to time	Cut-out temporally limited to approx. 3 seconds.
Engine speed >600 rpm	Speed dropped below minimum value (600 rpm)	

Pressure sensor

Based on the **coolant pressure** , the **pressure sensor** determines the **start-up torque** of the A/C compressor and the necessary **auxiliary fan stage** and passes on this information in the form of a telegram on the **K-bus** to the **DME/DDE** .

Full load cutout

In order to shorten the **rev-up time** of the engine from idle up to **full load** , the **electromagnetic clutch** is switched off for a **limited period** of time at full throttle. The cut-out time is **3** seconds.