

■ AIR CONDITIONER ECU

The air conditioner ECU has following control.

Control	Outline	IS300/200 IS300 SportCross	Previous IS200
Output Air Temperature Control	In response to the temperature control switch setting, the required outlet air temperature, evaporator temperature sensor, and engine coolant temperature sensor compensations are used by the air mix damper control to calculate a tentative damper opening angle, through an arithmetic circuit in the air mix damper, to arrive at a target damper opening angle.	○	○
Blower Control	This function controls the operation of the blower motor in accordance with the signals from the engine coolant temperature sensor, evaporator temperature sensor, and the solar sensor. In addition, it protects the blower motor controller from the sudden drive current that occurs when the blower motor is activated.	○	○
Air Outlet Control	When the AUTO switch of the control panel has been turned ON, automatic control causes the air mix servomotor to rotate to a desired position in accordance with the target damper opening, which is based on the calculation of the required outlet air temperature. Furthermore, under automatic control, the potentiometer in the air mix servomotor is used to detect the actual damper opening, as opposed to the calculated target damper opening, so that control can be effected to match the actual damper opening to the calculated target damper opening.	○	○
	In accordance with the water temperature, outside air temperature, amount of sunlight, required blower outlet temperature, and vehicle speed condition, this control automatically switches the blower outlet between the FOOT/DEF modes to prevent the window from becoming fogged when the outside air temperature is low.	○	—
Air Inlet Control	Drives the air inlet servomotor according to the operation of the air inlet control switch and fixes the dampers in the FRESH or RECIRC position.	○	○
Compressor Control	This control turns OFF the magnetic clutch of the compressor when the blower motor is turned OFF at the time the engine coolant temperature is below a predetermined value, an abnormal refrigerant pressure has been input, or the discharge temperature of the evaporator is below a predetermined value. Furthermore, it turns ON the magnetic clutch of the compressor when the air outlet mode is selected to the DEF mode.	○	○
Rear Window Defogger Control	The defogger turns OFF automatically after 15 minutes elapse with the rear window defogger switch turned ON.	○	○
Outer Temperature Indication Control	Based on the signals from the ambient temperature sensor, this control calculates the outside temperature, which is then corrected in the air conditioning ECU, and shown on the display panel.	○	○
Outside Rear View Mirror Heater Control	This function also automatically turns ON the mirror heater when the rear window defogger switch or front wiper switch are turned ON. After 15 minutes have elapsed from the time this function has been activated, the rear window defogger turns OFF automatically, and the mirror heater also turns OFF.	○	—