18ECO133T

Sensors and Transducers

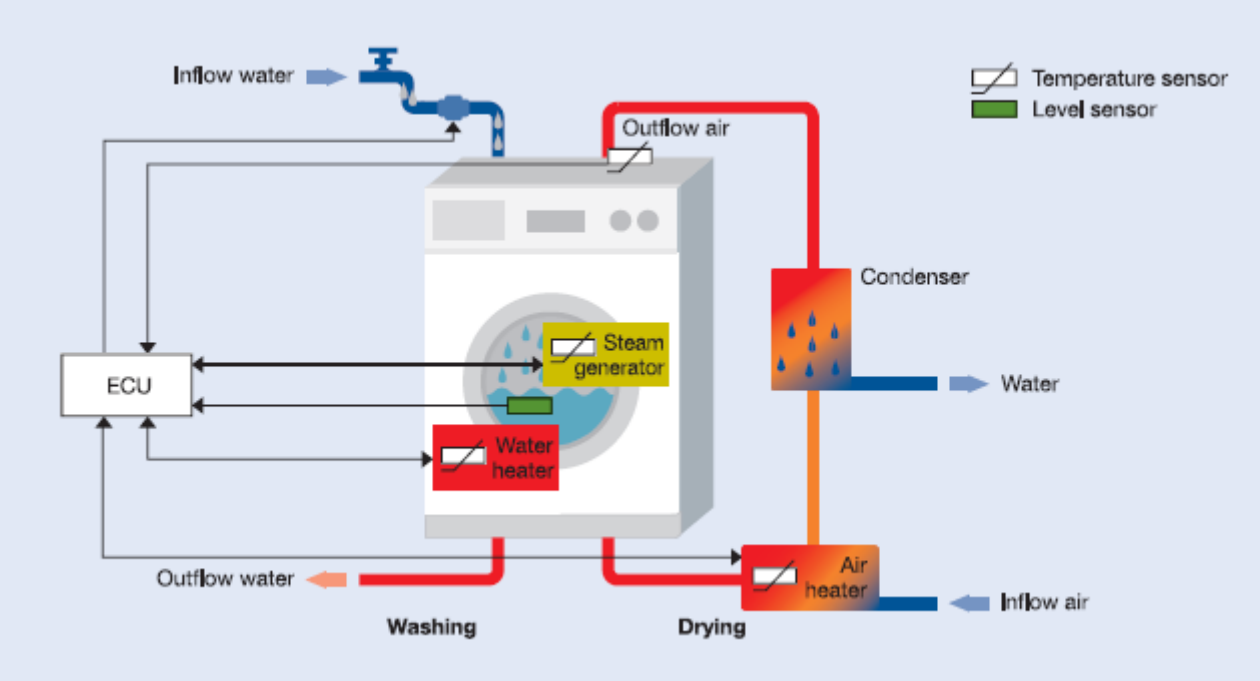
UNIT V

Session 9: SLO – 2

Temperature Sensors in Household Appliances

- **Large appliances** – washing machines, clothes dryers, dishwashers, refrigerators and freezers, ovens and ovens,
- **Small appliances** – coffee makers, induction hobs, irons and ice makers,
- **Heating devices** – heaters, radiators, fans and air conditioners.

- **Washing machines** – The temperature sensor in washing machines allows precise control of the water temperature.

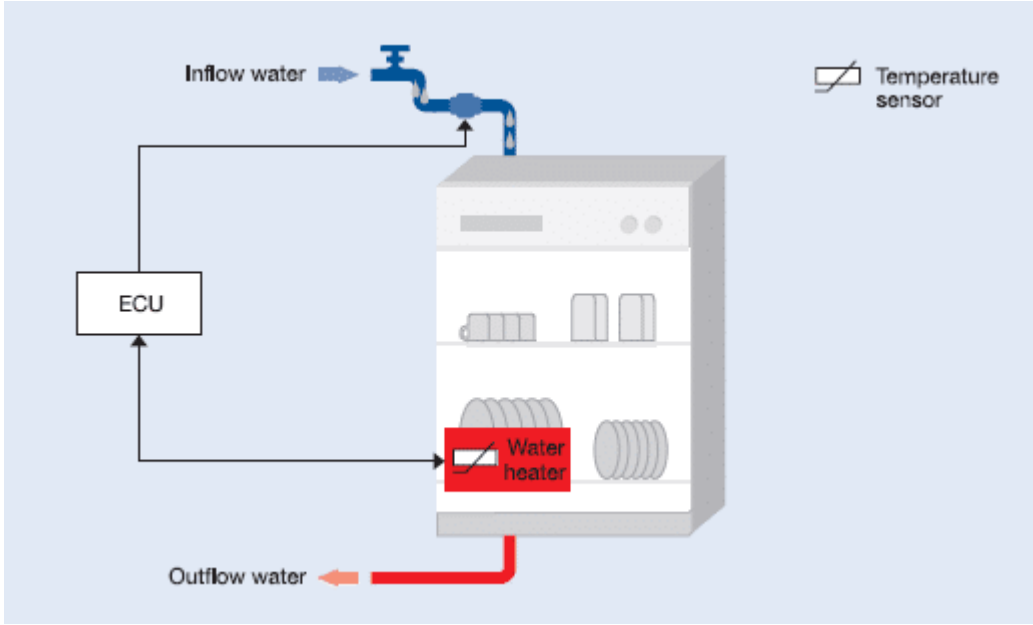


Overall specification of washing machine's temperature sensors:

- NTC thermistor in a stainless steel housing,
- Suitable for corrosive environments (water with suds),
- K276 meets the standards of water temperature sensors in washing machines,
- Temperature range: from -10 to 100° C,
- Long-term stability,
- Possibility to adapt the sensor construction to specific needs.

Dishwashers

- The temperature sensors in the dishwashers are used to measure the water temperature. The injection controller (an electronic device that manages the engine's power system) retrieves information from the sensor to regulate (in a closed loop) the water temperature for each given dishwasher program.

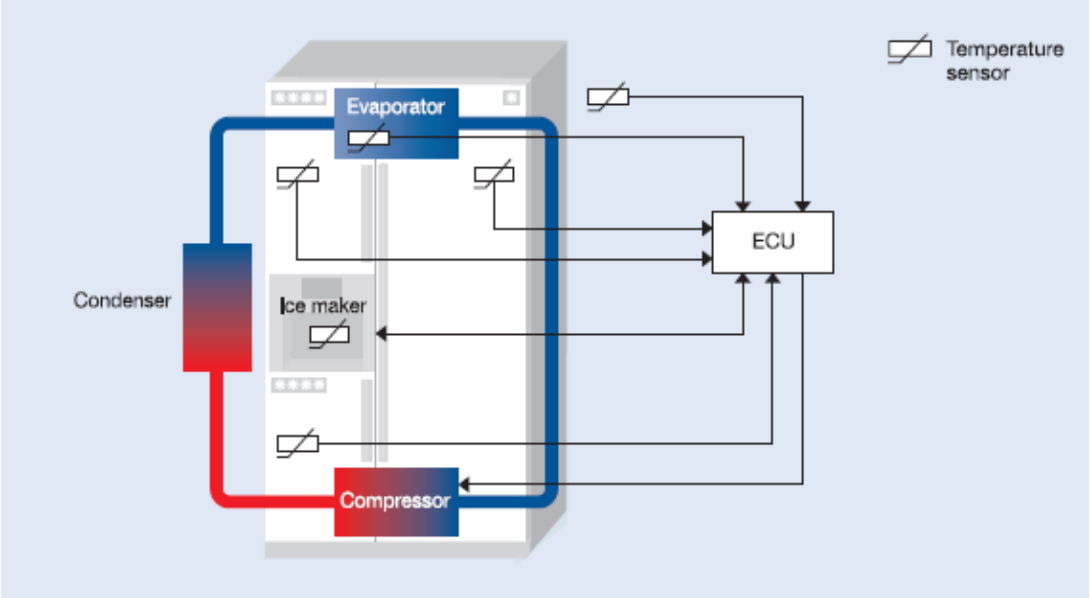


Overall specification of dishwasher’s temperature sensors:

- NTC thermistor placed in a specially formed, plastic housing,
- The housing is resistant to moisture and water,
- Possibility to adapt the sensor construction to specific needs,
- Temperature range: from 0 to 85 ° C.

Refrigerators and freezers

- Temperature sensors in refrigerators and freezers measure the temperature of the cooling chamber, protect against ice build-up of the evaporator, support the formation of ice cubes and detect the ambient temperature.

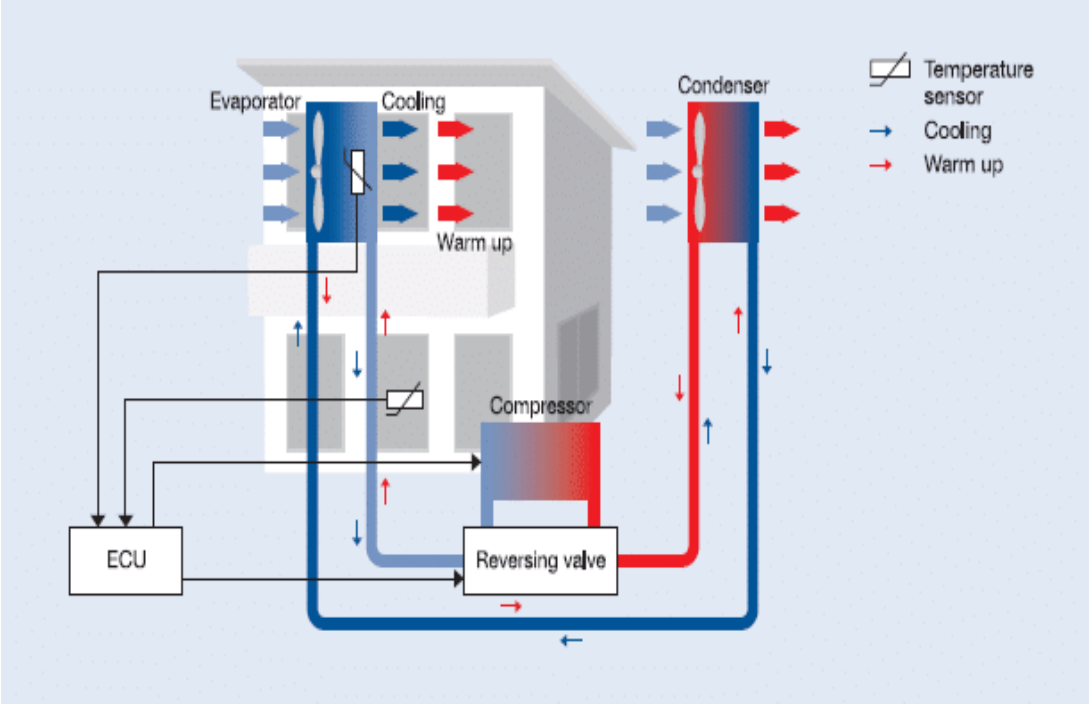


Overall specification of refrigerator’s and freezer’s temperature sensors:

- NTC thermistor placed in a specially formed, plastic housing with cable outlet,
- High resistance to moisture and water,
- Double insulated power cable (M2025), individually (M2010, M1005),
- Possibility to adapt the sensor construction to specific needs.

Air conditioners

- Sensors measure the temperature on the evaporator, preventing it from icing. They also measure the temperature at the air outlet or in the room.



Overall specification air conditioner’s temperature sensors:

- Copper housing well dissipating heat (K500),
- Measuring the temperature on the evaporator (K500),
- NTC thermistor in an epoxy casing (M500, M800),
- Increased resistance to moisture (M800),
- Possibility to adapt the sensor construction to specific needs.