

THE ASSESSMENT OF THERMAL COMFORT IN THE PASSENGERS COMPARTMENT

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Abstract

As many people spend several hours a day in cars, buses or trains, it is important to provide a good thermal environment, which gives comfort and optimizes performance for both drivers and passengers.

The increasing market demand for highly effective and efficient HVAC systems for automotive applications has determined a great impulse in the research and development of innovative methods and instruments to predict passengers' thermal sensation.

The present paper reports the assessment of thermal climate for persons in vehicles through equivalent temperature, the surface temperature of clothing depending on the different parameters.

Keywords

Vehicle, thermal comfort, air velocity, equivalent temperature, the surface temperature of clothing, simulation