

Analysis of automotive air conditioning system and design of its control model

Phan Hải Hiền

Abstract: This topic focuses on analyzing the air conditioning system in personal vehicles, identifying arising issues, and finding optimal solutions. The main objective is to build an effective control model for the air conditioning system with the aim of reducing fuel consumption while improving cabin environment quality. The research method combines theory and experimentation, including analysis of current technology, design of control algorithms, and testing on actual prototypes. The expected results will contribute to improving modern automotive technology and promoting the development of the automobile industry.

Keywords: Automotive air conditioning system, Control model, Fuel consumption, Cabin environmental quality