

topology by a more sophisticated one [9].

6 Conclusions

This paper gives an overview of the `FundamentalWave` library which is included in the Modelica Standard Library 3.2. The basic idea of the complex magnetic potential difference and the complex magnetic flux is introduced and the basic components and equations are presented. After discussing the machine specific components the common partial machine model and the different asynchronous and synchronous induction machines are presented. From a modeling point of view the basic structure of the fundamental wave electric machine models is very clear and plausible. Each model represents a distinct physically effect and can thus easily be replaced by a more sophisticated model in order to consider additional physical effects.

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