

AMESim

LIBRARIES – ELECTRIC MOTORS & DRIVES

KEY POINTS

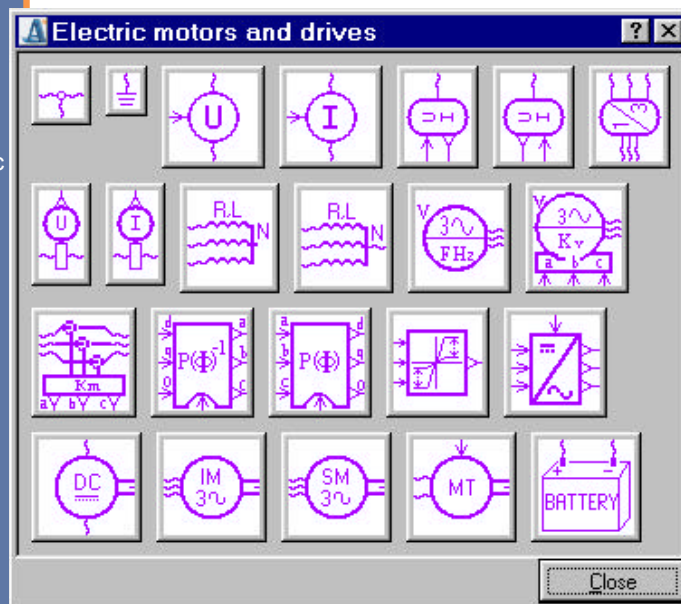
- Steady-state and transient simulation.
- Graphical interface enables you to create new designs quickly.
- State of the art theory. Easy parameters filling from manufacturers' experiments or data from technical drawings.
- Recognizable technological icons facilitating direct model identification with technical drawings.
- Full multi-domain compatibility for total system analysis with study of energetic couplings.
- Complex modeling without writing a single line of code thanks to a Basic Element approach.
- Build and save your own models for easy reuse.
- Sensitivity analysis and size optimization.
- Time domain and frequency analysis for vibration modes characterization (eigenvalues, modal shapes, transfer functions).
- Matlab®/Simulink® interface for control design.
- Direct Integration of your own Fortran and C code.
- Fully compatible with other AMESim libraries.

Overview

The AMESim® Electric Motors & Drives library can be used in most engineering applications where conversion between electrical and mechanical domains takes place. This is a set of system-level model components ready to use with the other AMESim component libraries.

The Electric Motors & Drives Library is very useful for modern car manufacturers which need to replace mechanical and hydraulic actuation with electrical devices.

This library will help the users who want to model full mechatronic systems activated by electric motors.



Benefits

The user-friendly AMESim Electric Motors and Drives library helps you to efficiently develop new design concepts. Thanks to a large collection of electrical components, it allows the user to find answers for the optimal development of complex electrical systems. As a result, the customer cuts down on the number of prototypes, and reduces both the development cost and time to market.

Recognizable technological icons facilitate both the understanding of the simulation model and the direct observation of the evolution of electrical variables.

All AMESim libraries are compatible with one another thus enabling true multi-domain simulation studies.

