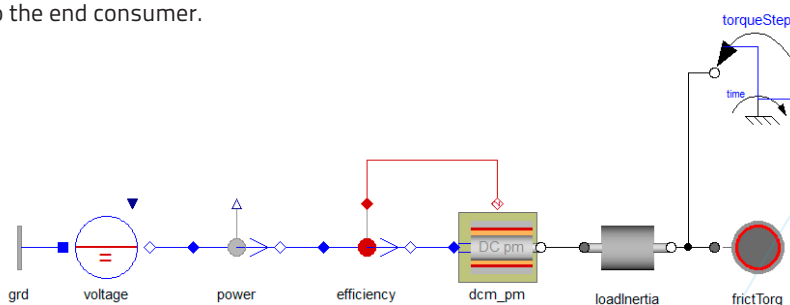# ELECTRIC POWER LIBRARY

▶ Transient and steady state simulation of electrical power systems within multi-physics applications.

The Electric Power Library provides a framework for efficient modeling, simulation, and analysis of electric power systems. The models can be used for simulation of both steady and transient power systems. The multi-domain modeling capability of Modelica makes it possible to model the complete power plant: from the energy source, whether it is oil, gas, hydropower or another renewable source such as wind, all the way through generator and power grid to the end consumer.

The components in the Electric Power Library provide standardized interfaces to the thermal and mechanical domains and can easily be combined with components from other libraries to represent electric power and actuation. Applications include electric power plants and grids, hybrid vehicles, ships, and more. Electric Power Library is also ideal for control design and supports multiple reference frame representations.

KEY FEATURES

- Supports multi-domain modeling
- Transient and steady state simulations
- Easily integrated into any application domain
- Ideal for control design
- 50+ DC components and 60+ one-phase AC components
- Three-phase AC with multiple representations, in total 280+ different components

DYMOLA IS A TRADEMARK OF DASSAULT SYSTÈMES