



VAPOR CYCLE LIBRARY



- ▶ The Vapor Cycle Library enables rapid design and simulation of vapor compression cycles for virtual prototyping, component dimensioning, and control system design.

The Vapor Cycle Library is a library for the design of vapor cycle systems including vapor compression cycles for heating or cooling purposes and Organic Rankine cycles for waste-heat recovery. Component interaction and dynamic system behavior can be studied at an early design stage.

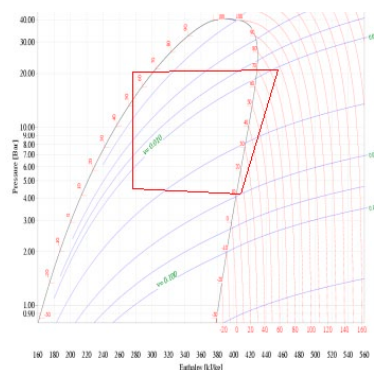
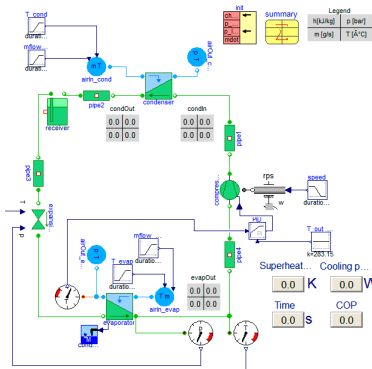
The library can be used as an integrated part of energy management design for both mobile and residential applications. Vapor Cycle Library is fully compatible with the Liquid Cooling

Library and Heat Exchanger Library. Vapor Cycle Library can also integrate with other Modelica libraries that cover mechanical and electrical parts of the system, such as the Battery Library and the Electric Power Library.

Vapor Cycle Library is ideal for system and component development in the automotive or aerospace industry, domestic air-conditioning and heating, industrial refrigeration and waste heat recovery, cryogenic applications, food production, and supermarket refrigeration.

KEY FEATURES

- Easy to use examples for pre-defined vapor compression cycles
- Transient and steady-state simulation
- Flexible composition of user-defined system architectures
- Wide range of working fluids
- Plug and play compatibility with other Modelon libraries (e.g. Heat Exchanger, Liquid Cooling)
- Based on the Modelica Language open standard



Modelon