

## 4.1.5 Addresses of project public website and relevant contact details

Extension of the Modelica FluxTubes Library (Technische Universität Dresden)

Modelica and the Modelica Association

[www.modelica.org](http://www.modelica.org)

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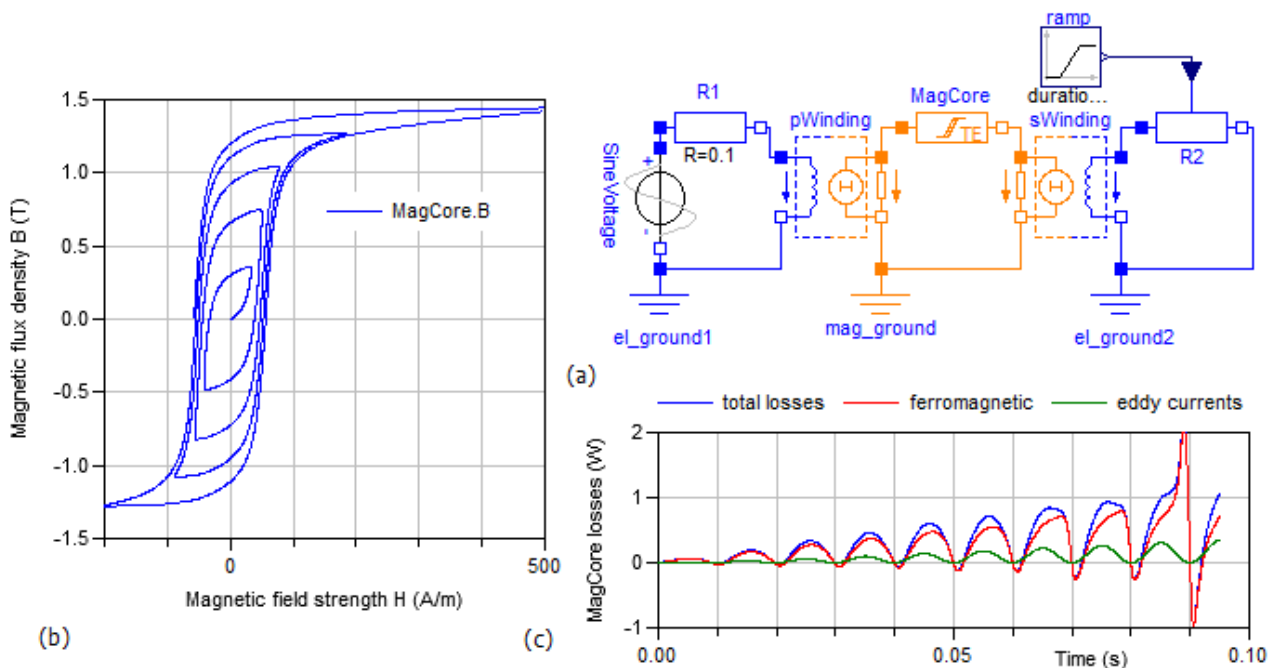
Johannes Ziske<sup>1</sup>

[Johannes.Ziske@tu-dresden.de](mailto:Johannes.Ziske@tu-dresden.de)

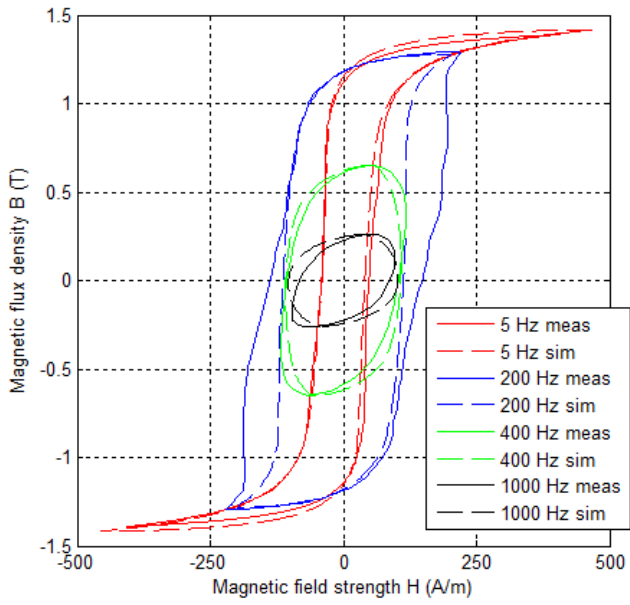
<sup>1</sup> Dresden University of Technology ([www.tu-dresden.de](http://www.tu-dresden.de))

Faculty of Electrical Engineering and Information Technology (<http://www.et.tu-dresden.de/eti>)

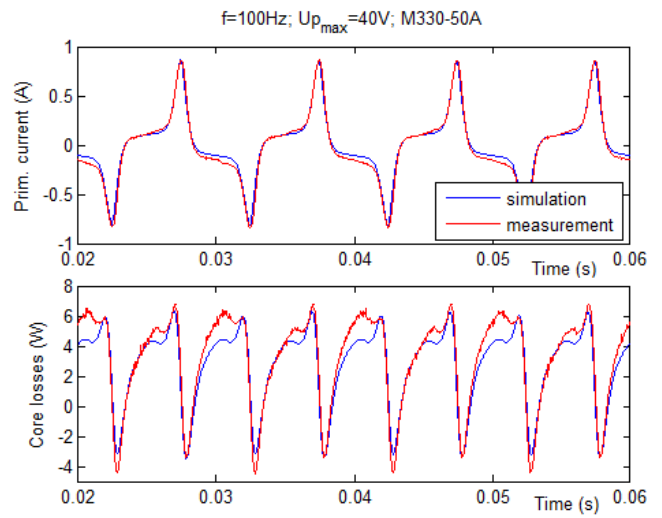
Institute of Electromechanical and Electronic Design ([www.ifte.de](http://www.ifte.de))



Demonstration of the new Modelica.Magnetic.FluxTubes library extension; (a) simple lumped magnetic network model of a transformer with a ramped load; (b) simulated transient course of the magnetic flux density  $B$  vs. the magnetic field strength  $H$  of the magnetic core element MagCore and (c) simulated total core loss split into its ferromagnetic and eddy current component.



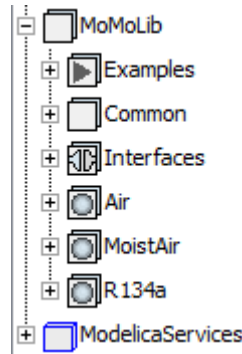
Comparison of measured and simulated hysteresis loops for different frequencies and excitations



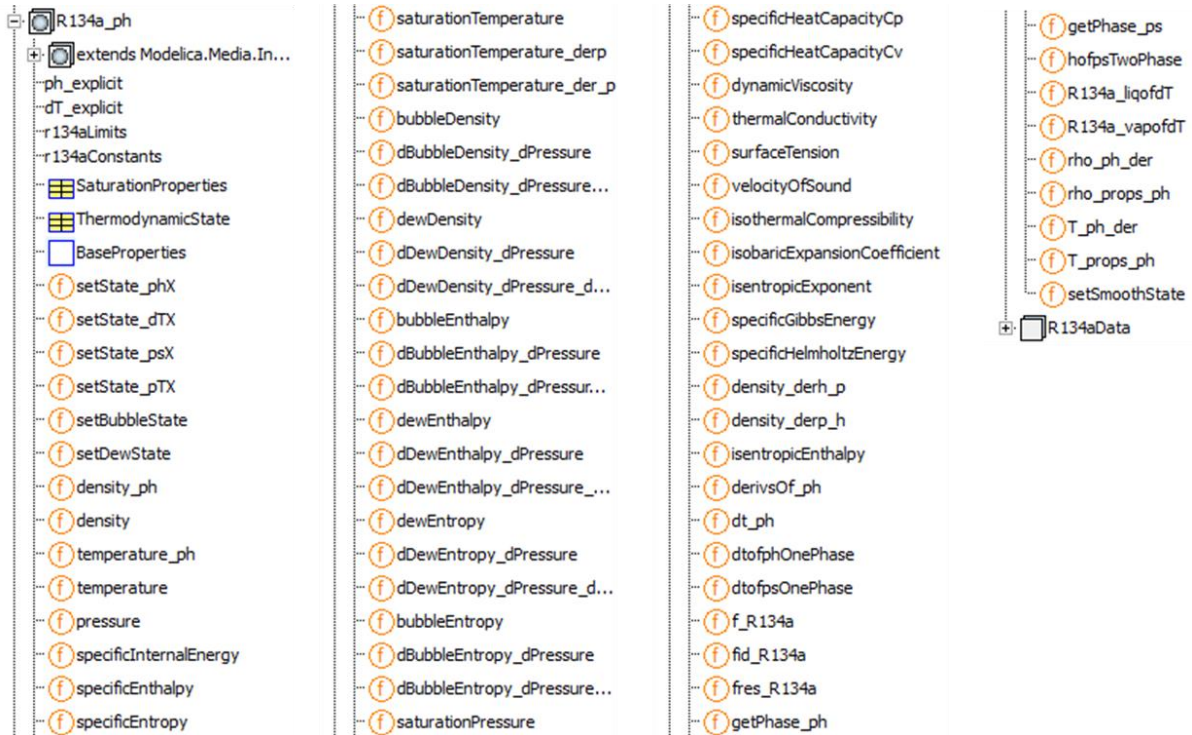
Comparison of the measured and simulated primary current of a transformer

# Modelica Media Library (XRG Simulation GmbH)

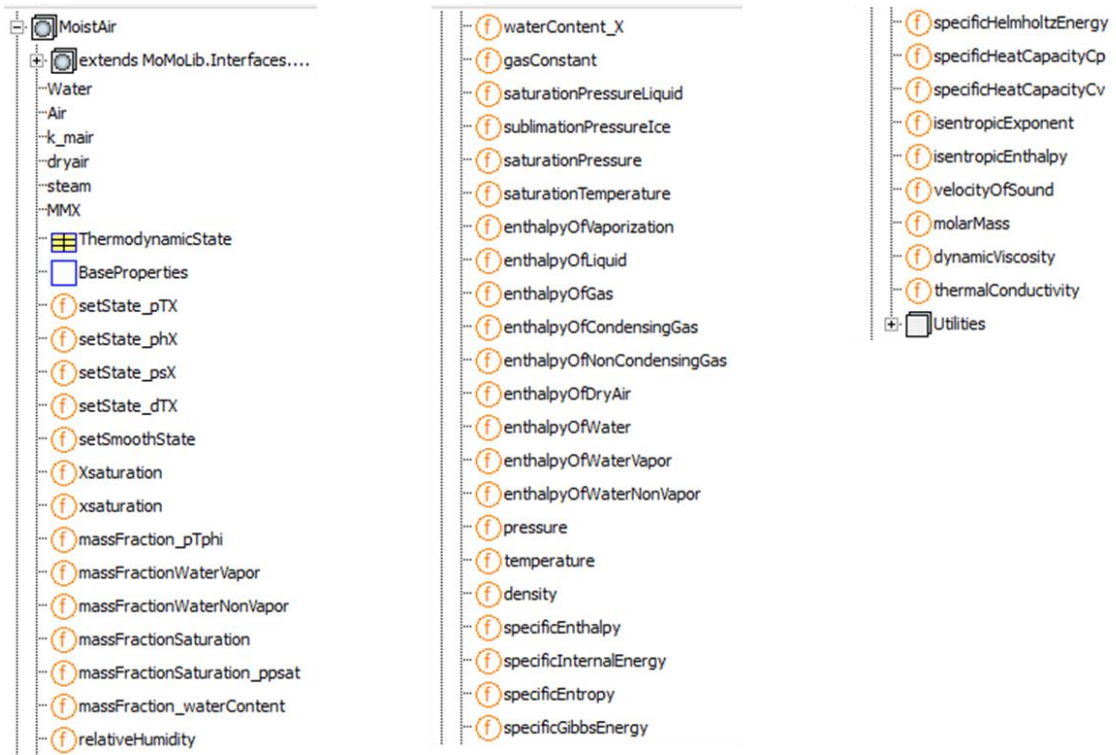
Dr. Stefan Wischhusen  
[wischhusen@xrg-simulation.de](mailto:wischhusen@xrg-simulation.de)



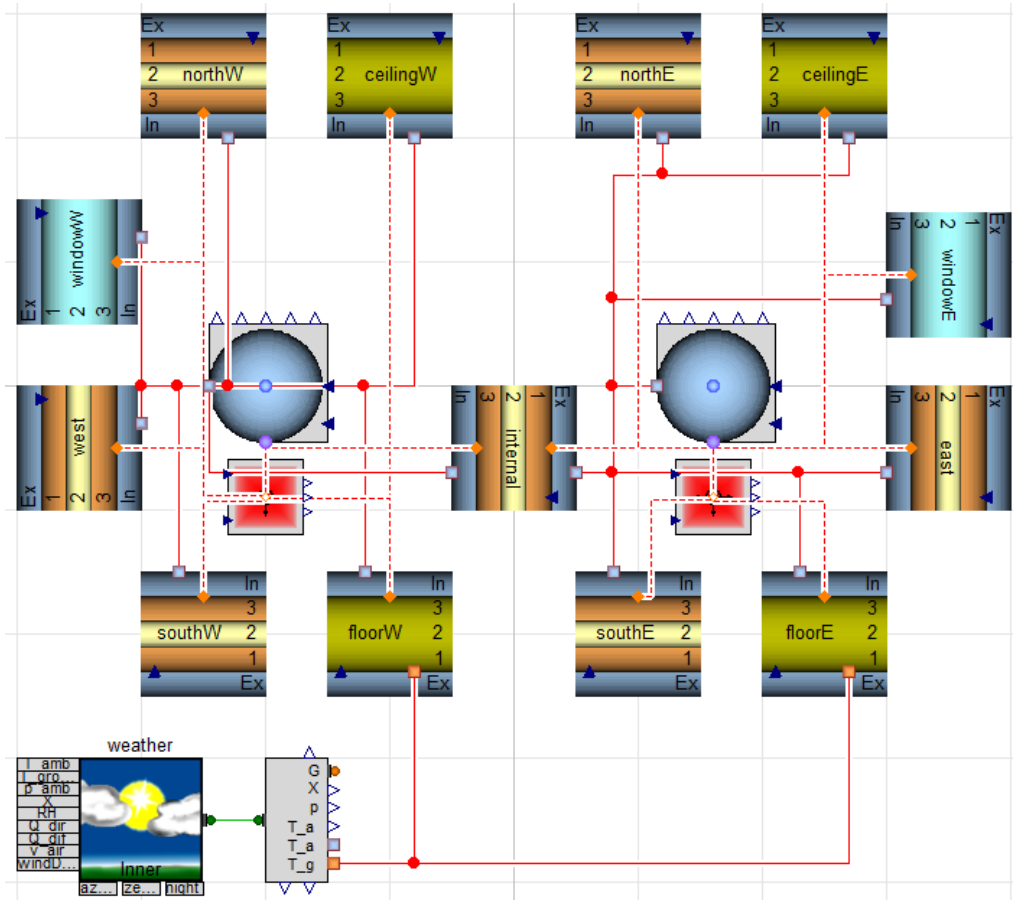
Structure of the MoMoLib media library



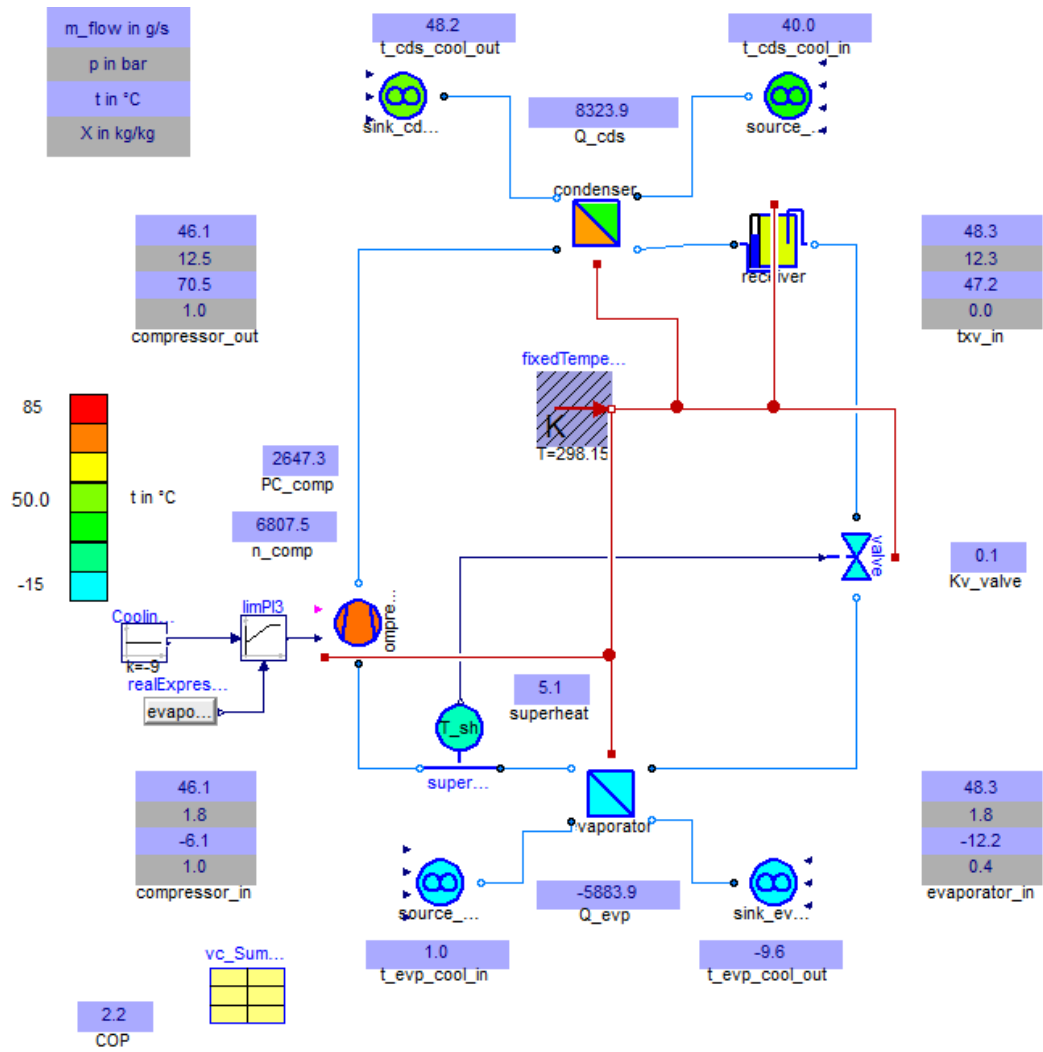
R134a package of the MoMoLib media library



MoistAir package of the MoMoLib media library



Verification model for two air zones using XRG's HumanComfort Library

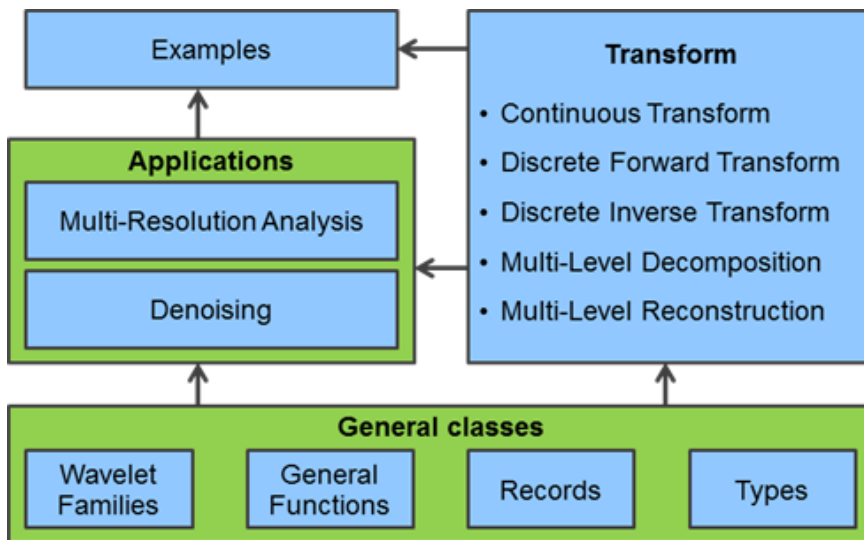


Transient one stage vapour compression cycle used to verify R134a fluid property model

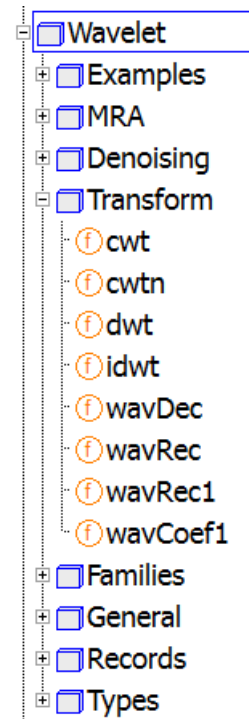
Modelica Wavelet Library (Technische Universität München)

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Structure of the new Modelica Wavelet library



Contents of the new Modelica Wavelet library