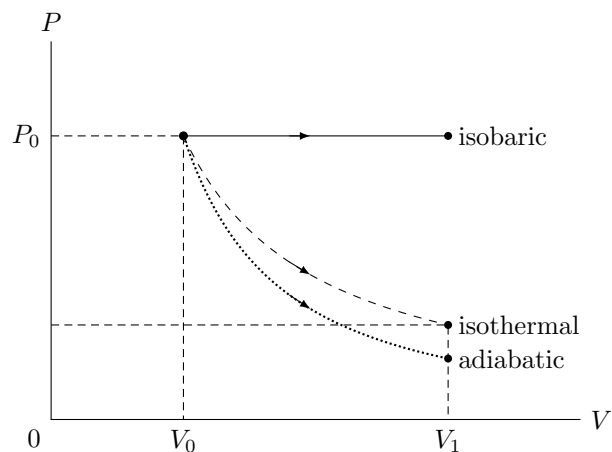
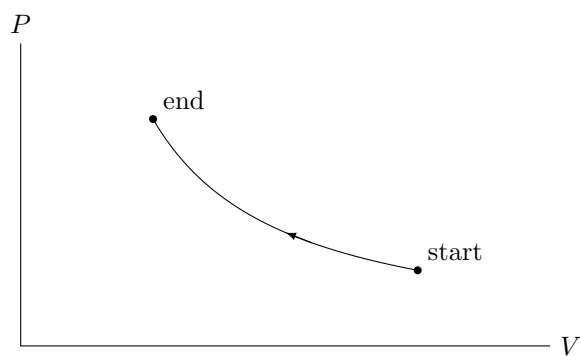


Comparing processes on one pressure–volume frame

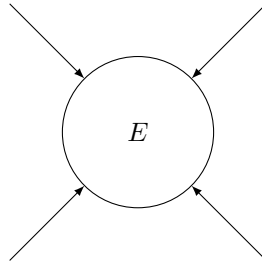


The three processes start at the same state. Solid, dashed and dotted curves remain distinct in black and white. Hiding axes retains every named coordinate and percentage anchor. All overlaid nodes share the same axis dimensions and limits.

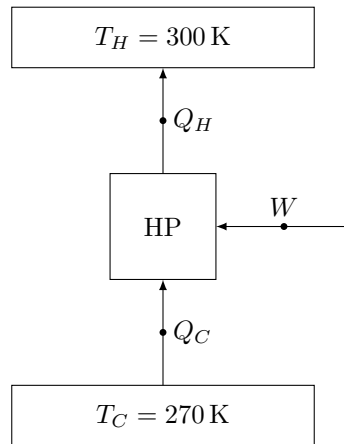


Reversing the volume endpoints draws compression. Process percentages continue to run from the specified start state to the specified end state.

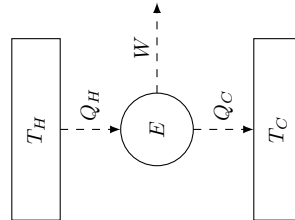
Circular connections and configurable energy diagrams



Automatic connections meet the circle

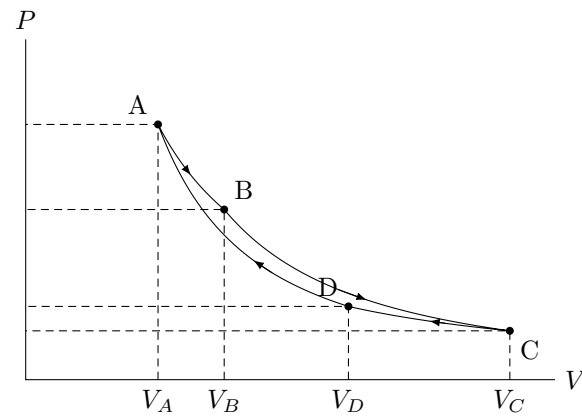


Heat pump: work enters, heat moves from cold to hot

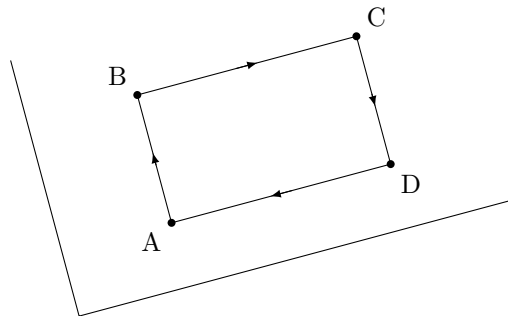


Black dots mark the 50-percent heat and work coordinates of the heat pump. The final engine is rotated and scaled with its nodes, connections and labels. The dashed arrows demonstrate document-level style customization.

Cycle states and projections



The cycle is derived from an absolute-temperature ratio of 0.7, a hot isothermal expansion ratio of 1.5, and $\gamma = 1.4$. Each state has independent pressure and volume projection anchors. All branches join at the same four physical states.



Rotated rectangular cycle: geometry, states and percentage branch anchors rotate together. Text and axis annotations remain under the document author's control.