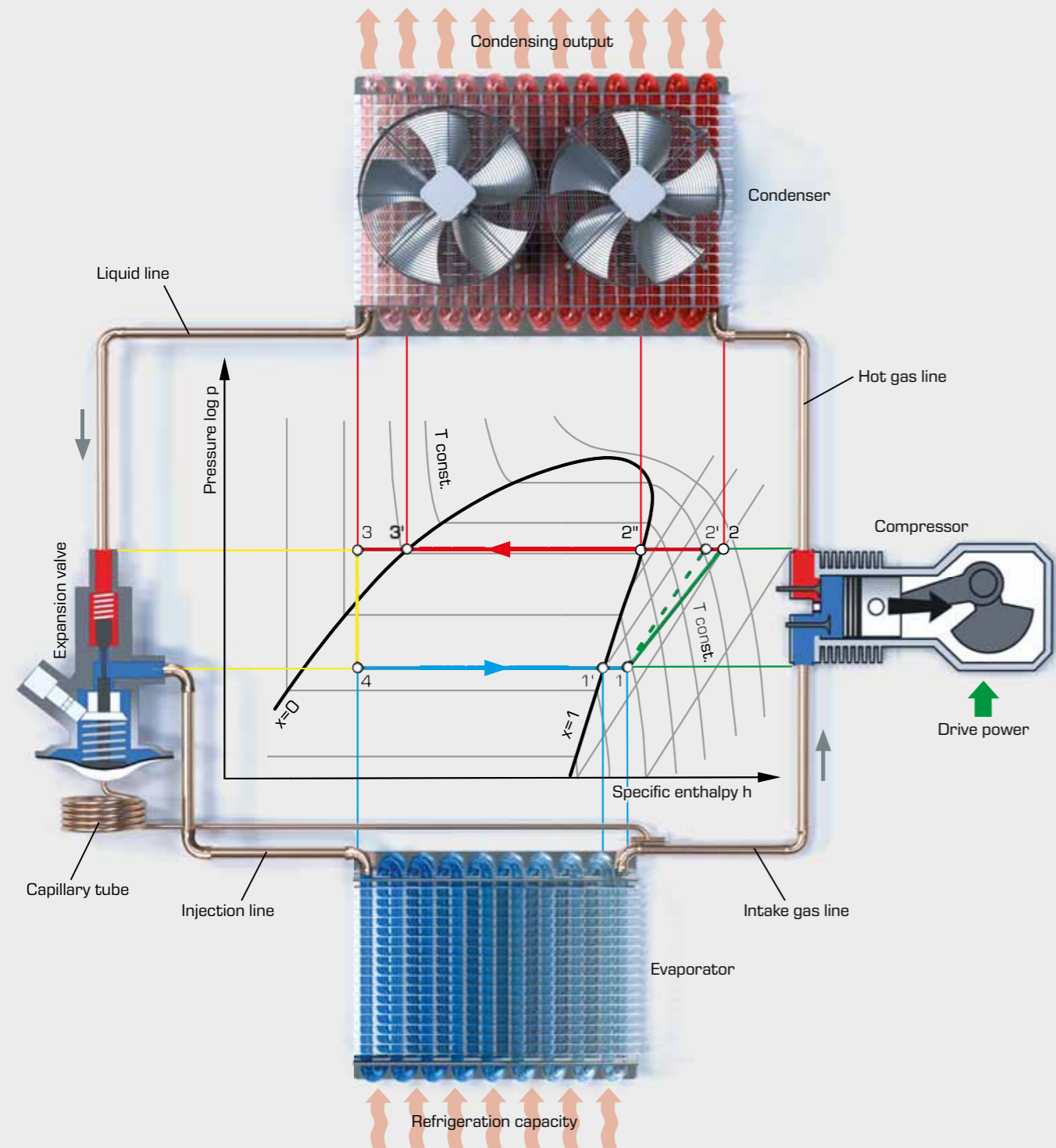


Components of refrigeration

Components in the refrigerant circuit



1 – 2 polytropic compression to the condensing pressure (for comparison 1 – 2' isentropic compression)	2 – 2'' isobaric cooling, deheating of the superheated vapour	2'' – 3' isobaric condensation	3' – 3 isobaric cooling, supercooling of the liquid	3 – 4 isenthalpic expansion to the evaporation pressure	4 – 1' isobaric evaporation	1' – 1 isobaric heating, superheating of the vapour
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Experimental units from GUNT show the function of components in the refrigerant circuit and their interaction with each other. Different types of main components such as compressors, evaporators and condensers, as well as primary and secondary controllers are investigated and typical characteristic variables are determined. The functioning of tubes conveying lubricant as well as gaseous and liquid refrigerant is also investigated.

ET 180
Pressure switches in refrigeration



ET 460
Oil return in refrigeration systems



ET 432
Behaviour of a piston compressor



Engineering animations such as **cutaway models** are ideally suited for representing processes and functions. GUNT uses up-to-date original parts for its cutaway models. Movement and switching functions are maintained. The cuts are made in such a way that the design details are clearly visible. The scope of delivery includes a short description and a sectional drawing. This allows the didactic use of the models to be extended to exercises on engineering drawing.

The larger models are clearly mounted on a base plate. Two handles make them easier to transport.

ET 499.01
Cutaway model: hermetic refrigerant compressor



ET 499.03
Cutaway model: open refrigerant compressor, 2-cylinder



ET 499.18
Cutaway model: thermostatic expansion valve



Assembly exercises, troubleshooting and maintenance provide students with a particularly high level of real-world relevance and support them with an overall didactic concept in learning manual work on refrigerating plants. This involves the planning, implementation and checking of processes.

ET 192
Replacement of refrigeration components



ET 150.01
Refrigerant filling and evacuation equipment

