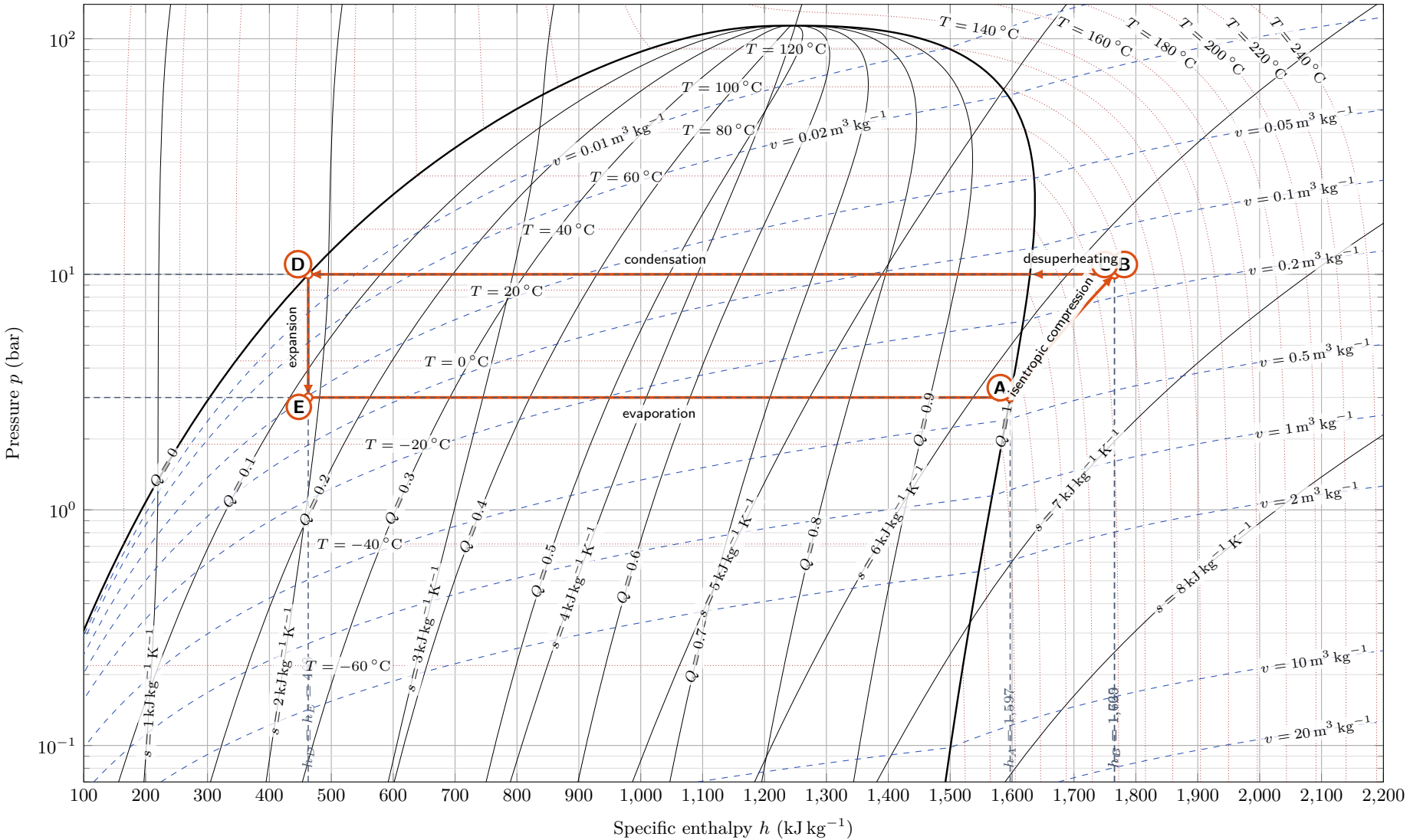

R717 pressure–enthalpy diagram
Pressure p (bar)
Specific enthalpy h (kJ kg^{-1})
10^{2}
10^{1}
10^{0}
10^{-1}
100 200 300 400 500 600 700 800 900 1,000 1,100 1,200 1,300 1,400 1,500 1,600 1,700 1,800 1,900 2,000 2,100 2,200
A
B
C
D
E
isentropic compression
desuperheating
condensation
expansion
evaporation
$T = 140\,^{\circ}\mathrm{C}$
$T = 160\,^{\circ}\mathrm{C}$
$T = 180\,^{\circ}\mathrm{C}$
$T = 200\,^{\circ}\mathrm{C}$
$T = 220\,^{\circ}\mathrm{C}$
$T = 240\,^{\circ}\mathrm{C}$
$T = 120\,^{\circ}\mathrm{C}$
$T = 100\,^{\circ}\mathrm{C}$
$T = 80\,^{\circ}\mathrm{C}$
$T = 60\,^{\circ}\mathrm{C}$
$T = 40\,^{\circ}\mathrm{C}$
$T = 20\,^{\circ}\mathrm{C}$
$T = 0\,^{\circ}\mathrm{C}$
$T = -20\,^{\circ}\mathrm{C}$
$T = -40\,^{\circ}\mathrm{C}$
$T = -60\,^{\circ}\mathrm{C}$
$v = 0.01\,\mathrm{m^3\,kg^{-1}}$
$v = 0.02\,\mathrm{m^3\,kg^{-1}}$
$v = 0.05\,\mathrm{m^3\,kg^{-1}}$
$v = 0.1\,\mathrm{m^3\,kg^{-1}}$
$v = 0.2\,\mathrm{m^3\,kg^{-1}}$
$v = 0.5\,\mathrm{m^3\,kg^{-1}}$
$v = 1\,\mathrm{m^3\,kg^{-1}}$
$v = 2\,\mathrm{m^3\,kg^{-1}}$
$v = 10\,\mathrm{m^3\,kg^{-1}}$
$v = 20\,\mathrm{m^3\,kg^{-1}}$
$Q = 0$
$Q = 0.1$
$Q = 0.2$
$Q = 0.3$
$Q = 0.4$
$Q = 0.5$
$Q = 0.6$
$Q = 0.7$
$Q = 0.8$
$Q = 0.9$
$Q = 1$
$s = 1\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 2\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 3\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 4\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 5\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 6\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 7\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$s = 8\,\mathrm{kJ\,kg^{-1}\,K^{-1}}$
$h_D = 467$
$h_A = 1,597$
$h_B = 1,668$