



Single-stage process

Evaporator

Refrigerating cap. : 3.50 kW
 Temperature : -15.00 °C
 Superheating : 5.00 K
 Pressure drop : 0.00 bar

Condenser

Temperature : 40.00 °C
 Subcooling : 2.00 K
 Pressure drop : 0.00 bar

Compressor

Isentr. efficiency : 0.590

Suction line

Superheat : 0.00 K
 Pressure drop : 0.00 bar

Discharge line

Temperature loss : 0.00 K
 Pressure drop : 0.00 bar

Point	p bar	t °C	v dm ³ /kg	h kJ/kg	s kJ/(kgK)	x --
1	3.61	-10.00	55.84	362.52	1.6331	
2s	18.15	51.46	11.12	395.66	1.6331	
2	18.15	70.39	12.80	418.69	1.7021	
3	18.15	70.39	12.80	418.69	1.7021	
3'	18.15	40.00	9.86	380.16	1.5845	
3"4'm	18.15	39.83	5.45	319.67	1.3915	
4'	18.15	39.66	1.03	259.18	1.1984	
4	18.15	37.66	1.02	255.90	1.1878	
5	3.61	-15.33	23.83	255.90	1.2204	0.430
56"m	3.61	-15.17	39.05	306.96	1.4181	
6"	3.61	-15.00	54.27	358.01	1.6158	
6	3.61	-10.00	55.84	362.52	1.6331	

Power

Condenser : 5.34 kW
 Compressor : 1.84 kW

Suction line : 0.000 kW
 Discharge line : 0.000 kW

Pressure ratio : 5.03
 Pressure difference : 14.54 bar
 Mass flow : 32.826 g/s
 Volume flow (Suction line) : 6.60 m³/h
 Volum. capacity : 1910 kJ/m³
 COP : 1.90