Example 3.2

Result

Diagram for Ex.3.2
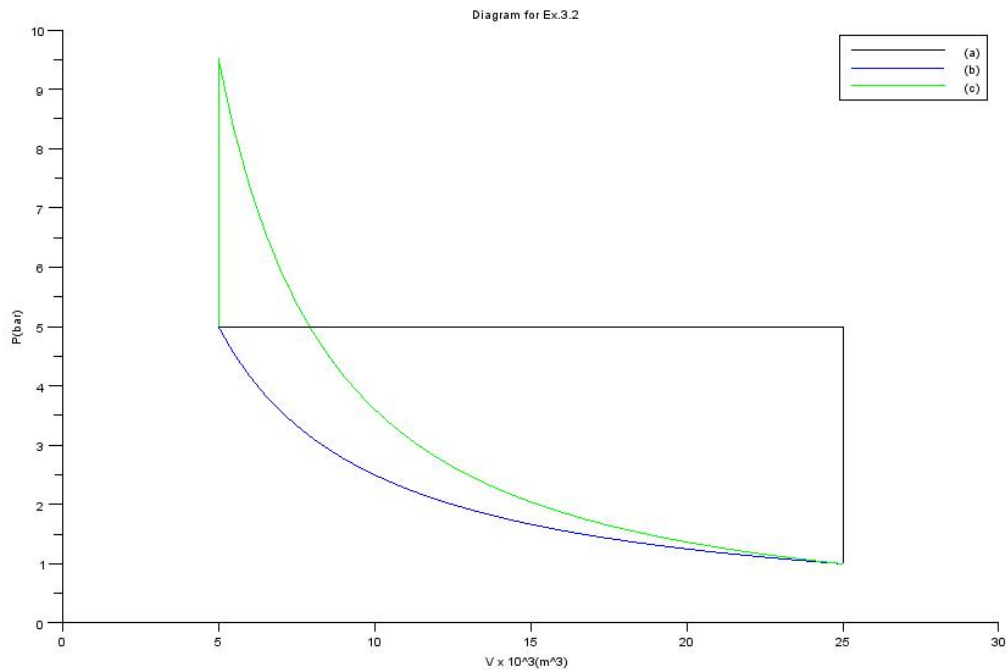
Figure 3.2 PV Diagram Process (a)

(a) Heating at constant volume Followed by cooling at constant Pressure
work done by heating at const vol followed by const Pressure

   9915.

J

Heat Transferred Q =

 - 9915.

J

change in Internal Energy and enthalpy = 0

(b) Isothermal compression

work done by Isothermal compression

3990.

J

Heat Transferred Q =

- 3990.

J

change in Internal Energy and enthalpy = 0

(c) Adiabatic compression followed by cooling at constant Volume

work done by Adiabatic compression Followed by Cooling at const Vol

5600.

J

Heat Transferred Q =

- 5600.

J

change in Internal Energy and enthalpy = 0