## **Problems**

- A consumer wants to verify if the window ac unit purchased is operating as efficiently as advertised. The unit is supposed to have an EER of 7.8 and a cooling capacity of 9500 Btu/hr.(at design conditions). A portable watt-meter is clamped onto the outlet cord serving the unit and is reads 1560 watts. Does the unit have the efficiency as claimed?
- The COP of a refrigeration system is 3.5. The cooling capacity is 20.7 Tons. What is the expected power consumption in KW.
- What is the EER of the unit in question 2.2 above.
- A refrigeration machine with a cooling capacity of 34 tons of refrigeration has a COP of 3.6. What is the power input to the compressor?