

SIMPLE COMPRESSION REFRIGERATION CIRCUIT

RT 053

Description:

The basis of the refrigeration cycles is that after the refrigerant passes through the expansion valve, its temperature and pressure will drop, and at low pressure and temperature it starts to evaporate. Evaporation continues along the evaporator and the amount of the liquid decreases and the amount of steam grows so that the refrigerant will be completely evaporated while exiting the evaporator. The heat which is needed to evaporate the refrigerant is taken from the surrounding of the evaporator. The steam that exits the evaporator enters the compressor and through compression, its pressure and temperature will increase, and then enters the condenser. There, through heat loss, which is facilitated by letting air flowing across it, the temperature of the refrigerant will decrease to the temperature of the environment and it starts to distillate. Exiting the condenser, the saturated refrigerant gets behind the expansion valve under very high pressure, and the refrigeration cycle is repeated. With the user friendly setup of the device the users can easily observe the refrigeration cycle and measure its COP.

Specifications:

- Compressor
- Air-Cooled Condenser
- Evaporator
- The expansion valve
- Capillary tubes
- Dryer
- Pressure gauges
- Sensors for measuring temperatures
- Electrical control panel with switches and displays
- carbon steel structure
- Installation and training video included
- Instructions manual included
- 10-year warranty

Note: Direct contact with the sales department is required to confirm the last updated technical specifications and pictures.

Applications:

1. Familiarizing with the main components of the compressed refrigeration cycle
2. Obtaining the COP of the cycle
3. Studying the effective parameters on the COP
4. Studying and comparing the actual cycle with the ideal one

Required For Operation:

- 220 v Single Phase Electricity
- Desirable Temperature (°C): 10-30
- Relative Humidity: 15% - 80%

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Dimensions (L*W*H) mm:1400×700×700

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