

**Product Name :**  
Bench Top Mechanical Heat Pump Trainer

**Product Code :**  
ENGLABINGCAG270003



**Description :**

Bench Top Mechanical Heat Pump Trainer

**Technical Specification :**

**FEATURES:**

- Design and operation of an air-to-water heat pump
- Representation of the thermodynamic cycle in the log p-h diagram
- Energy balances
- Determination of important characteristic variables
- Compressor pressure ratio
- Real coefficient of performance
- Dependence of the real coefficient of performance on the temperature difference (air-to-water)
- Operating behavior under load
- Ideal coefficient of performance

**SPECIFICATION:**

Compressor :  
Capacity: 372W at 7,2/32°C

Coaxial coil heat exchanger (condenser) :  
Refrigerant content: 0,55L  
Water content: 0,3L

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Finned tube evaporator :  
Transfer area: approx. 0,175m<sup>2</sup>

Pump :  
Max. Flow rate: 1,9m<sup>3</sup>/h  
Max. Head: 1,4m

Hot water tank volume: approx. 4,5L

Refrigerant: R134a/22/A  
Filling volume: 1kg  
CO<sub>2</sub>-equivalent: 0,6t

Measuring ranges :  
Pressure: 2x -1...15bar  
Temperature: 4x 0...100°C, 2x -100...100°C  
Power: 0...6000W  
Flow rate: 0...108L/h (water)  
Flow rate: 10...160L/h (cooling water)

Required for operation :  
230V, 50Hz, 1 phase  
230V, 60Hz, 1 phase



**Engineering Lab Equipment India**