

HEAT PUMP TRAINER

MODEL: RAC06



FEATURES

- Compact, comprehensive, sturdy design
- Smooth and silent operation
- Total instrumentation for complete heat balance

DESCRIPTION

An invaluable aid in the effective understanding of the refrigeration process. The trainer is designed for the study of thermodynamics of vapour compression refrigeration cycle and heat pump by way of demonstration and experimentation. It has a facility to measure various parameters for experimentation.

INSTRUCTION MANUAL

Self-explanatory operating manuals are provided with each system. Detailed theory as well as practical exercises is also included in the manual.

LIST OF EXPERIMENT

1. Study of vapour compression refrigeration / Heat pump cycle
2. To determine the heat rejection ratio^{NOTE1}
3. To determine the cooling energy ratio
4. To determine heating efficiency
5. To determine refrigeration efficiency
6. To verify second law of thermodynamics.

NOTE1: Possible only if BOTH condenser and evaporator used are water cooled type

COMPONENTS

1. Compressor
2. Condenser
3. Expansion Device
4. Temperature Indicator with sensors
5. Evaporator
6. Test chamber*
7. Rotameter for refrigerant flow measurement
8. Pressure gauges
9. HP/LP Cut-out
10. Rotameter to measure water flow**
11. Pump for water**
12. Sump tank for water**

** Supplied in case air-cooled condenser/evaporator used, ** Supplied in case water-cooled condenser/evaporator used*

OPTIONAL ADDITIONAL

1. Computerised Heat Pump Trainer
An advanced personal computer based model. This system has facility of data acquisition, plotting on-line and historical trends. It carries out complete calculations to determine performance. A comprehensive HELP menu makes the system user friendly.
2. Heat Pump fault trainer.

Note: Details of attachments can be made available on request.

SERVICES REQUIRED

- Water supply and drainage arrangement
- Electric supply

NiYo Engineers

Unit 1B, Devgiri Industrial Estate, S. No. 17/1B Plot No. 14, Kothrud, Pune 411 029
INDIA, Tel-91 20 2546 5004, 2546 8051, 2546 7296 Telefax - 91 20 2546 8051
e-mail- sales@niyoindia.com Web: www.niyoindia.com



(1) Since research and development is an on-going activity, the specifications mentioned herein are subject to change without notice
(2) Photographs are indicative only