

## REFRIGERATION TRAINER

MODEL: RAC01



### FEATURES

- Compact, comprehensive, sturdy design
- Smooth and silent operation
- Total instrumentation for complete heat balance
- Direct flow measurement of refrigerant
- Study of refrigeration effect/process

### 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 by way of demonstration and experimentation.

It has a facility to measure various parameters for experimentation. Optionally, a Fault Trainer can also be provided as an additional teaching aid.

### 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

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1. To study the actual Refrigeration effect against varying load.
2. Determination of Coefficient of performance based on actual cycle.
3. Determination of cycle efficiency.

#### COMPONENTS

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1. Compressor
2. Condenser
3. Expansion Device
4. Temperature Indicator with sensors
5. Evaporator coil placed in a water tank
6. Electric heater to load the system
7. Pressure gauges
8. Rotameter to measure refrigerant flow
9. Water Stirrer
10. Energymeter
11. HP LP Cut out

#### OPTIONAL ADDITIONAL

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1. Computerised refrigeration trainer
2. 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.
3. Refrigeration components cut away model board.

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

#### SERVICES REQUIRED

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1. Water supply and drainage arrangement
2. Electric supply

#### DIMENSIONS AND WEIGHT

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Less than 0.3 T

- Weight: 110 Kg (Without packing)
- Dimensions: 800 mm X 600 mm X 1850 mm (H)

More than 1T

- Weight: 150 Kg (Without packing)
- Dimensions: 1100 mm X 900 mm X 1850 mm (H)

#### 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](mailto:sales@niyoindia.com) Web: [www.niyoindia.com](http://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