



Visual Refrigeration Training Unit 801



- Shows Clearly the Basic Principles of the Vapour Compression Refrigeration Cycle***
- Introduces the Concepts of Change of State, Saturated Liquid, Saturated Vapour and Superheated Vapour***
- Optional Student Tool Kit, Test and Service Equipment and Maintenance and Student Practice Package.***
- Instruction Manual Contains Course Notes, Instruction Notes and Student Example Worksheets***
- Demonstrates Common Faults and Effects on the System***
- Two year Warranty.***



Introduction

Students who are new to refrigeration may find some important concepts difficult to understand, for example,

- Latent heat
- Pressure/temperature relationship
- A liquid can boil at sub-zero temperatures
- Saturation temperature
- Superheat
- Sub-cooling

With its transparent evaporator, the Model 801 is designed to promote a clear understanding of these concepts, and to support the teaching of:

- The basic principles of heat transfer
- The Vapour compression refrigeration cycle
- Function and application of different flow controls

Description

Model 801 is one of a range of trainers designed to provide practical training in the fields of Refrigeration and Air Conditioning.

Each trainer has been carefully designed to provide instruction in specific topic areas that trainees are required to study as part of most Refrigeration and Air Conditioning courses.

The unit is mounted on a steel frame with stainless steel panels and comprises an open type compressor with air cooled condenser and clear plastic evaporator.

A variety of different flow controls can be selected and the operation with each type of control studied, including liquid return to the compressor.

All the flow controls and the high and low pressure switches are adjustable by the student to enable basic studies in the control of vapour compression refrigeration.

A standard Student Tool Kit, Test and Service Equipment Package and Maintenance and Student Practice Package are available as optional items.

Further details available on request.

Student Tool Kit



Test & Service Equipment





Specification

DETAILED

The unit is mounted on a steel framework with stainless steel base and back panels.

Air-cooled condensing unit with open type twin cylinder reciprocating compressor.

Transparent plastic evaporator, clearly showing change of state of refrigerant from liquid to vapour phase

Refrigerant flow control options, selected by use of hand wheel valves as follows:

1. Automatic Expansion Valve
2. Thermostatic Expansion Valve, Internally equalised.
3. Capillary with Separate Filter Drier

Liquid/suction heat exchanger

Liquid line filter drier and sight glass

HP/LP switches

Compound and pressure gauges

Suction and discharge service valves fitted

Liquid line hand wheel valve fitted for easy manual pump down of system

Refrigerant R134a

An electrical control box is mounted on the back panel and includes indicators/warning lamp, on/off contactor and overload, as well as residual current device for protection against earth leakage.

Operating Manual

A comprehensive operating manual includes:

- Notes on theory and principles
- Instructor's guide notes
- Student test papers and sample answers
- Electrical wiring diagram.

Dimensions

Height 163 cm Depth 64 cm
Width 134 cm Weight 89 kg

Services Required

Electrical

Either: A: 2.5Amp.220-240 Volts, Single Phase, 50Hz (With earth/ground).

OR

B: 5Amp.110-120 Volts, Single Phase, 60Hz (With earth/ground).

Optional Equipment

- Student Tool Kit
- Test And Service Equipment
- Maintenance And Student Package

Ordering Information

Order as: Visual Refrigeration Training Unit 801

Electrical Specification

Either: A: 220-240 Volts, Single Phase 50Hz (With earth/ground).

OR

B: 110-120 Volts, Single Phase 60Hz (With earth/ground).

Language

Either: English, Spanish or French

Shipping Specification (Approx.)

Net Weight: 89 kg
Gross Weight: 138 kg.
Packing Case Dimensions: 143 x 72 x 126 cm
Packing Case Volume: 1.297m³

Also Available on Request

- Further detailed specification
- Additional copies of instruction manual
- Recommended list of spares for 5 years operation

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