Commercial Refrigeration Training Unit 802

- ***Constructed from the Components actually required to install a 2.50 Cubic meter (75 Cubic Feet) Chill room***
- ***Shows how the Basic Principles of the Vapour Compression Cycle are applied in Practical Refrigeration***
- ***Optional Student Tool Kit, Test and Service Equipment and Maintenance and Student Practice Package***
- ***Complete with Comprehensive Installation, Operation and Maintenance Manual***
- ***Demonstrates Common Faults and Effects on the System***
- ***Two year Warranty.***

Introduction

The 802 unit is constructed from components that are required to install a 2.54 cubic metre (75 cubic feet) chill room operating at. -1/+2ºC (30/25ºF.) (actual size 0.166m^3).

This unit quickly enables the student engineer to learn how the basic principles of the Vapour-Compression Cycle, are applied in practical refrigeration, and provides
valuable 'Hands-On' experience in:

- Fault diagnosis and correction
- Refrigerant recovery and recycling
- Changing components
- Evacuation and Charging^3

All exercises with the 802 relate directly to installations that students will encounter later in their work as a service and installation engineers.

Description

Model 802 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 made up of stainless steel panels and comprises a hermetic type compressor, air cooled condenser and a forced air evaporator inside an insulated cabinet.

The layout of the system components is exactly the same as fitted to a full size chill room and the unit is designed as an introduction to "real" refrigeration systems. The training objectives of the 802 unit link directly to the Basic Installation Training Package 803 for a comprehensive range of practical skills training. The instructor can introduce "faults" such as removing part of the system charge, setting high or low pressure switches to unusual levels or overcharging the unit. This assumes suitable charging and recovery equipment is available locally.

A comparison between the student built 803 and 802 clearly establishes whether installation skill and competences are sufficiently developed or if further training and practice are required.
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

802 Maintenance & Student Practice Package

Specification

DETAILED

The unit is mounted on a steel frame and with a stainless steel base and back panel.
The unit comprises:
Air cooled condensing unit with high back pressure, high starting torque hermetic compressor
Complete with:
Suction and Discharge Service Valves
Gauge Manifold Connection points.
Built in Motor Protector

Forced air, blow through type evaporator, with 15-watt fan motor. Powder coated galvanised sheet steel casing with removable front panel. Evaporator coil constructed from internally grooved copper tube, and fitted with aluminium fins at 5 FPI.

Open-able, Insulated hood with on/off heat load.
Internally equalised Thermostatic Expansion Valve.
Liquid Line Filter Drier.
Heat Exchanger.
High Pressure Switch,
Low Pressure Switch.
High Pressure gauge.
Compound gauge.

An electrical control box is mounted on the panel and includes indicators/warning lamps on/off and heat load contactors 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
- Guide notes.
- Suggested student test procedures

Experimental Procedures

1. Examination of the system cycle and components.
2. Heat leakage demonstration No 1
3. Heat Leakage Demonstration No 2
4. Product heat load
5. The use of service gauges
6. Method of adjusting Low Pressure Switch.
7. Excessive Discharge Pressure
8. Transfer of Refrigerant to the Liquid Receiver
9. Charging

Dimensions

Height: 165 cm
Depth: 64 cm
Width: 134 cm
Weight: 101 kg

Services Required

Electrical either:
A: 13 Amp 220-240 Volts, Single Phase, 50Hz (With earth/ground).
OR
B: 26Amp 110-120 Volts, Single Phase, 60Hz (With earth/ground).

Optional Equipment

- Student Tool Kit
- Test and Service Equipment
- Maintenance and Student Practice Package

Ordering Information

Order as: Commercial Refrigeration Training Unit 802

Electrical Specification

Either: **A**: 220-240 Volts, Single Phase 50Hz (With earth/ground).
B: 110-120 Volts, Single Phase, 60Hz (With earth/ground).

Language

Either: English, Spanish or French.

Shipping Specifications

Net Weight: 101 kg.
Approximate Gross Weight: 151 kg.
Packing Case Dimensions: 143 x 72 x 126 cm
Packing Case Volume: 1.297m^3

Also Available on Request

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

P.A.HILTON Ltd.

Horsebridge Mill, King's Somborne,
Stockbridge, Hampshire, SO20 6PX, England.

Telephone: National (01794) 388382
International +44 1794 388382

Fax: National (01794) 388129
International +44 1794 388129
E-mail: **sales@p-a-hilton.co.uk**
Website: www.p-a-hilton.co.uk

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