Advanced Training Unit 805



The policy of P.A.Hilton Ltd is one of continual improvement. The visual appearance of this unit may be changed without notice.

- Fully Operational small scale cold room
- Multiple circuit, incorporating secondary controls
- Push button selection of built in faults
- Push button selection of Refrigeration circuit
- Optional Student Tool Kit, Test and Service Equipment and Maintenance and Student Practice Package
- Two year Warranty.

P.A.Hilton Ltd



Introduction

The Advanced Training Unit 805 is a fully operational, small scale coldroom, which enables the student to relate all test results, system faults and adjustments directly to situations encountered in service and maintenance.

It is a multiple circuit unit, incorporating important secondary controls, and is constructed entirely from standard commercial components that will give the student invaluable experience in fault diagnosis, system adjustment and replacement of faulty components.

Components include:

- Electric Defrost System
- Evaporator Pressure Regulation
- Crankcase Protection
- Capacity Regulation
- Variable Coldroom Heat Load

The push-button Switches Enable:

- 1. Selection of simple or more complex refrigeration circuit.
- 2. Comparison of controls.
- 3. A clear demonstration of the correct use of internal and externally equalised thermostatic expansion valves.
- 4. Selection of built in faults.

Description

Model 805 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 a hermetic type compressor with air cooled condenser and forced air evaporator with electric defrost inside an insulated cabinet with hinged lid.

A variety of different refrigerant controls can be selected and the operation with each type of control studied.

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

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



805 Maintenance & Student Practice Package



Page 2 of 3 Version 5



Specification

DETAILED

The unit is mounted on a steel framework, with stainless steel base and back panels and incorporates:-

- Hermetic condensing unit, with fan cooled condenser and receiver.
- Forced-air evaporator, with electric defrost, mounted in insulated box with hinged lid.
- Evaporator heat load variable
- Pressure gauge.
- 2 Compound gauges.
- High-pressure control and low pressure control
- Thermostat.
- Oil separator.
- Liquid-vapour heat exchanger
- 2 Liquid line driers
- 3 Thermostatic expansion valves.
- Evaporator pressure regulator.
- Crankcase pressure regulator.
- Capacity Regulator.
- 7 Solenoid valves.
- 3 Hand wheel valves.
- Refrigerant R134a.
- 6 Sight glasses

Electrical

ON/OFF switch with indicator light.
7 Push button switches to control refrigerant flow path and to select in-built faults.

Separate push-button to switch:

- Condenser Fan Motor
- Evaporator fan motor
- Coldroom heat load

Overload protector

Contactor

Earth leakage protector

De-frost timer

Operating Manual

A comprehensive Installation Operating and Maintenance manual and data sheets includes:

- Notes on theory and principles
- Instructor/student guide notes
- Electrical wiring diagram.

Dimensions

Height: 163 cm Depth: 64 cm Width: 134 cm Weight: 164kg

Services Required

Electrical

Either: **A**: 15Amp.220-240 Volts, Single Phase, 50Hz (With earth/ground).

OR

B: 30Amp.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: Advanced Training Unit 805

Electrical Specification

Either: A:220-240 Volts, Single Phase, 50Hz

(With earth/ground).

<u>OR</u>

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

Language

Either: English, Spanish or French

Shipping Specification (Approx)

Net Weight: 164 kg Gross Weight: 218 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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