Reverse Cycle Refrigeration and Air Conditioning Training Unit
808

- Air Cooled and Water Cooled Condenser
- Forced Air and Static Evaporator with dual temperature operation
- Optional Student Tool Kit, Test and Service Equipment and Maintenance and Student Practice Package.
- Comprehensive Instruction Manual Contains Course Notes, Instruction Notes and Student Example Worksheets
- Demonstrates Common Faults and Effects on the System
- Two year Warranty
Introduction
The 808 is designed to augment the student engineer’s existing knowledge of the theory and practice of refrigeration and lead him to an understanding of a more complex system.

Some features of the 808:
- Reverse Cycle Operation
- Air Cooled and Water Cooled Condensers
- Forced Air and Static Evaporators
- Dual Temperature Operation
- Compact and self contained, the 808 needs only a water supply, drain and a single phase electrical supply.

Description
Model 808 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 of a hermetic compressor with air and water cooled condensers.

The static and forced air evaporator are fitted with the necessary controls to allow dual temperature operation.

Reverse cycle operation allows the study of the application of the vapour compression to air conditioning and heat pump systems.

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.
**Specification**

**Detailed**
The unit is mounted in a steel frame with stainless steel base and back panels and incorporates **Hermetic Condensing Unit:**

- Having a high starting torque motor with built-in:
  - Winding protector, air-cooled condenser and liquid receiver
  - Remote Water-cooled Condenser
  - Forced Air Evaporator:
  - Coil block: $\frac{3}{8}”$ O.D. copper tube with aluminium fins.
  - Flow Controls:
  - Automatic expansion valve.
  - Internal equalised thermostatic expansion valve.
  - External equalised thermostatic expansion valve.
  - Selection by handwheel valve.

**Static Evaporator:**
- Coil block as for Forced Air Evaporator.
- Flow Control:
- Capillary tube with separate filter drier.
- Selection by handwheel valve.

**Reverse Cycle Operation:**
- Evaporator pressure regulating valve for dual-temperature operation.
- High pressure switch.
- Low pressure switch.
- Compound Gauge.
- High Pressure Gauge.

- 3 – Sight Glasses.
- 4 – Check Valves to control direction of refrigerant flow.
- 9 Hand valves

An electrical control box is mounted on the back panel and includes indicators/warning lamp, on/off evaporator and condenser fan and reverse cycle 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 115kg

**Services Required**

**Electrical**
Either:  
- A: 13Amp.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 Package

**Ordering Information**
Order as: Reverse Cycle refrigeration Training Unit 808

**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: 115 kg
- Gross Weight: 165 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

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**NOTE:** The policy of P.A.Hilton Ltd is one of continual improvement and we reserve the right to change this specification without notice.