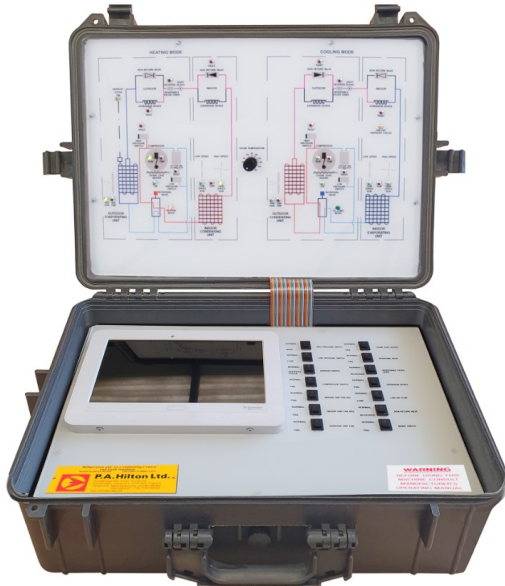




# REFRIGERATION AND AIR CONDITIONING CONTROL AND FAULT SIMULATOR

## 814A



### Features

- Touch Screen Display Panel
- Demonstrates both Cooling and Heating Modes in Normal Operation
- Demonstrates 21 Common Faults and Effects on the System
- 17 Functions and System Components
- Room Temperature and Humidity Potentiometers
- Compact Case - Easy to Store and Carry

### Description

The Refrigeration and Air Conditioning Control and Fault Simulator, Model 814A, enables the study and operation of various components as applied to the refrigeration plant used in air conditioning systems. Both cooling and heating modes (Reverse cycle operation can be studied). Designed for single phase operation the demonstration case is divided into two main boards: - a) Mimic Diagram with room temperature and humidity potentiometers b) Control board with Touch Screen programmable controller and normal Run/Fault switches The Mimic diagram is split into two sections:- 1) Cooling Mode 2) Heating Mode

### Learning capabilities

- The unit enables the user to simulate the temperature control of the room space by switching from Cooling to Heating mode.
- The Heat Pump process is then shown via the mimic diagram in heating mode and in cooling mode
- Various switches have been fitted so that normal run operation is possible with the facility to switch to fault simulations and the implications.
- Wireless touch screen and web page technology are included in the case.
- A full instruction manual is provided with each case.

### Technical Specification

- The following main functions and components are simulated:- Refrigeration/Cooling, Heating/Heat Pump, Compressor, Crankcase Heater, High Pressure Switch, Reversing Valve, Condensing Unit, Non return Valve (outdoor use), Expansion Device (outdoor use), Reversible Filter drier, Sight Glass (Heating), Non Return Valve (indoor use), Expansion Device (indoor use), Evaporator, Low pressure Switch, Suction Line Accumulator, Defrost Facility.
- The following Normal operation can be simulated in Cooling Mode: Normal operation, High Pressure Switch – high pressure fault, Low Pressure Switch – low pressure fault, Compressor - failed, Indoor fan - failed, Outdoor fan - failed, Crankcase Heater - failed, Reversing Valve - failed, Drier - blocked, Expansion device - failed, Air flow – low, Non return Valve – blocked/seized.
- The following Fault conditions can be simulated in Heating Mode: Normal operation, Low Pressure Switch – low pressure fault, Compressor - failed, Indoor fan - failed, Outdoor fan - failed, Crankcase Heater - failed, Reversing Valve - failed, Drier - blocked, Expansion device - failed, Air flow – low, Non return Valve – blocked/seized.

### What's in the Box?

- 1 x Refrigeration and Air Conditioning Control and Fault Simulator unit

### Weights & Dimensions

- Net dimensions: 160mm (H) x 330mm (D) x 470mm (W)
- Net weight: 8 Kg

### Essential Services

- 2.5 Amp. 220-240 Volts, Single Phase, 50Hz (With earth/ground) or
- 5 Amp. 110 -120 Volts, Single Phase, 60Hz (With earth/ground)

### Ordering information

To order this product, please call PA Hilton quoting the following codes:

814A/230 - Refrigeration and Air Conditioning Control and Fault Simulator

814A/115 - Refrigeration and Air Conditioning Control and Fault Simulator

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COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS