

ADVANCED TRAINING UNIT - 10 SYSTEM FAULTS 805



Year 1
study

Features

- 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

Description

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. It 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.

Related Laws/Applications

- Cold room
- System faults
- Service and Maintenance
- Refrigeration
- Air conditioning
- Food industry
- Manufacturing
- Transport
- Distribution

Learning capabilities

- Basic Refrigeration Cycle – Without Heat Exchanger
- Basic Refrigeration Cycle – Without Heat Exchanger
- Visual Demonstration Of The Effect Of The Heat Exchanger
- Heat Loads - Effect Of An Increased Heat Load On Operating Pressures
- Heat Loads – Time To Pull Down To Temperature
- Low Pressure Switch - As A Temperature Controller
- Low Pressure Switch - As A Safety Cut-Out
- High Pressure Switch - As A Safety Cut-Out
- Partially Blocked Condenser
- Internally Equalised Thermostatic Expansion Valve
- Externally Equalised Thermostatic Expansion Valve
- Thermostatic Expansion Valve Fault
- Filter Drier Fault

Technical Specification

- 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 x Compound gauges.
- High-pressure control and low pressure control
- Thermostat.
- Oil separator.
- Liquid-vapour heat exchanger
- 2 x Liquid line driers
- 3 x Thermostatic expansion valves.
- Evaporator pressure regulator.
- Crankcase pressure regulator.
- Capacity Regulator.
- 7 x Solenoid valves.
- 3 x Hand wheel valves.
- Refrigerant R134a.
- 6 x Sight glasses
- ON/OFF switch with indicator light.
- 7 x 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

Recommended Ancillaries

- TKB
- TSE

What's in the Box?

- 1 x 805
- 1 x Transformer (115V only)
- 1 x 2m Plastic tube
- 1 x Hose clip
- 1 x Spare fuse
- Instruction manual
- Packing list

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.

Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS

Weights & Dimensions

- Weight: 164 kg
- Weight: 168 kg (115V version)
- Length: 1340mm
- Width: 640mm
- Height: 1630mm

Essential Services

- 15Amp, 220-240 Volts, Single Phase, 50Hz (With earth/ground).
- 30Amp, 110-120 Volts, Single Phase, 60Hz (With earth/ground).

Ordering information

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

805/230

805/115

All brand and/or product names are trademarks of their respective owners. Specifications and external appearance are subject to change without notice. The colour of the actual product may vary from the colour shown in the brochure.

Copyright © 2018 P.A. Hilton Limited. All rights reserved. This technical leaflet, its contents and/or layout may not be modified and/or adapted, copied in part or in whole and/or incorporated into other works without the prior written permission of P. A. Hilton Limited. Hi-Tech Education is a registered trade mark of P. A. Hilton Limited.

COUNTRY OF ORIGIN - UK WARRANTY PERIOD - 5 YEARS