

A/C & Refrigeration Training Kits

Educational Training Equipment for the 21st Century

Bulletin 233-2

Description

Hampden Air Conditioning and Refrigeration Training Kits provide practical hands-on experience in connecting, charging, and servicing of current air conditioning and refrigeration systems. The various trainers are suitable for a wide range of institutions including: technical and community colleges, industrial corporations, and government and military training centers.

Each kit comes complete with the necessary tubing, fittings, and electrical hardware as well as the compressor, condenser, evaporator, and auxiliary apparatus and is supplied with a mobile cart of code-gauge furniture stock steel finished in instrument tan enamel with 4-inch swivel rubber-tired casters, except for H-ACTK-20 which is supplied with a mobile cabinet.

H-ACTK-1 Beverage Cooler

Includes: forced convection evaporator, air-cooled condenser, open-type compressor with $\frac{1}{3}$ HP motor, thermostatic expansion valve, filter-drier, sight glass, and low pressure control.

H-ACTK-2 Single Evaporator Refrigeration/Freezer

Includes: gravity type domestic evaporator, capillary tube, filter-drier, hermetic compressor with $\frac{1}{4}$ HP motor, air-cooled condenser, dehydrator, and temperature control.

H-ACTK-3 Two-Door Refrigerator

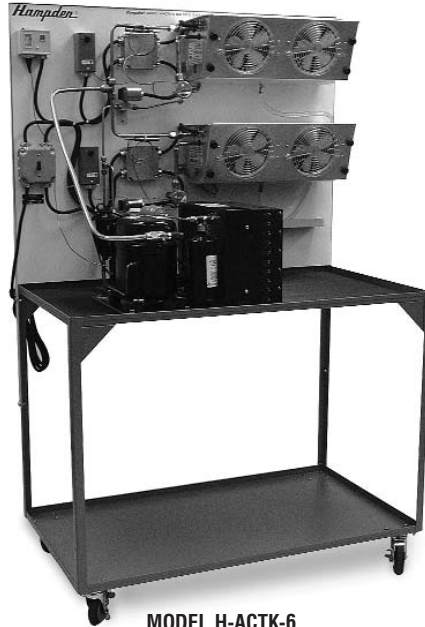
Includes: domestic freezer evaporator, finned high-humidity evaporator, hermetic compressor with $\frac{1}{4}$ HP motor, air-cooled condenser, capillary tube, filter-drier, dehydrator, temperature control, and a hand valve to regulate temperature difference at evaporator.

H-ACTK-4 Grocery Reach-in Cooler

Includes: gravity evaporator with automatic expansion valve, hermetic compressor with $\frac{1}{3}$ HP motor, air-cooled condenser, sight glass, filter-drier, and temperature control.

H-ACTK-5 Small Walk-in Meat Cooler

Includes: forced convection evaporator, $\frac{1}{2}$ HP semi-hermetic compressor, air-cooled condenser, thermostatic expansion valve, filter-drier, sight glass, and low pressure control.



MODEL H-ACTK-6
Other models similar in configuration
Cart Base Dimensions: 38"W x 24"D,
Height ranges from 54" to 72"
Shipping Weight: 300 lbs

H-ACTK-6 Multiple Case Cooler

Includes: 2 forced convection evaporators, hermetic compressor with $\frac{1}{2}$ HP motor, air-cooled condenser, 2 thermostatic expansion valves, 2 solenoid valves, filter-drier, sight glass, 2 temperature controls, and low pressure control.

H-ACTK-7 Ice Cream Freezer

Includes: forced convection electric defrost evaporator, air cooled condenser, semi-hermetic compressor with $\frac{1}{2}$ HP motor, thermostatic expansion valve, filter-drier, sight glass, and temperature control.

H-ACTK-8 Restaurant High-Temperature Salad-Box

Includes: forced convection evaporator, open-type compressor with $\frac{1}{2}$ HP motor, water-cooled condenser, thermostatic expansion valve, sight glass, filter-drier, water regulating valve, and low pressure control.

H-ACTK-9 Commercial Florist Cooler

Includes: semi-hermetic compressor with $\frac{1}{2}$ HP motor, water-cooled condenser, forced convection evaporator, thermostatic expansion valve, filter-drier, sight glass, and temperature control.

H-ACTK-10 Room Air Conditioner

Includes: hermetic compressor with $\frac{1}{2}$ HP motor, air-cooled condenser, $\frac{1}{2}$ -ton air handler with filters and centrifugal blower, capillary tube and temperature control.

H-ACTK-11 Small Air Conditioner

Includes: semi-hermetic compressor with 1 HP motor, water-cooled condenser, 1-ton air handler with centrifugal blower, thermostatic expansion valve, filter-drier, sight glass, and temperature control.

H-ACTK-12 Water Chiller Trainer

Includes: $\frac{1}{4}$ HP hermetic compressor, forced air-cooled condenser, automatic thermostat, capillary tube, high & low pressure gauges, Type T thermocouples.

H-ACTK-15 Freezer Trainer

Includes: hermetic compressor with external oil cooling, forced air-cooled condenser, evaporator, 24 hour timer, thermostat, filter-drier, sight glass, accumulator, and capillary tube.

H-ACTK-20 AC/Refrigeration Control Kit

Includes the components necessary to demonstrate the operation, installation, and troubleshooting procedures for typical installations. Optional fault program available, add suffix -FT.

H-ACTK-21 Split-Type AC Trainer

Includes: rotary compressor, evaporator, 24 hour clock with on/off programmer timer, integrated circuit thermostat, high and low pressure gauges, capillary tube, Type T thermocouples.

H-ACTK-22 Split-Type Heat Pump Trainer

Includes: hermetic compressor, evaporator, forced air cooled condenser, high and low pressure gauges, TEV valve, Type T thermocouples.

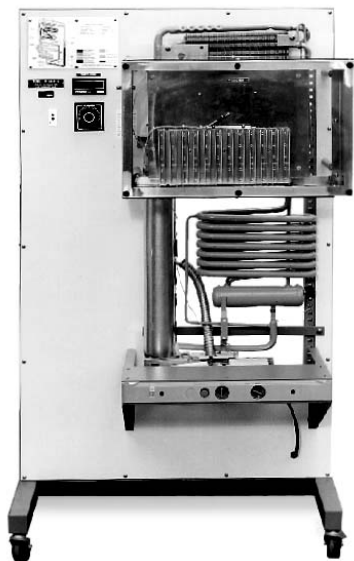
All Hampden units are available for operation at any voltage or frequency

Hampden
ENGINEERING CORPORATION

AC & Refrigeration Training Kit

Educational Training Equipment for the 21st Century

Bulletin 233-3



Dimensions: 67"H x 42"W x 38"D
Shipping Weight: 370 lbs

H-DAR-1G Domestic Absorption Refrigeration Trainer

Purpose

The Hampden **Model H-DAR-1G** has been designed to familiarize the student with the continuous cycle absorption system. The operation of this system is based on Dalton's Law, which states "the total pressure of a confined mix of gases is the sum of the pressures of each of the gases in the mixture". In this case, we are using a solution of water and ammonia.

Description

This unit consists of the basic components of a continuous cycle trainer: the boiler, condenser, evaporator, and the absorber, contained in a sealed package. The **Model H-DAR-1G** consists of a mobile bench with control panel and the domestic absorption refrigeration unit. It is designed to operate on liquid petroleum gas (LPG). The LPG tank is not supplied.

Services Required

Voltage: 120V AC, 1 ϕ , 60Hz

Description

The Hampden **H-AACT Series** Automotive Air Conditioning Systems use an electric motor to drive the compressor. The unit also includes a condenser and fan, a filter/drier, a DC power supply, and AC controls. Furnished complete with text/manual, "Automotive Air Conditioning", by Boyce H. Dwiggin.

Models Available

(Refrigerant: R-134a)

MODEL H-AACT-1B

(Factory Original Equipment—shown)
With variable speed drive

MODEL H-AACT-2A (After Market)

This unit incorporates a variable pitch sheave system.

MODEL H-AACT-3A (After Market)

Similar to H-AACT-2A except with fixed pulley system.

MODEL H-AACT-3P (After Market)

Same as H-AACT-3A except pallet-mounted.

H-AACT Series Automotive Air Conditioning Systems



MODEL H-AACT-1B

Dimensions: 37"H x 34"W x 42"D
Shipping Weight: 640 lbs

All Hampden units are available for operation at any voltage or frequency

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