

# AUTOMOBILE AIR CONDITIONING TRAINER

## GENERAL DESCRIPTION

The DB-117AAC Automobile Air Conditioning Trainer are used to cool the air inside the compartment of a vehicle. In most cases they work according to the recirculating principle, taking air to be cooled from the own compartment. The objective of the Computer Controlled Automobile Air Conditioning Trainer, designed by Domino Technical Resources is to introduce the student into the complex world of air conditioning systems, as well as to study and determine the optimum parameters for the operation of the unit in relation to the basic functions of a car.

● DB-117AAC ●



## Specification

- Bench-top unit.
- Anodized aluminum structure and panels in painted steel. Main metallic elements stainless steel.
- Diagram in the front panel with similar distribution to the elements in the real unit.
- A condenser (radiator).
- An Evaporator.
- Two Cooling fans.
- A filter.
- Electrical motor (to simulate the vehicle combustion engine).
- Frequency converter to adjust the number of revolutions of the motor between 300-1500 r.p.m . Motor speed measurement.
- A variable area compressor.
- An expansion Valve.
- A compartment with ventilation windows.
- A safety pressure switch that switches off the compressor at 14 bars.
- Six 'J' Type temperature sensors.
- A low pressure manometer for the coolant to measure the pressure before the compressor.
- A high pressure manometer for the coolant to measure the pressure after the compressor and before the condenser.
- A high pressure manometer for the coolant to measure the pressure after the condenser.
- Flow meter for the coolant, range: 5-60 l./h.
- This unit uses R134a Coolant (CFC free).
- Electrical console, with:
  - Metallic box.
  - Temperature Sensors connections.
  - Digital display for temperature sensors .
  - Digital display for internal temperature.
  - A storage tank.
  - Selector for temperature sensors.
  - Compressor switch.
  - Switches and regulators for the fans (0-100%).
  - Switch and regulator for the electric motor speed (0-100%).
  - Digital display for the electric motor speed.
  - Cables and accessories for normal operation.
- **Manuals:** Services Manual, Assembly and Installation, Starting-Up, Safety, Maintenance & practices Manuals.
- Standard tool box with machine dust cover.