

# AUTOMOTIVE AIR CONDITIONING TRAINER

Model Number : GOTT-ACT-2



## DESCRIPTION

This Automotive Air Conditioning Trainer is not only demonstrating all the principles of a compressor cycle but it also simulates all the difficulties of integrating the equipment into vehicles.

It is equivalent to that used for air conditioning of civil buildings. It is also adapted to a very hot environment which is subjected to rapid movements, vibrations and equipped with a variable output source of mechanical energy.

## FEATURES

This trainer is designed for an easy use in different environment & is provided with:

- Industrial components & instruments, which are properly connected & operating, easily accessible & visible
- Large color silk screen printed synoptic panel with signaling lamps & switches
- Variable speed motor to simulate the car motor in different operating conditions
- Pulley-activated open compressor
- Multiple-speed fan, to send the cold air to the room through refrigeration openings
- Complete set of instruments for troubleshooting & data collection operations
- Safety devices: Fault current circuit breaker and standard plant protections

## TRAINING PROGRAM

### Practical applications of procedures for:

- Gas recovery
- Evacuating & cleaning the system
- Gas loading & testing the circuit for leaks
- Starting the system & checking the safety devices

### Compressor opening, exam & mounting Searching for:

- Faults on the circuit or its main components
- Faults caused by a faulty charge, to a plant unbalancing or to excessive heat load
- Experiments on the variations on the cycle at the motor

### Calculation of:

- Exchange coefficients of the evaporator and the condenser
- Heat balances
- C.O.P. and E.E.R

### These calculations can be repeated indefinitely, changing the following parameters:

- Refrigerant flow
- Motor speed
- Air flow to the condenser and/or evaporator

## TECHNICAL SPECIFICATIONS

- Fault current circuit breaker to trip the mains if the leakage occurs
- Emergency stop to prevent the system to stop function if the system malfunction
- Color synoptic diagram, provided with signaling lamps, mounted on painted and baked steel structure
- Open compressor, range 700 W to 2.5 kW
- Pulley transmission
- Forced air variable flow condenser
- Multiple-speed forced air evaporator
- Variable speed, three-phase electrical motor
- Vibration-proof devices on all pipes connected to the motor
- High low pressure switch for safety purpose
- Adjustable hand valve
- Digital thermometers
- Pressure gauges
- Floating flow meter
- Electronic instrument for electrical parameters measurement

## OPTIONAL ITEM

Fault simulator with keyboard and microprocessor. It enables the lecturer to insert faults and to check the troubleshooting procedures chosen by the student.

## Manuals :

- (1) All manuals are written in English.
- (2) Model Answer
- (3) Teaching Manuals

## General Terms :

- (1) Accessories will be provided where applicable.
- (2) Manual & Training will be provided where applicable.
- (3) Design & specifications are subject to change without notice.
- (4) We reserve the right to discontinue the manufacturing of any product.

## Warranty :

2 Years

## ORDERING INFORMATION :

ITEM	MODEL NUMBER	CODE
AUTOMOTIVE AIR CONDITIONING TRAINER	GOTT-ACT-2	955-732

\*Proposed design only, subject to changes without any notice.