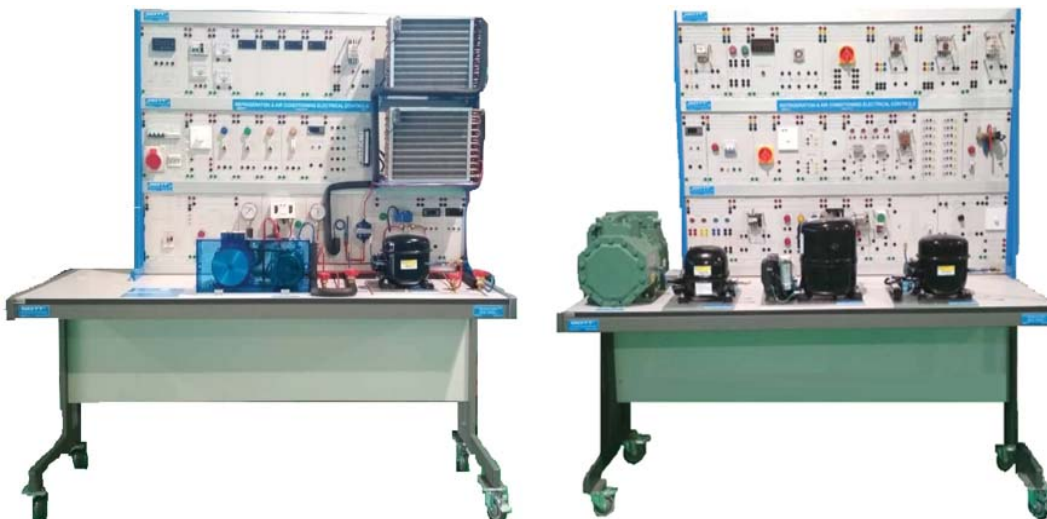


# REFRIGERATION AND AIR CONDITIONING ELECTRICAL CONTROLS

Model Number : GOTT-RAACEC-30



\*Proposed design only.

## DESCRIPTION

GOTT-RAACEC-30 is a special flexible training system for the teaching of refrigeration and air conditioning electrical controls.

The program covers the operation, use and wiring of refrigeration and air conditioning controls, compressors, electrical motors and basic electrical installation. It consists of real industrial components mounted on to clear plexiglass panels which are then inserted into the special frame. This allows the student to quickly assemble the components into various types of operational systems and explore their functions and characteristics.

Its not only ideal for exposing and giving practice in the basic of refrigeration and air con controls but also can be used for making up special demonstrations of a variety of control systems to match specific training programs. Complete systems can be mocked up or the controls can be connected to other installations or trainers to provide additional features.

All electrical connections of the components are brought out to 4 mm heavy duty terminals. Connections are made with stackable electrical test leads, which allow the student to make quick connections and easy measurements. Refrigerant connections can also be made with flexible hoses in order to create fully operational systems.

A variety of modules are available to suit particular training requirements. Student exercise sheets are including to covering the components and basic electrical connections.

## TECHNICAL SPECIFICATION

- A/C & Ref. Controls
  - Low Voltage Thermostat
  - Reverse Cycle Solenoid
  - Electronic Thermostat
  - High/Low Pressure Switch
  - Fan Control Switch
  - Evaporator Fan On/Off
  - Condensor Fan On/Off Oil
  - Pressure Switch Electric
  - Heat Sequencer Electric
  - Solenoid Valve Defrost
  - Cycle Timer
  - Hot gas gauge meter
  - Suction gauge meter
  - Hygrostat Reverse Cycle
  - Solenoid Interface Board
- Compressors & Ref. Components
  - 1 Hp Hermetic Compressor
  - 1/2 Hp Hermetic Compressor
  - 1/4 Hp Hermetic Compressor
  - 1/5 Hp Hermetic Compressor
  - 1 Hp Semi-Hermetic Compressor
  - 1 Hp Open Compressor
  - Evaporator
  - Condenser
  - Capillary tube
  - Filter/drier

# REFRIGERATION AND AIR CONDITIONING ELECTRICAL CONTROLS

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- Electrical Motors
  - Permanent Split Capacitor Motor, 1/3 Hp, 1-phase
  - Dual Speed Induction Motor, 1/3 Hp, 3-phase
  - Ref. Multi function Motor, 1/3 Hp, 1-phase
  - Capacitor Start, Capacitor Run Motor, 1/3 Hp, 1-phase
  - Split Phase Motor, 1/3 Hp, 1-phase
  - Universal Motor AC/DC, 1/3 Hp
  - Three phase induction motor, 1/3 Hp, 3-phase
- Electrical devices & Controls
  - DC Power Supply
  - Single Phase Power Control
  - Thermal Overload Relay
  - Three Phase Disconnect
  - Control Relay
  - CAM Switch
  - Toggle Switch
  - Selector Switch
  - Motor Starter
  - Push Button Switch
  - Y-Delta Timer Relay
  - Switching Relay
  - Dimmer Switch
  - Single Phase disconnect
  - Control Transformer,
  - Three Phase FCCB,
  - Solid State Relay
  - Pilot Lamp
  - Rheostat
  - Single Phase Contactor(24V)
  - Single phase contactor(220V)
  - Circuit Breaker 1Pole
  - Circuit Breaker 3 Pole
  - Three Phase Contactor(3P)
  - Three Phase Contactor(4P)
  - Thermal Overload, 1 Phase
- Accessories:
  - 3 level Bench Top Rack for mounting panels
  - Set of Connection Leads
  - Gas Checking Set
  - Hand valve (1/4" or 3/8") Fault Module
  - Switches
  - Refrigerant 10 kg
- Instruments:
  - AC Volt and Current Meter
  - Evaporator Temperature Meter
  - Condensor Temperature Meter
  - Suction Temperature Meter Hot
  - Gas Temperature Meter
  - Watt Meter
  - Hygrometer
  - Tachometer

## EXPERIMENT TOPICS:

- Understanding The Refrigeration And Air Conditioning Circulation System By Using An Open Compressor
- Controlling The Compressor's Temperature
- Varying The Evaporator Fan Speed
- Understanding The Refrigeration And Air Conditioning Circulation System By Using A Hermetic Compressor
- Varying The Evaporator Fan Speed
- Study The Function Of Solenoid Valve
- Mollier Chart
- Calculating System Performance
- Re-Fill Gas For Open Compressor
- Re-Fill Gas For Hermetic Compressor

### Manuals :

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

### General Terms :

- (1) Accessories will be provided where applicable
- (2) Manuals & Training will be provided where applicable
- (3) Designs & 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
REFRIGERATION AND AIR CONDITIONING ELECTRICAL CONTROLS	GOTT-RAACEC-30	150-999

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