

COMMERCIAL AIR CONDITIONING TRAINER (WATER CHILLER TYPE)

Model Number : GOTT-CACWT-HP



DESCRIPTION

Commercial air conditioner unit is an energy moving or converted machines that are designed to cool or heat the entire house. It does not create heat or cool. It just removes heat from one area, where it is undesirable, to an area where it is less significant. Central air conditions have a centralize duct system. The duct system (air distribution system) has an air handler, air supply system, air return duct and the grilles and register that circulates warm air from a furnace or cooled air from central air conditioning units to our room. It returns that air back to the system and starts again.

SPECIFICATION

Hardware:

- 2HP Commercial Air-Conditioning Trainer -Water Chiller Type with the following components:
 - o Indoor Air Handling Unit (AHU)
 - o Heat Exchanger (water type)
 - o Fan and Controls
 - o Liquid to Liquid Heat Exchanger Condenser
 - o High Pressure switch
 - o Low pressure switch
 - o Thermal expansion valve (TXV)
 - o Water Flow Meter
 - o Water Pressure Gauges
 - o Thermostat
 - o Filter/drier
 - o Refrigerant Pressure Gauges
 - o Hand valves
 - o Water cooling tower
 - o Water Pumps and connections
 - o Instrument Control Panel with Voltmeter and Ammeter
 - o Maintenance spare part and consumables
 - o Electrical circuit Panel

Specification of all sub-components will depend on the engineering design of the air conditioning trainer as a system.

- Three Phase 380VAC, 60Hz
- Dimension: The equipment when installed should not consume more than 6sqm space and not over 1.9m for the overall height.

EXPERIMENT TOPICS

Mock-up that will allow learners to simulate the following:

- Familiarization and operational functions of water chiller refrigeration system components.
- Evacuating and charging water chiller refrigeration system.
- Measurement of refrigerant pressures, temperatures and flow rate.
- Observation of thermostatic expansion valve and capillary tubes performance for water chiller system.
- Understanding and plotting thermodynamic cycle in pressure-enthalpy diagram
- Calculate the refrigeration capacity from the p-h diagram
- Calculate the coefficient of performance.
- Loads variation on water chiller system
- Controlling chilled water temperature in the water chiller system.

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
COMMERCIAL AIR CONDITIONING TRAINER (WATER CHILLER TYPE)	GOTT-CACWT-HP	975-996

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