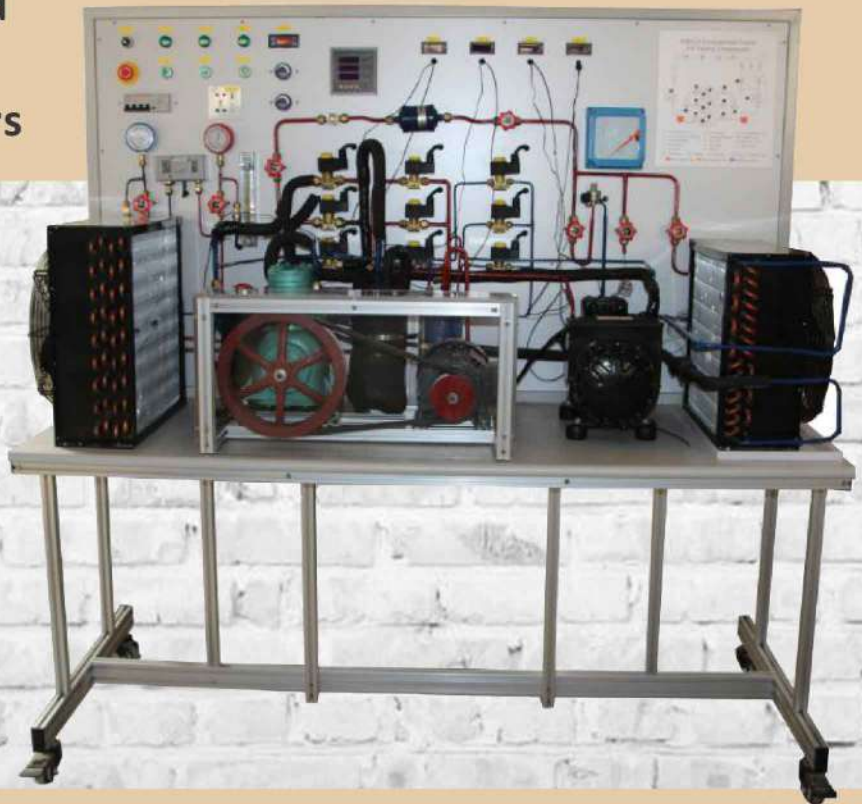




ZM6121 Computerized Trainer for Testing Compressors

Note :

Due to keeping innovation, the specification and Machine pictures or color are subject to alteration without notice!



I Introduction

This trainer has been designed specifically for educational aims to study the operation of three different types of compressors used in refrigeration systems; hermetic compressor, semi-hermetic compressor, open compressor. It includes a set of sensors and a data acquisition board that enable the system supervision from a PC (demand) and manual fault setting. Supply software which can monitor voltage, current, frequency, power, power factor, pressure, flow, etc, they can be displayed on PC in real time, and can print report.

II Training Program

Plant starting and safety devices intervention checking

Analyzing the system behaviour versus the variation

- Compressor type
- Liquid expansion device
- Superheat (When thermostatic expansion valve is used)
- Air flow rate at the evaporator

Examining hermetic, semi-hermetic and open compressors

Determine the power of a compressor

Plotting the cycle in the refrigerant pressure-enthalpy diagram

Data acquisition and calculation of:

- Heat balances corresponding to evaporator, condenser, compressor
- Refrigerant mass flow
- Volumetric compression efficiency

The software of the equipment carries out

The heat balance of the refrigerating circuit

The system supervision with the display of the values detected by sensors

Supplied with:

English General Refrigeration Manual

English Experimental Handbook