



ZM6115 Deep Freezing Trainer

Note :

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



I Introduction

This trainer, specifically conceived for educational aims allows to study deep freezing that is a technological improvement of freezing. This trainer permits to determine the actual rate of cold penetration inside the products under examination via two different systems of heat exchange; natural convection (plate-type heat exchanger) and forced convection (finned battery). 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 safely devices intervention checking

Studying the operation of a thermostatic expansion valve and its calibration

On - off control freezing room thermostat

Analyzing the system behaviour versus the variation of:

- Thermostatic valves superheat

- Condenser air flow

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

Determination of cold penetration rate in the meat, in seafood, in vegetables, etc

Identifying the most suitable substances to be deep frozen

Duration of deep frozen products

Hot gas defrost

Supplied with:

English General Refrigeration Manual

English Theoretical Experimental Handbook