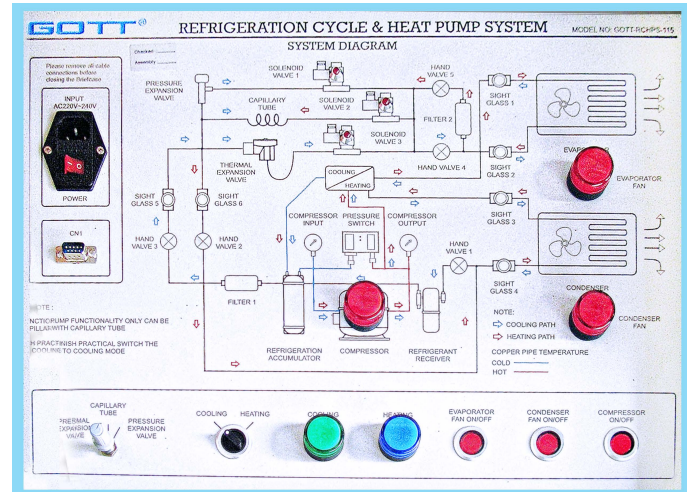
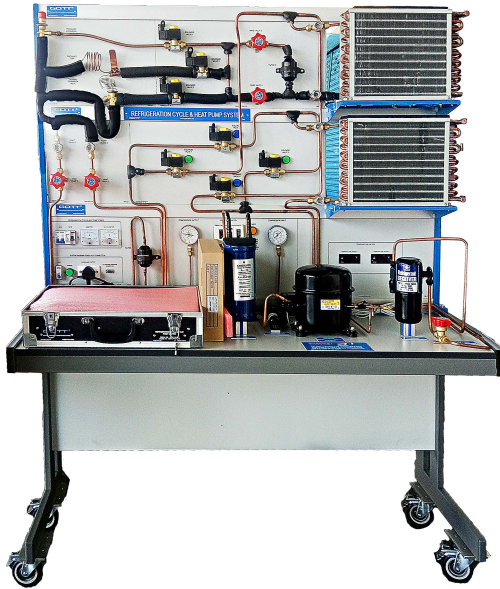


# REFRIGERATION CYCLE & HEAT PUMP SYSTEM

Model Number : GOTT-RCHPS-115



## DESCRIPTION

This trainer designed to learn the theory of Heat Transfer in refrigeration engineering. With proper setup, KR-115 can be emulated as a Refrigeration or Heat Pump system. All system components are mounted on the front panel so students can directly observe, touch the components, and hear the noise produced by the components while it is running under either Refrigeration or Heat Pump cycle. It offers three expansion devices available for the refrigerant to pass through; they are pressure expansion valve, capillary tube, and thermal expansion valve. Students can use the control panel to switch the preferred expanding path from three expansion devices and compare the corresponding performance under Refrigeration or Heat Pump cycle.

## FEATURES

- All system components, including condenser, compressor, evaporator, capillary tube, filter, refrigerant receiver, accumulator, hand valves, pressure gauges, expansion devices, are mounted on the front panel for direct operation and observation.
- Use control panel to select heat pump cycle (cooling or heating), fan speed of evaporator and condenser, and expanding path of the refrigerant
- Use control box to monitor the system voltage and current as well as heat pump status.
- Provide three types of expansion devices, including capillary tube, pressure expansion valve, and thermal expansion valve for refrigerant to pass through.
- Provide 6 sight glasses to observe the refrigerant status before and after passing evaporator, condenser, expansion devices, and compressor.
- Provide 5 hand valves to control the flowing direction of the refrigerant.
- Provide high and low pressure protection switches to automatically halt the compressor when detecting wrong refrigerant flowing path.
- The refrigerant path for high pressure tube is painted in red and low pressure tube in blue.

## EXPERIMENT TOPIC

- Refrigeration circulation system with capillary tube
- Refrigeration circulation system with pressure expansion control valve
- Refrigeration circulation system with thermal expansion control valve
- Reverse cycle heat pump system
- Reverse cycle heat pump system without refrigerant receiver
- Drawing Mollier Chart
- Calculating system performance
- Comparison of system performance
- Comparison of energy between cooling and heating experiments
- Coefficient of performance (COP) and energy efficiency ratio (EER)

## 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
REFRIGERATION CYCLE & HEAT PUMP SYSTEM	GOTT-RCHPS-115	955-740

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