

Refrigeration and Air Conditioning Training Units



Mission

1. to regard promise and trustworthy with clients as best assets of the company.
2. to execute sufficient operation training and strict regular in inspection at delivery and checking of equipments.
3. to respond to clients needs by operating quick YES01 After Service System.
4. to increase R&D Invertment incessantly in order to develop state of the art educational practice equipments.

Vision

Provide the vocational education support in developing countries to establish them happy life through self-reliance and development.

Core Value

1. Ownership
2. Active Thought
3. Mutual trust
4. Mind for Victory
5. Diligence & Sincerity

Business Area

Business Types

1. Manufacturing products for Educational & Vocational training equipment.
 - Automotive training equipment & Heavy machinery equipment.
 - Electronic, Electricity, Control, Renewable and Telecommunication equipment.
 - Refrigeration & Air conditioning Training equipment.
2. High Technology Training for Teachers & Professors.
3. Cooperates with Turnkey based project EDCF, KOICA, ADEF, ADF etc.

Company Introduction

YES01, No1 Company in exporting technical teaching equipment in 2015, 2016, guides you to the way to reduce costs up to 30% and double effect of automotive training curriculum.

1. K Sure(Korea Trade insurance corporation) only choose YES01 as a global growth ladder company in technical teaching equipment sector in South Korea.
2. PPS(Public procurement Service) Selectis YES01 as an entered enterprise in the international procurement Business(PQ enterprise) in an automotive training equipment sector
3. No1 and international enterprise in Technical Teaching Equipment, over 10billion Revenue "Great place to work" award.





Trade Korea, 5million Export Tower



K Sure, Global growth ladder company



PPS, PQ enterprise company



2015, Trade Korea, 5 Million Export Tower



Hi-Seoul Brand company



PPS, PQ enterprise company



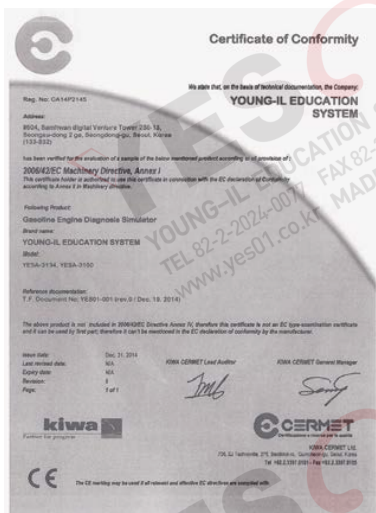
Great place to work



Innobiz, Great company to work



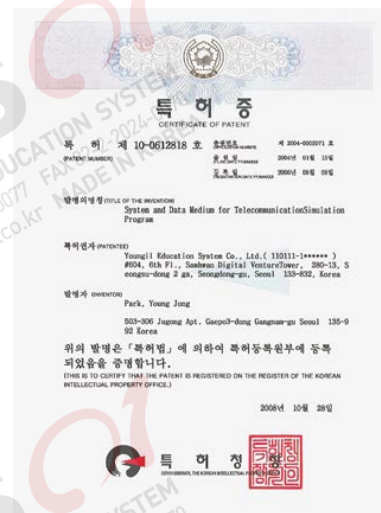
Export Merit Award



Certificate of Conformity



Part for Training in Module



System and Data Medium for Telecommunication Simulation Program



Certificate of Venture Business



Experimental Equipment for Heat Exchange and Server for Controlling Experimental Equipment



Automotive Electronic Control Engine Simulator



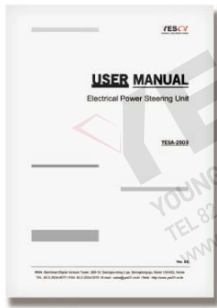
Certificate of INNO-BIZ



ISO-9001



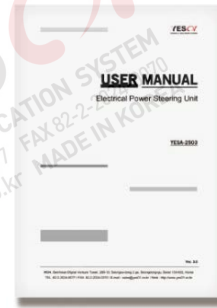
Supporting Device of Vehicle Base



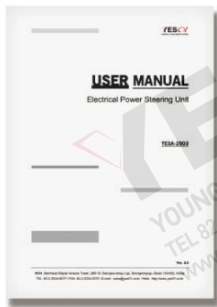
Basic Refrigeration Trainer



Cooling Tower Trainer



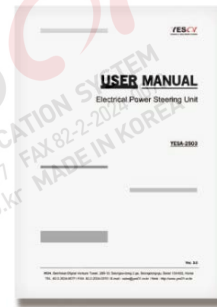
Heart Pump & Heat Accumulation
Experiment Trainer



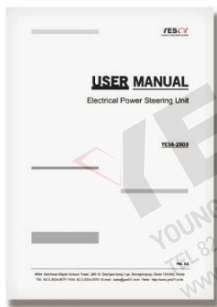
Domesic Air Conditioner Trainer



Refrigerator System Trainer



Ice Thermal Storage Trainer



Electricity Vehicle Electricity Circuit Training
Equipment



Eco-Friendly Commercial Refrigeration Trainer



Training Panel

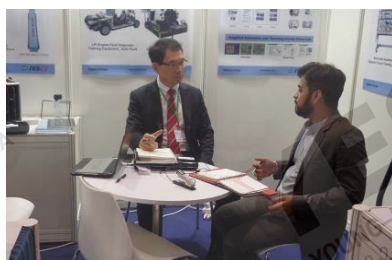
Curriculum Text, Video and Simulation software

We supply 3 Benefits to our VIP customer's Training.

1. We supply curriculum for Air conditioning & Refrigeration Training units.
The curriculum consists of
 - . Theory
 - . Practice exercise
 - . Solutions
2. We supply Training Video for Air conditioning & Refrigeration Training units.
Video included English and some languages.
3. We supply HVAC Software with ADA.



Indonesia_Training & Education at customer site



2016 WorldDidac HongKong



Clombia_Training & Edauration at customer site



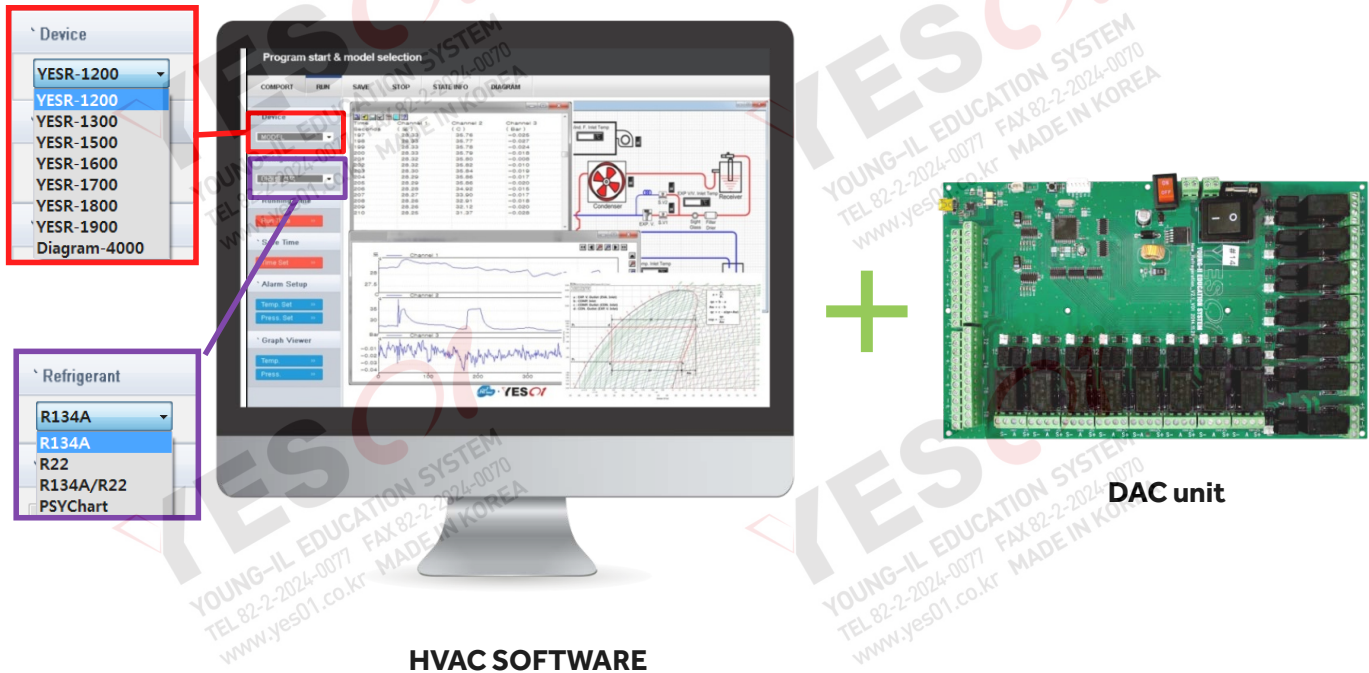
Clombia_Training & Edauration customer site



Clombia_Training & Edauration customer site

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Feature

- This unit available Data Acquisition, Monitoring and Control System for Refrigeration & Air-conditioning Equipments.
- Total measuring program based on PC containing a required temperature, pressure and humidity for air-conditioning refrigeration experiment
- Check of temperature, pressure and enthalpy from the PC at real-time
- The continuous measurement of experiment data related to temperature and pressure, enthalpy value, temperature and pressure in Mollier diagram
- Up to 20 fault insertion and simulation is available
- Operating control(ON, OFF) of monitoring and machine using data saving function and electric control board in the PC
- This unit compatible with all of YES01's Air conditioning and Refrigeration units.

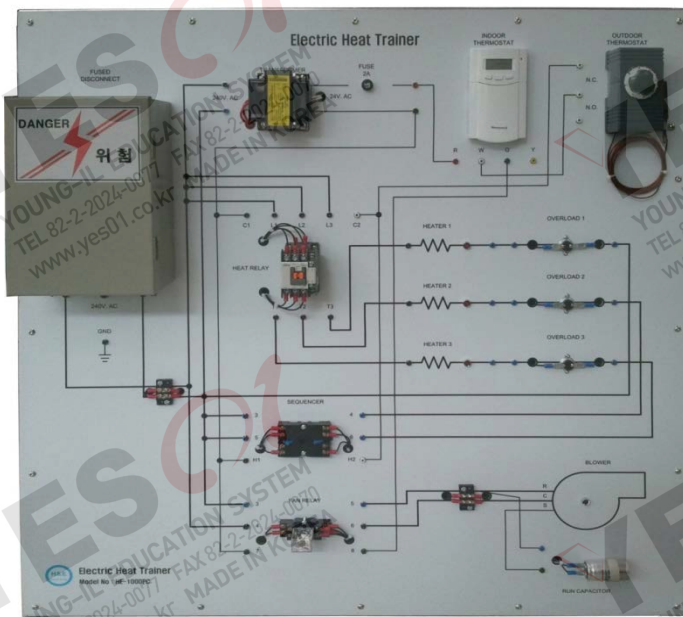
Technical Description

- The possibility to data processing, application and control based on result of continuously measured data and graph
- To provide brief PC interface with USB2.0
- Computer controller program is possible to link up with air-conditioning refrigeration experimental instrument and to apply to other machine following user's demand
- The variety of refrigerant selection according to an available refrigerant (R134A, R22, R134A/R22, PSYChart)
- Interchange with other program drawing a graph by saving excel file of all data
- Running & save time set up is available
- Temperature and pressure set u is available for alarm and graph viewer



Technical Description

- Magnet Contact : 13A, 5a2b : 2EA
- Relay (8Pin) : 2EA
- Timer (60sec) : 1EA
- Digital thermometer : 6EA (temperature control type)
- Power Control : toggle, PUSH BUTTON, selected switch
- Safety device : Blocking overvoltage (N.F.B), buzzer, use
- Pilot lamp : Red, Green, Yellow, White
- Graphic module and automatic module : 595 x 595 Al
- Coupling device with Power and Sensor Connector (more 24PINs)
- Ideal combined use with YESR-1500, YESR-1400, YESR-1700 and YESR-3000
- Dimension : 1000 x 600 x 900



Technical Description

- Available to test checking fault, temp. control, and pressure control in air-con.
- Available to check wind pressure at duct with visual by using a digital anemometer and pitot tube.
- Available to adjust air volume at duct by using duct damper.
- Available to adjust air speed by using blower controller.
- Available to test performance with theory on operation of device.
- Size(LxWxH): 1100x720x400mm

Optional

- Sequence Control Unit [Model Name : YESR-SEC]



※included options



Sequence Control Unit



YESR-DAQ

Technical Description

- It is able to make the experiments and training for temperature, pressure of auto pressure-control device and auto defrosting
- It is able to check the changes of refrigeration device depends on different types of expansion valves
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit by various circuit structure of equipment
- It is able to understand the principles of hot gas defrost, capillary tube and thermostatic expansion valve by manual operation.
- Unlike separation system in mechanical part, the control unit is visualized.
- Automatic control for graphic panel with two automatic control modules
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	pin, Tube Air-cooled type, transparent chamber, damper
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, capillary tube, temperature Expansion Valve
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
High and Low pressure switch	LPS, HPS

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)



Sequence Control Unit



YESR-DAQ

※included options

Technical Description

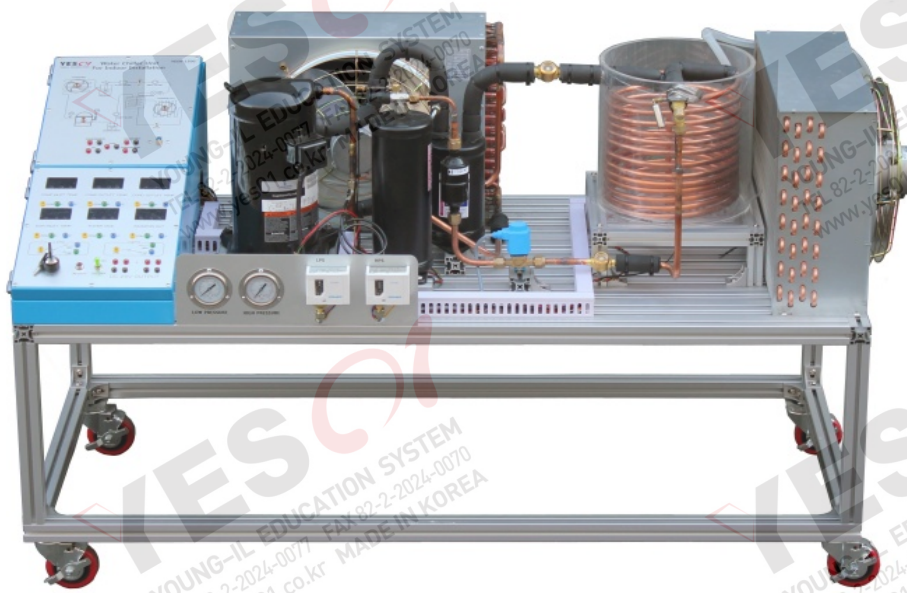
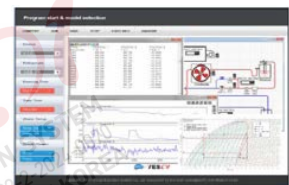
- It is able to make the experiments and training for temperature, pressure of auto pressure-control device and auto defrosting
- It is able to check the changes of refrigeration device depends on different types of expansion valves
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit by various circuit structure of equipment
- It is able to understand the principles of hot gas defrost, capillary tube and thermostatic expansion valve by manual operation.
- Unlike separation system in mechanical part, the control unit is visualized.
- Automatic control for graphic panel with two automatic control modules.
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	pin, Tube Air-cooled type, transparent chamber, damper
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, capillary tube, temperature Expansion Valve
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Chamber for Evaporator	320*350*500, damper
High and Low pressure switch	LPS, HPS


Sequence Control Unit

YESR-DAQ

Technical Description

- Evaporator: shell and tube type
- Compressor: hermetic scroll type 2HP
- Microprocessor Controlled
- Fan with speed motor, filling: fire resistant
- Drift eliminator, rubber spray, nozzle, vibration dampers, catch basin with over flow and float valve.
- Capacity to match AHU(refrigerant/cooling capacity): up to 20kW
- Water circulating pump with all its accessories, centrifugal pump
- Safety and balancing valve with all accessories
- Expansion Tank
- All necessary connecting pipes.
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Automatic control unit

- Power, lamp, power switch
- Relay, timer, DPS module
- Switch, voltmeter, ampere meter, temperature module
- Temperature sensor 6EA
- Pressure sensor 4EA Included if YESR-DAQ used.

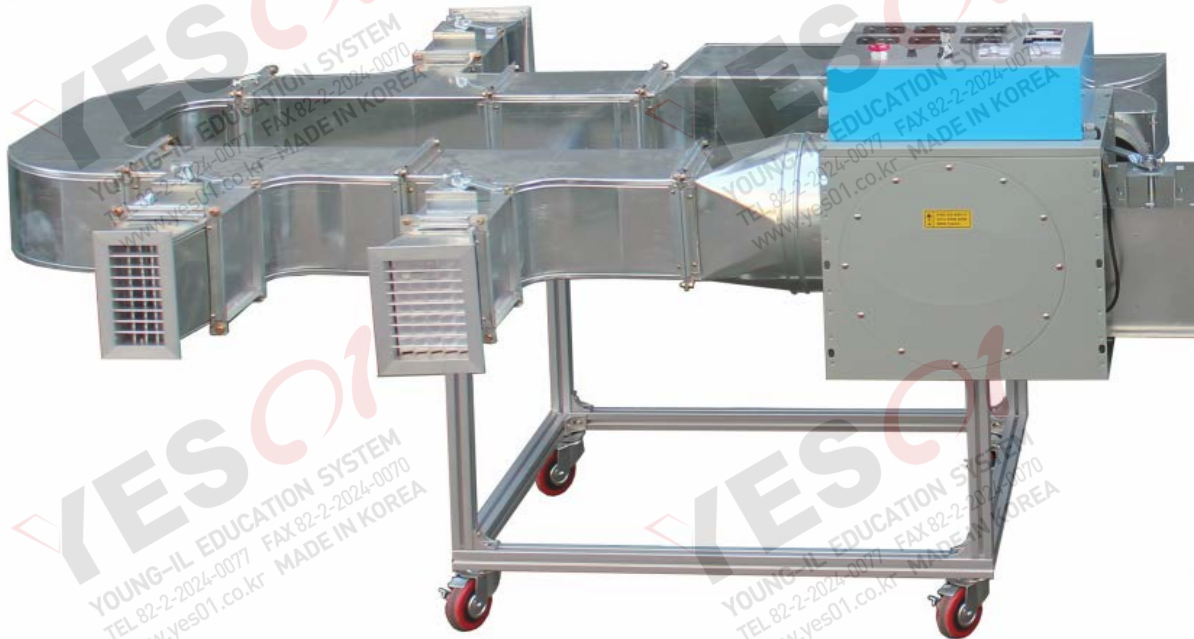
Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)



Technical Description

- Single-phase 220 ~ 240V used
- Attached propeller type or sirocco fan type motor
- Cooling water circulation pump
- 2 coolant shut-off solenoid valve
- Equipped with two water shut-off solenoid valve
- Cooling system checked by using a transparent acrylic
- 6 of 7 column cooling wings attached
- Stand made with precision machined steel, profile and lockable & swivel castors
- Cooling system is visualized by transparent glass
- Temperature sensor 5EA



Automatic control unit

- Power, lamp, power switch
- Relay, timer, DPS module
- Switch, voltmeter, ampere meter, temperature module

Machine control unit

- Power supply single-phase 220 ~ 240V
- It helps understanding of air flow by Sirocco fan operation of inlet
- 6EA of Temperature sensors are attached on each of ventilation holes (exhaust)
- Damper is mounted to allow the air flow block
- It is able to make a complete air conditioning system
- This YESR-2300 compatible with YESR-4000, YESR-2100



※ included options



Sequence Control Unit



YESR-DAQ

Technical Description

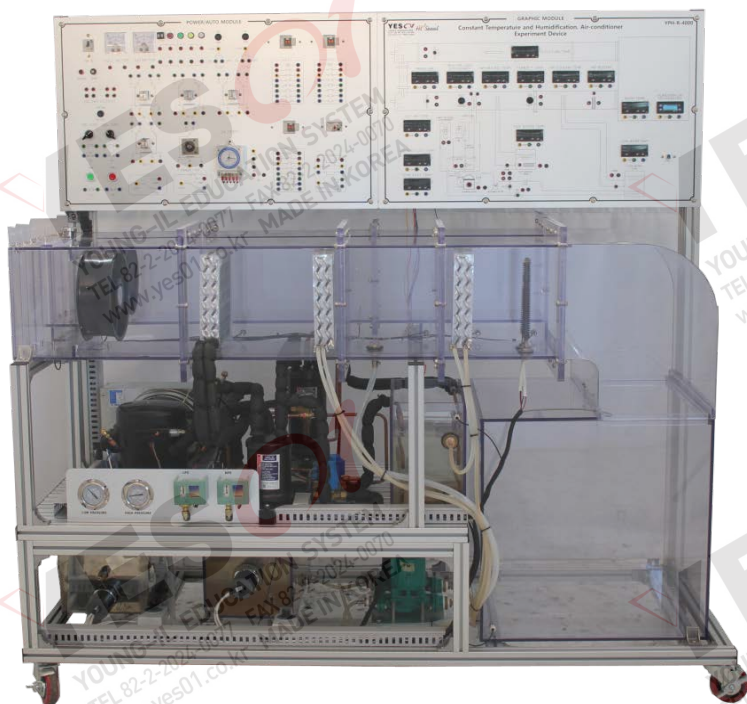
- It is able to experiment and train the temperature, pressure of auto pressure-control device and auto defrosting
- It is able to experiment and educate theoretically about automatic control of refrigeration system and refrigerator components.
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Secondary heat-exchange through heat-accumulation tank.
- It is able to check and adjust the flow of the heating medium(water type)
- It is able to get the most accurate data by digital low/high pressure switch
- Heating Accumulation tank is visualized by transparent acrylic and it is able to circulate the thermotherapy by circulator
- It should be structured to be able to accumulate the heat, to see the states and flow of refrigerant, and to understand the principle of components to maximize the achievement of education.
- Consist of accessories to visualize the state, principle and flow of refrigerant
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	Pump and chamber with accumulation of heat
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, or welding type
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Pressure Switch	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Check Valve	welding type
4-Way Valve	welding type with 4-Way



Sequence Control Unit



YESR-DAQ

Technical Description

- It is able to experiment for 4 strength type of ventilation system and air conditioning system by heat pump.
- Consist of auxiliary heater with heat pump and humidification device is usable for both cold and hot water.
- Humidification device has a sprinkler system that makes air-acrossing is available, can evaluate and compare its performance and can adjust its damper of intake/exhaust.
- Temperature of hot and cold water for humidification can be adjustable by user.
- Whole equipment is designed to check the operation from the outdoor and to indoor temperature is adjustable.
- Whole equipment has auto control system by the organic temperature and humidity
- Sequence panel is consist of automatic control of graphic device, and it is able to experiment and train the controls of temperature, pressure and humidity adjustment by connecting circuit to power.
- It is able to protect the overload and operate the pressure switch, alarm bell and a pilot lamp while problem occurs in thermo-hygrostat.
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

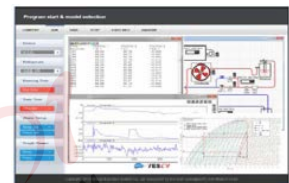
- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type
Nipple clamp type	Heat exchanger for cool and warm water (2EA)
Evaporator for heat pump	pin, Tube Air-cooled type (welding type)
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve(2EA)	manual expansion valve
Electronic Valve (4EA)	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Transportation pump(3EA)	220V, 60Hz
Sealing valve	220V, 60Hz
Exhaust valve	220V, 60Hz
Humidifier device	spray type and atmospheric crossing type
High and Low pressure switch	LPS, HPS, VOLT, AMPER METER
Temperature sensor	14EA
Pressure Sensor	4EA
Humidity Snecor	1EA



Sequence Control Unit



YESR-DAQ



Mano Meter

Technical Description

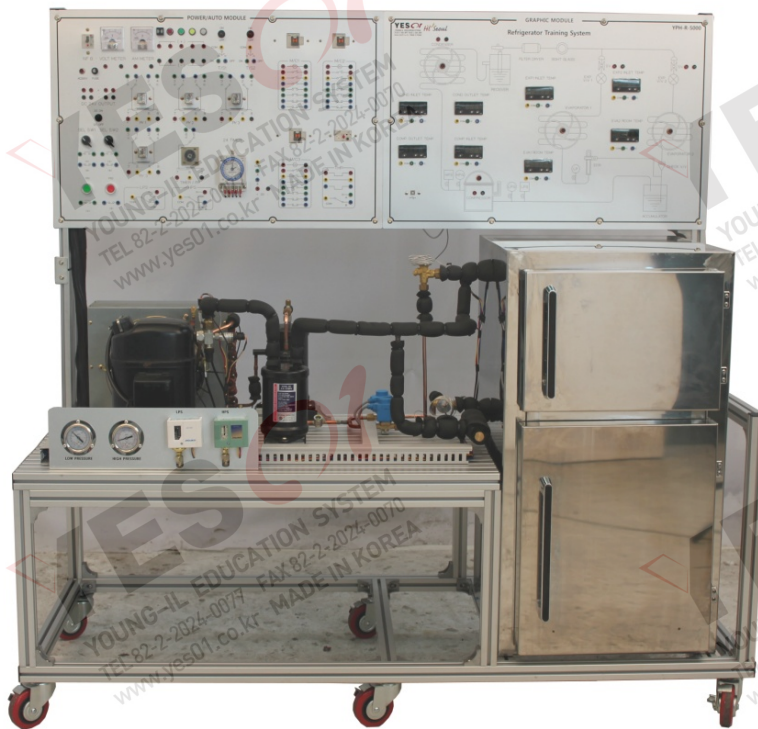
- Simple air conditioning system
- Ventilation duct, cross-section 250x250mm
- Expansion element selectable using solenoid valves: expansion valve and capillary tubes 1m
- Radial fan with regulating flap
- Lamellar evaporator with drip tray
- Determination of airflow rate by velocity measurement with Pilot tube 2 temperature sensors, differential pressure transducer
- Controllable valves and equipment actuated by software
- Compressor :1/2HP
- Condenser: Air cooled type
- Evaporator chamber, damper
- Size(LxWxH):1100x720x490mm
- Weight: 80kg
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	Pin, Tube type
Accumulator	1HP
Receiver tank	1/2HP
Expansion Valve	Manual expansion valve (welding type)
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Filling nipple	Attached to a nipple for Filling
Sight Glass	welding type or nut clamp type
Duct	PC 250X250
Ventilator	220V, Fan speed controller included
Heater	Pin type, 1Kw
Wind pressure	220V, Pitot tube
Temperature Sensor	9EA
Liquid receiver, Accumulator	



※included options

Technical Description

- It is able to experiment for temperature, pressure, defrosting automatic control and mechanical trouble of automatic pressure control device.
- Effective to understand the constituting principle and operating principle of refrigerator and freezer
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit by various circuit structure of equipment
- Graphic module control has compatibility and expandability .
- Consist of accessories to visualize the state, principle and flow of refrigerant
- Unlike separation system in mechanical part, the control units are visualized.
- Automatic control for graphic panel with two automatic control modules Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

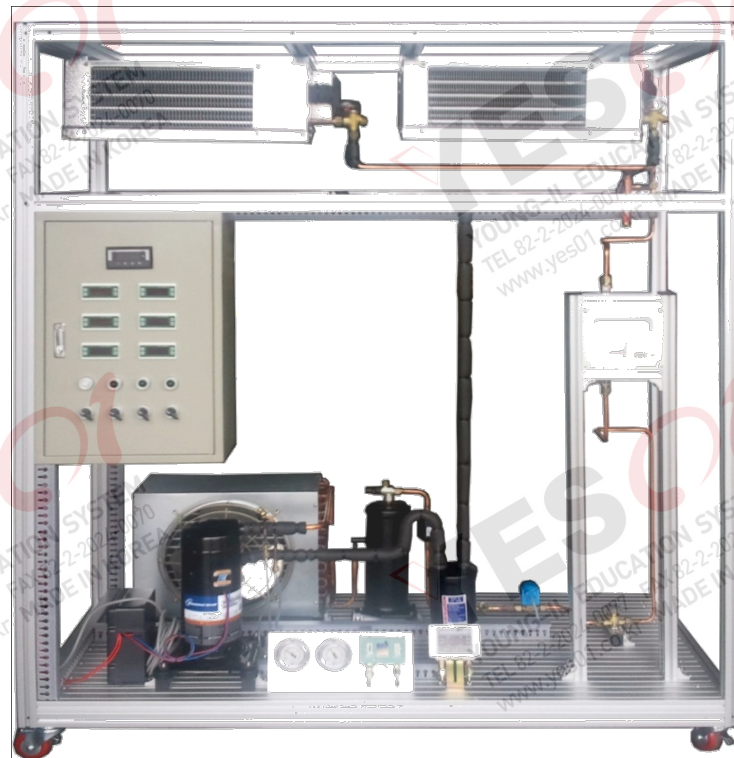
- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, ingle-phase 220V
Evaporator	2-stage chamber , Tube type
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, temperature sensor
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Chamber for Evaporator	material with stainless steel or Acril (550*650*1100) E.P.R
High and Low pressure switch	LPS, HPS

ACCESSORIES

Banana jack	red 20EA, black 20EA
High, low pressure hose, with power cable	
25p cable	



Technical Description

- Available to test checking fault, temp. control, and pressure control in industrial refrigerator.
- Available to check working situation at each evaporator by using two evaporators.
- Available to check coolant volume at system by using coolant manometer.
- Available to adjust evaporating pressure at each of evaporator by using EPR.
- Available to adjust coolant volume at system by using manual V/V.
- Available to draw p-I diagram as changing system cycle in refrigeration apparatus, since the measured section in the system should be selected.
- Available to test performance with theory on operation of device.
- Weight: 200Kg
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

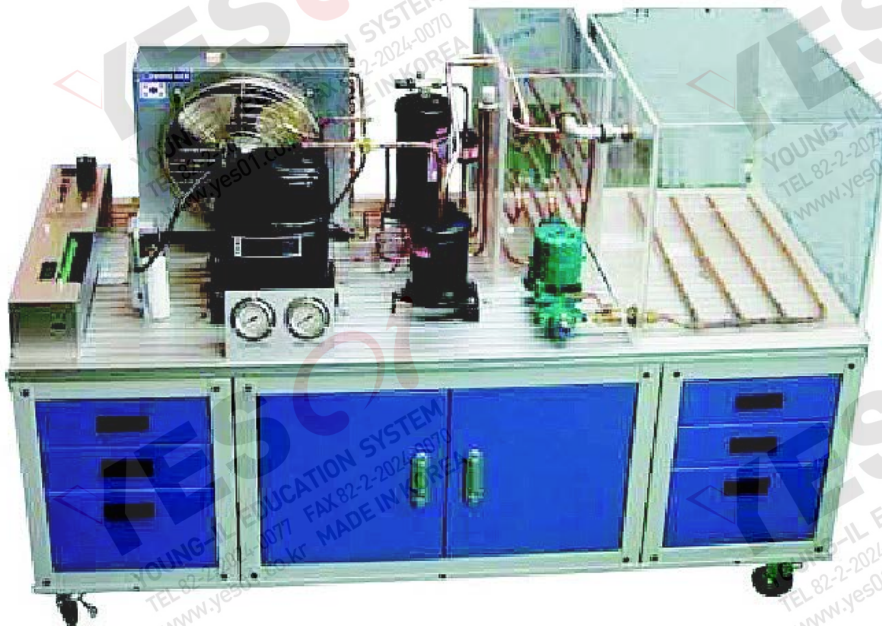
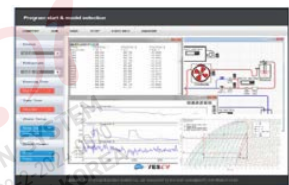
Compressor	1HP
Condenser	Air-cooled type
Evaporator	Multi type
Evaporating Pressure Regulator	1EA
Accumulator	2HP
Expansion Valve	Manual type
Liquid receiver	1HP
Electronic valve for operation	3/8" nut clamp type
Manometer	High Pressure, Low Pressure
Filling nipple	
Sight Glass	
Control box	
Thermostat range	-50℃~100℃
Pressure switch range	Low side: 0bar~5bar High side: 5bar~30bar
Condenser, Accumulator	

PROGRAM

Temperature, pressure and humidity data acquisition control program

MACHINE

BLDC compressor


Sequence Control Unit

YESR-DAQ

※included options

Technical Description

- The possibility of the experiment on temperature, pressure, automatic control of the device with Ice Accumulation and mechanical trouble
- The comprehension of refrigeration system with Ice thermal storage and device's principle
- The experiment on cycle change of refrigeration equipment according to temperature and Mollier diagram drawing in P-I diagram drawing part.
- Theoretical education and experiment related to efficiency test of device and Ice storage
- Theoretical education of a fundamental circuit, application circuit and experiment with Ice storage
- The sequence screen attached to the graphic module control department and power automatic control machine for experiment on temperature, pressure and automatic control and operation
- Accessories to observe refrigerant state or flow and principle of accessories
- Unlike separated system from machine department, the control department is visual
- Automatic control with graphic panel and two automatic control modules
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

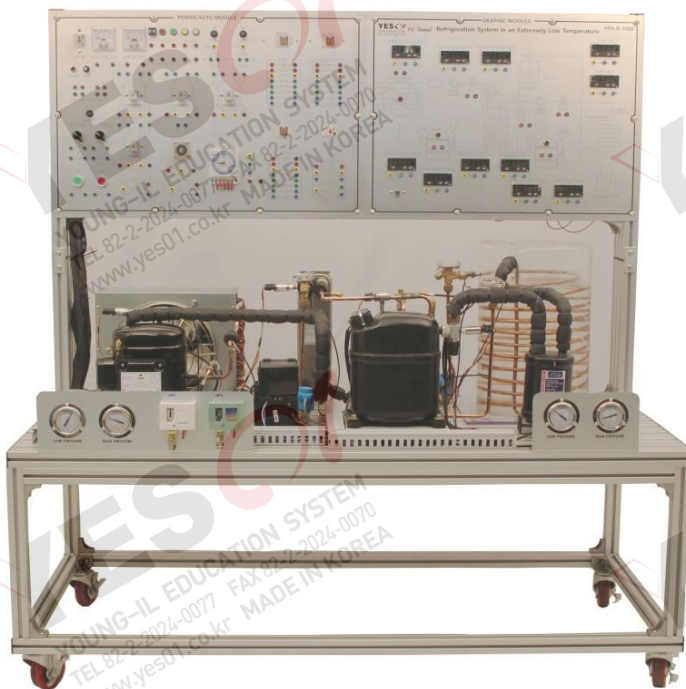
- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

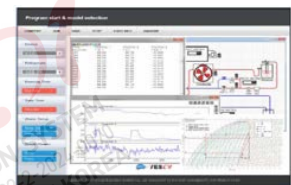
Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	Transparent chamber with accumulation of heat, Tube type
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, capillary tube, automatic Expansion
Electronic Valve	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type circulation pump : circulation for heat medium
Ice thermal storage box	acrylic box, stainless steel
High and Low pressure switch	LPS, HPS

The Refrigeration System in an Extremely Low Temperature Trainer

YESR-7000



Sequence Control Unit



YESR-DAQ

※included options

Technical Description

- It is able to do experiments and understand about temperature, pressure structure and mechanical trouble of auto control system by ice thermal storage
- Effective to understand the principle of deice and refrigeration system by using ice thermal storage
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Theoretical education, experiments and trainings are available for the efficiency test of deice and ice thermal storage
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit of deice by ice thermal storage.
- Sequence panel is consist of automatic control of graphic device, and it is able to experiment and train the controls of temperature, pressure and humidity adjustment by connecting circuit to power.
- Consist of accessories to visualize the state, principle and flow of refrigerant
- Unlike separation system in mechanical part, the control units are visualized.
- Automatic control for graphic panel with two automatic control modules
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

Compressor	1/2HP, 1HP 2EA(NO1, NO2 refrigerator), single-phase 220V, Control Box
Condenser	Air-cooled type
Plate heat exchangers (low temperature side), Evaporator	Tube type
Accumulator, Receiver tank	1HP
Expansion Valve	manual expansion valve(2EA), capillary tube(1EA)
Electronic Valve for operation	nut clamp type or welding type (3EA)
Filter dryer	nut clamp type or welding type (2EA)
Manometer	High Pressure(2EA), Low Pressure(2EA)
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type (2EA)
High and Low pressure switch	LPS, HPS
Temperature Snsor	8~11EA
Pressure Sensor	4~6EA

MACHINE

BLDC compressor



※included options



Technical Description

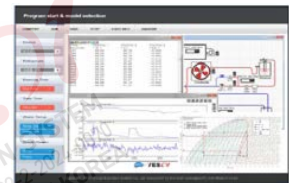
- Available for experiment and test by temperature or pressure control in two-stage compressing and expansion system.
- Using solo coolant for two-stage compressing and expansion system.
- As variable pressure at middle cooling device, available to check temperature change.
- Graphic module control department and power automatic control machine for experiment on temperature, pressure and automatic control and operation
- The control department is made up of visual lamps separated system from machine department
- Temperature sensor 10Ea
- Pressure sensor 8EA
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC [Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)



Sequence Control Unit



YESR-DAQ

Technical Description

- Available to test checking fault, temp. control, and pressure control in multi condensing unit system.
- Available to compare with effect of one condensing unit and two condensing unit..
- Available to check oil level gauge at system with visual by using oil level regulator at each of compressor.
- Available to draw p-I diagram as changing system cycle in refrigeration apparatus, since the measured section in the system should be selected.
- Available to test performance with theory on operation of device.
- Available to acquisition and save data of p-I diagram with program software.
- Size(LxWxH): 1500x700x700mm
- Weight: 80Kg
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, 2ea
Condenser	Air-cooled type
Expansion Valve	Manual type
Liquid receiver	1/2HP, Accumulator : 1ea, 1HP 1ea
Electronic valve for operation	3/8" nut clamp type or welding type
Electronic Valve	3/8" nut clamp type
Manometer	
Fitting nipple	
Sight Glass	
Thermostat range	-50℃~100℃
Pressure switch range	Low side: 0bar~5bar High side: 5bar~30bar
Pressure Sensor	4EA
Condenser, Accumulator	

PROGRAM

Temperature, pressure and humidity data acquisition control program

OPTION

BLDC compressor



※included options

Technical Description

- Basic Experiment of Refrigeration Truck Trainer
- Low stage evaporating temperature test by changing temperature of high stage condensing temperature
- Low stage evaporating temperature test by changing temperature of high stage evaporating temperature
- Low stage evaporating temperature test by changing temperature air-forced heat exchanger
- Testing temperature variation about cascade temperature variable
- Variation test of low stage refrigeration system by changing charging refrigerant
- Analysis temperature by controlling low stage evaporating pressure
- It is able to set up the temperature scope of measurement to create the P-I diagram so it makes these experiments and trainings available such as cycle changes of equipment, Mollier diagram, and data saving.
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

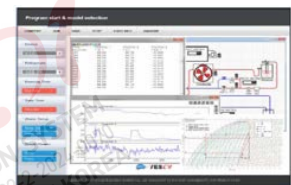
- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, 1HP 2EA(NO1, NO2 refrigerator), single-phase 220V, Control Box
Condenser	Air-cooled type
Plate heat exchangers (low temperature side), Evaporator	Tube type
Accumulator, Receiver tank	1HP
Expansion Valve	manual expansion valve(2EA), capillary tube(1EA)
Electronic Valve for operation	nut clamp type or welding type (3EA)
Filter dryer	nut clamp type or welding type (2EA)
Manometer	High Pressure(2EA), Low Pressure(2EA)
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type (2EA)



Sequence Control Unit



YESR-DAQ

※included options

Technical Description

- It is able to experiment for temperature, pressure, defrosting automatic control and mechanical trouble of automatic pressure control device.
- Effective to understand the constituting principle and operating principle of refrigerator and freezer
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit by various circuit structure of equipment
- Graphic module control has compatibility and expandability .
- Consist of transparent accessories to visualize the state, principle and flow of refrigerant
- Unlike separation system in mechanical part, the control units are visualized.
- Automatic control for graphic panel with two automatic control modules
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

Compressor	1/3HP, single-phase 220V, Control Box
Condenser	Air-cooled type, single-phase 220V
Evaporator	2-stage chamber , Tube type
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, temperature sensor
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Chamber for Evaporator	material with stainless steel(550*650*1100) E.P.R
High and Low pressure switch	LPS, HPS
Temperature	8EA

ACCESSORIES

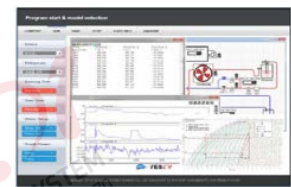
Banana jack	red 20EA, black 20EA
High, low pressure hose, with power cable	
25p cable	



※included options



Sequence Control Unit



YESR-DAQ

Technical Description

- It is able to do experiments and understand about temperature, pressure structure and mechanical trouble of auto control system by ice thermal storage
- Effective to understand the principle of deice and refrigeration system by using ice thermal storage
- Theoretical education, experiments and trainings are available for the efficiency test of deice and ice thermal storage
- Theoretical education, experiments and trainings are available for the fundamental circuit and application circuit of deice by ice thermal storage.
- Sequence panel is consist of automatic control of graphic device, and it is able to experiment and train the controls of temperature, pressure and humidity adjustment by connecting circuit to power.
- Consist of accessories to visualize the state, principle and flow of refrigerant
- Unlike separation system in mechanical part, the control units are visualized.
- Automatic control for graphic panel with two automatic control modules
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a
- Storage Cabinet (Model YESR-STO)

MACHINE

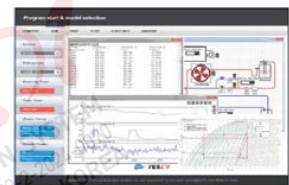
Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type, ingle-phase 220V
Evaporator	2-stage chamber , Tube type
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve	manual expansion valve, temperature sensor
Electronic Valve for operation	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Chamber for Evaporator	material with stainless steel(550*650*1100) E.P.R
High and Low pressure switch	LPS, HPS
Temperature Sensor	7EA

ACCESSORIES

Banana jack	red 20EA, black 20EA
High, low pressure hose, with power cable	
25p cable	



Sequence Control Unit



YESR-DAQ

※included options

Technical Description

- It is able to experiment for 4 strength type of ventilation system and air conditioning system by heat pump.
- Consist of auxiliary heater with heat pump and humidification device is usable for both cold and hot water.
- Humidification device has a sprinkler system that makes air-acrossing is available, can evaluate and compare its performance and can adjust its damper of intake/exhaust.
- Temperature of hot and cold water for humidification can be adjustable by user.
- Whole equipment is designed to check the operation from the outdoor and to indoor temperature is adjustable.
- Whole equipment has auto control system by the organic temperature and humidity
- Sequence panel is consist of automatic control of graphic device, and it is able to experiment and train the controls of temperature, pressure and humidity adjustment by connecting circuit to power.
- It is able to protect the overload and operate the pressure switch, alarm bell and a pilot lamp while problem occurs in thermo-hygrostat.
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Optional

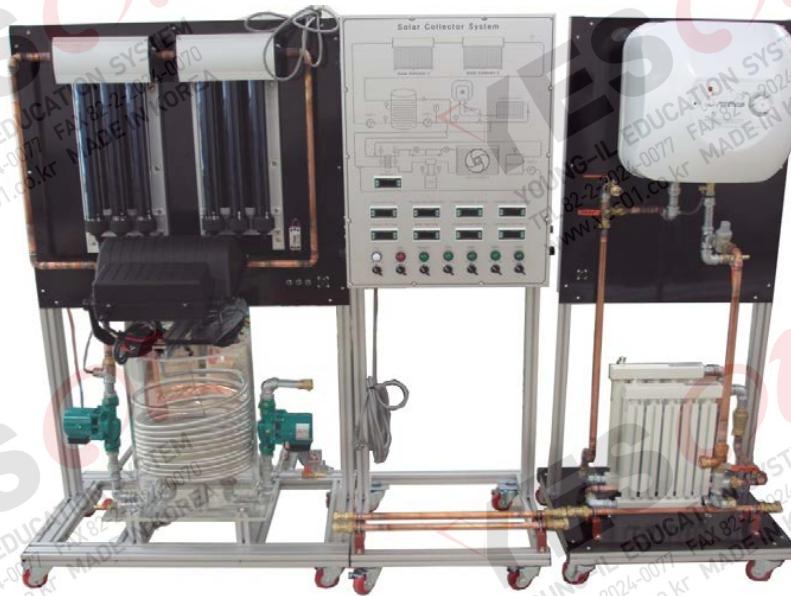
- HVAC with DAC[Model name : YESR-DAQ]
- Sequence Control Unit [Model Name : YESR-SEC]
- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Compressor	1/2HP, single-phase 220V, Control Box
Condenser	Air-cooled type
Heat exchanger for cool and warm water (2EA)	nipple clamp type
Evaporator for heat pump	pin, Tube Air-cooled type (welding type)
Liquid receiver	1/2HP
Accumulator	1HP
Expansion Valve(2EA)	manual expansion valve
Electronic Valve (4EA)	3/8" nut clamp type or welding type
Filter dryer	3/8" nut clamp type or welding type
Manometer	High Pressure, Low Pressure
Charging nipple	Attached to a nipple for Charging
Sight Glass	welding type or nut clamp type
Transportation pump(3EA)	220V, 60Hz
Sealing valve	220V, 60Hz
Exhaust valve	220V, 60Hz
Humidifier device	spray type and atmospheric crossing type
High and Low pressure switch	LPS, HPS, VOLT, AMPER METER

ACCESSORIES

Banana jack	red 20EA, black 20EA
High, low pressure hose, with power cable	
25p cable	



Technical Description

- The apparatus is a comparative experiment apparatus able to educate the structure of system and universal controlling related with the calculate the energy with solar thermal collecting, thermal storage, control, and auxiliary heater.
- To understand the theory for the solar thermal storage system by using the artificial sunlight
- To understand the working principle and the structure of each unit of the solar thermal storage system
- To comprehend the principle of the energy flowing and by controlling methods
- Able to experiment the amount of thermal energy of heat storage tank according to the quantity of sunlight by using an artificial sunlight
- Operating Control(ON,OFF) of monitoring and machine using data saving Function and electric control board in the PC via YESR-DAQ (optional accessory)
- Fault insertion & simulation, Data acquisition and P-I diagram drawing via YESR-DAQ (optional accessory)
- Manual with theory and experiments

Solar collector tube

Capacity for educational purpose

Heat pipe type

Heat collector tube 3 column(2set)

Water pressure test 10 Kg/cm²

Materials of Solar Collecting tank -Acryl(50ℓ)

Heat travers pipes inside

Circulation PUMP

Auxiliary boiler

Capacity 1.5kw/h

Electricity Single phase 220V

Wall attached type

Heat transferring unit Radiation type



Technical Description

- This equipment generates heat energy by vapor–condensing coolant while maintaining relatively constant temperature all the year round in ground circulating circuit.
- It consists of ground circulating circuit and coolant circuit.
- It is designed for test and practice on the composition of the system based on the conventional vapor–compression cooling cycle and various basic automatic controls.
- It is also possible to experience the conversion of heating and cooling operations using heat pump system.
- It is possible to switch between ground and water as heat source.
- Manual with theory and experiments
- Size(LxWxH): 1500x900x1700mm
- Weight: 300Kg

Optional

- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a

MACHINE

Heat pump system

Compressor	1HP
Condenser	Air-cooled type
Evaporator	pin, Tube air-cooled type
Expansion Valve	manual type
Liquid receiver	1/2HP
Accumulator	1HP
Electronic valve	3/8" nut clamp type
Manometer	
Fitting nipple	
Sight Glass	
Electric control module	DC24V
Thermostat range	-50℃~100℃
Geothermal system	-Ground unit chamber -Water unit chamber



Technical Description

- Available to have Experiment of boiling component.
- Available to test heat exchanger performance through heat exchanger.
- Boiler and plumbing-related terms, the purpose of a part, should be able to learn to understand and process the order
- To ensure the safety of the gas furnace gas valve automatically detect and install the gas block for safe driving should be configured.
- Available to save data through power gauge.
- Available to have study both of theory and experiment
- Vessel: transparent
- Pressure sensor: 4~20mA
- Pressure V/V: 4kg/cm²
- Flow meter sensor: 4~20mA
- Electric heater: 3kw
- Compressor : 1/2HP,
- Condenser : Air-cooled type
- Evaporator
- Size(LxWxH): 1100x720x1000mm
- Weight: 80Kg

Optional

- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a



Technical Description

- Available to have Experiment of oil boiler control and check fault.
- Available to experiment temp. changing and calculate, and understand a couple of tube heat exchanger through a dual tube heat exchanger.
- Available to check plumbing schematic, and study principle of condensing system.
- Available to test on operation of apparatus.
- Available to test fan coil unit.
- Available to save all of data and monitor automatic.
- Water tank: 20L, 1EA
- Oil boiler: Include oil tank
- Heat exchanger: 80-15 dual type
- Control box
- Radiator: wall type: 2EA
- Fan coil unit: 1EA
- Water flow meter : 20A
- Gas meter: 20A
- Size(LxWxH): 2200x720x1000mm
- Weight: 200Kg

Optional

- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a



Technical Description

- Available to have Experiment of Gas boiler control and check fault.
- Available to experiment temp. changing and calculate, and understand a couple of tube heat exchanger through a dual tube heat exchanger.
- Available to check plumbing schematic, and study principle of condensing system.
- Available to test on operation of apparatus.
- Available to select each of control type between vertical and parallel in a dual heat exchanger.
- Available to save all of data and monitor automatic.
- Water tank : STS 20ℓ
- Gas boiler : LPG 10,000kcal/h
- Heat exchange device : 80A-15A, dual type pipe
- Gas Meter
- Data acquisition device
- GAS Safety valve
- Water flow meter
- Cooler for heat exchanger: 1/2hp
- Size(LxWxH): 1100x720x1000mm
- Weight: 200Kg

Optional

- Refrigerant : R-22, R-134a, R-401a, R-404a, R-600a



Global Leading Company for Eco-Friendly Air Conditioning & Refrigeration Training System

YES01

953-6, Hongjuk-ri, Baeksuk-eup, Yangju,
Gyeonggi-do, South Korea

TEL : +82-2-2024-0077

FAX : +82-2-2024-0070

H.P : yes01.co.kr/en

For Further information on YES01 equipment please contact...

