

KR-102 Refrigerator Training System



The Refrigerator Training System (KR-102) is designed for the skill training of a refrigerator, including refrigerator circuit constructing, system processing, and copper tube welding. Modified from an actual refrigerator, KR-102 is installed with safety plug and terminals. In addition, for welding and refrigeration process exercises, the system consists of 3 low pressure manual valves and 1 high pressure manual valves.

● Specifications

1. Power : 1Ø110V/220V, 50Hz/60Hz
2. Single-Door Refrigerator (70L or above)
3. The Circuit Elements, Including
 - (1) Overheat protection switch
 - (2) Capacitance : 88M ~ 108M
 - (3) Defrost timer
 - (4) Overload
 - (5) Temperature switch
 - (6) PTC start relay
 - (7) 2P3cm fuse holder
 - (8) 75 °C temperature fuse
 - (9) Defrost heater
 - (10) Button switch
 - (11) 22mm φ LED lamp
 - (12) 4P copper grounding
4. Oil-Filled Stainless Steel Pressure Gauge
5. 1 / 10HP Compressor, R134a Refrigerant
6. PID Temperature Controller
7. 300V Voltmeter
8. 10A Ammeter
9. 4 Hand Valves
10. Dimension :
(710(W) x 1040(D) x 1760(H))mm ±10%

● Experiments

1. Copper processing
 - (1) Pipe cutting
 - (2) The tube flaring making
 - (3) The tube overlap making
 - (4) Bended tube
 - (5) Sealed tube
2. Copper tube welding
 - (1) Specifying a location where a tube welding method is chosen
 - (2) Tube welding methods:
silver soldering, brazing, aluminum welding
 - (3) Practicing tube welding with and without nitrogen flow
Devices required for tube welding: oxyacetylene, Soldering Guns, hydroxide flame (not included in the system)
3. System processing of refrigerators
Exercises of processing the refrigerant, including pressurized leak detecting, pressure stabilizing, vacuum making, and refrigerant filling.
4. Circuit processing
 - (1) Testing of electrical components
 - (2) Circuit connecting and inspecting
5. Testing for the running of the refrigerator
6. The equipment complies with the "Taiwan Refrigerating & Air-Conditioning Skills Test Standard"

Please refer to the appendix table for the accessories set and optional equipment of KR-102.

Appendix Table

Accessories Sets										
Items	KR-101	KR-102	KR-105	KR-112	KR-115	KR-201	KR-212	KR-221	KR-270	KR-351
Manifold Gauge	●	●	●	●	●	●	●	●	●	
Digital Thermal Meter	●			●	●			●	●	
Digital Anemometer			●	●	●	●	●	●	●	
AC Current Clamp Meter	●	●	●					●		●
Wrench Set		●		●			●			
Flaring & Swaging Kit		●					●			
Others		Leak Detector		Concentration meter			Leak Detector			
Tool Box	●	●	●	●	●	●	●	●	●	●

Optional										
Specific Tools Set		Soldering Set *					Washing tools Set			
Vacuum Pump	●	●	●		●	●	●	●	●	
Air Compressor				●						●
Wire Rack										●

Self-Provide										
Refrigerant	R-134a	R-134a	R-134a	R-404A	R-134a	R-410A	R-410A	R-410A	R-134a	

*Note. Soldering Set = If the soldering tools set is obtained, locally please prepare a fuel cylinder.



📞 22 736 3650 / 22 736 5827
 22 736 4461 / 22 728 6162
 ✉ systelec@systelec.cl
 🌐 ww.systelec.cl
 📞 +56 9 34415419
 📍 Av. Pedro Fontova 3954
 Santiago de Chile