

# KR-201

## AIR CONDITIONER TRAINING SYSTEM



### Features

1. Understand the type and structure of window type air conditioner
2. Be familiar with the running theory of window type air conditioner
3. Learn window type air conditioner circulation
4. Catch on the location of each component through transparent acrylic board
5. Use the service valves to undertake system operation and maintenance
6. Four sight glasses fully observe the change of the refrigerant when running the whole system.
7. Show temperature of each point by inserting temperature sensor
8. Use instruments for data acquisition and estimate the performance of air conditioner
9. Application of Mollier Chart
10. Application of Psychrometric Chart

### Specifications

#### 1. COMPRESSOR

- (1) Power Source : 208~230/60Hz  
208~230/50Hz is available but at extra charge
- (2) Cooling Capacity : 3.5KW
- (3) Power Dissipation : 1200Watt
- (4) Refrigerant : R-22

#### 2. CONDENSER

- (1) Cooling Type : Forced Cooling
- (2) Pipe Size : Input 3/8", Output 3/8"

#### 3. EVAPORATOR

- (1) Cooling Type : Direct Expansion
- (2) Pipe Size : Input 3/8", Output 5/8"

#### 4. REFRIGERANT CONTROLLER

- (1) Type : Capillary Tube
- (2) Size : 3.0Ø(mm)

#### 5. FILTER AND DRIER

- (1) Liquid & Service : 3/8", 1/4"
- (2) Output : 3.0Ø(mm)

#### 6. SERVICE VALVE

- (1) High Pressure Service : 3/8"
- (2) Low Pressure Service : 3/8"

#### 7. HIGH PRESSURE GAUGE

- (1) Size : 67Ø
- (2) Range : 0~35kg/cm<sup>2</sup>

#### 8. LOW PRESSURE GAUGE

- (1) Size : 67Ø
- (2) Range : 0~15Kg/cm<sup>2</sup>  
0~76cmHgVac (29.92inHgVac)

#### 9. AC VOLTMETER

- (1) Range : 0~300V

#### 10. AC AMMETER

- (1) Range : 0~20A

#### 11. TEMPERATURE DISPLAY 1

- (1) Range : -100~200°C
- (2) Sampling time : 1 cycles/sec.(total)
- (3) Display : Red high efficiency LED high 7mm (0.28")
- (4) Temperature coefficient : 50ppm/°C(0~50°C)
- (5) Operating condition : 0~50°C(20~90%RH non-condensed)
- (6) Storage condition : 0~70°C(20~90%RH non-condensed)
- (7) Power source : 115~230VAC±15%, 50/60HZ

#### 12. TEMPERATURE DISPLAY 2

- (1) Range : -100~200°C
- (2) Sampling time : 16 cycles/sec.
- (3) Display : Red high efficiency LED high 20.32mm (0.8")
- (4) Temperature coefficient : 50ppm/°C(0~50°C)
- (5) Operating condition : 0~50°C(20~90%RH non-condensed)
- (6) Storage condition : 0~70°C(20~90%RH non-condensed)
- (7) Power source : 115~230VAC±15%, 50/60HZ

#### 13. POWER SOURCE

- (1) 230VAC±15% , 50/60Hz

#### 14. DIMENSION

- (1) 1105(W)×955(D)×1495(H)mm(±10%)

### Experiments

- Knowledge of components
- Experiment of window type air condition
- Application of Mollier Chart
- Application of Psychrometric Chart