



1. Understanding the construction of the split heat pump
2. Being aware of the theory of the split heat pump
3. Understanding the circuit system of the split heat pump
4. Developing the ability to connect pipes and wires of the split heat pump
5. Use the service valves to undertake pipe-rangement of split heat pump system
6. Use instruments to require data and estimate the performance of split heat pump system
7. Application of Mollier Chart
8. Application of Psychrometric Chart

### SPECIFICATION

- Compressor
  - Power Source: 208/230/60Hz
  - Cooling Capacity: 3.6kw/3150kcal/hr
  - Power Dissipation: 1210Watt
  - EER: 2.97kcal/hr-W
  - Refrigerant: R-22
- Condenser
  - Cooling Type: Nature Cooling
  - Pipe Size: Input 3/8", Output 3/8"
- Evaporator
  - Cooling Type: Direct Expansion
  - Pipe Size: Input 1/4", Output 3/8"
- Refrigerant Controller
  - Type: Capillary Tube
  - Size: 3.0Ø(mm)
- Filter and Drier
  - Liquid & Service: 3/8"
  - Output: 3.0Ø(mm)
- Three Way Service Valve
  - High Pressure Service: 1/4"
  - Low Pressure Service: 3/8"
- High Pressure Gauge
  - Size: 67Ø
  - Range: 0... 35 kg/cm<sup>2</sup>
- Low Pressure Gauge
  - Size: 67Ø
  - Range: 0... 15 kg/cm<sup>2</sup>, 0... 76 cmHgVac (29.92 inHgVac)
- AC Voltmeter: Range: 0... 300V
- AC Ammeter: Range: 0... 20A

11. Dimension: 140(W)×810(D)×1622(H)mm(±10%)
12. Power Source: 230VAC±15% , 50/60Hz

### EXPERIMENTS

- Knowledge of components
- Management of split heat pump system
- Experiment of split heat pump system
- Fault judgment
- Application of Mollier Chart
- Application of Psychrometric Chart

