



### GENERAL EXPLANATION

This training set is designed to provide a number of faults that may occur in a mechanical cooling set and to facilitate fault diagnosis.

### EXPERIMENTS

1. Excessive refrigerant charge
2. Missing refrigerant charge
3. Oil separator clogged
4. The oil separator float remains in the open position
5. Condensation of the fluid in the oil separator
6. Condenser fan defective
7. Air-cooled condenser battery is dirty
8. Condenser pressure regulator defective
9. Aqueous condenser dirty (lime)
10. Overpressure drop failure in wet condenser
11. Compressor capacity regulator defective
12. Fluid line solenoid valve defective
13. Leakage failure when fluid line solenoid valve stops system
14. Filter drier clogged failure
15. Failure to locate air in the cooling system
16. Expansion valve partially blocked failure
17. Failure of run-out of tail charge of expansion valve
18. Capillary tube partially clogged failure
19. Automatic expansion valve partially blocked
20. Check valve malfunction
21. Evaporator fan defective
22. Insufficient air flow in the evaporator
23. Evaporator pressure regulator defective
24. Heat exchanger pressure regulator defective
25. Insufficient compression in compressor
26. Compressor fluid walk-through failure
27. Compressor overheating fault
28. Defective hot gas defrost system
29. Water cooling tower fan failure
30. Cooling tower pump defective
31. Cooling tower three-way valve defective
32. Water regulation valve defective

### TECHNICAL SPECIFICATION

The training set is used to detect defects in the cooling system. 32 different faults can be generated in the device.

### TECHNICAL DETAILS

- Semi hermetic reciprocating compressor
- Air-cooled condenser
- Air-cooled evaporator
- Capillary tube
- Evaporator, condenser, capacity and heat exchanger pressure regulators
- Electronic expansion valve
- Water cooling tower
- Digital multimeter

### DIMENSIONS

A x B x H : 2000 x 600 x 1600 mm

### OPTIONAL FEATURES

- Touch LCD Display
- USB Computer Connection
- Computer Control

### PACKAGE INCLUDED

Device, device cover, 1 printed experiment report, circuit diagram and product catalog