HVAC1110
Refrigeration Controls
and Components

Course Description

This course covers: The components common to all refrigeration systems and different types of controls that are used in today's commercial refrigeration. (3 C/ 2 lec/pres, 1 lab, 0 other)

Course Goals

The following list of course goals will be addressed in the course. These goals are directly related to the performance objectives. (*designates a CRUCIAL goal)

1. Explain Material Safety Data Sheets
2. match thermostat terms/definitions
3. match motor enclosures /characteristics
4. identify motor mount types
5. identify open drive motor parts
6. identify millivolt thermostat parts
7. identify low voltage thermostat parts
8. identify line voltage thermostat parts
9. install low voltage thermostat
10. identify capacitor types
11. match capacitor terms/definitions
12. define capacitor motor terms
13. solve wired in series/in parallel capacitor problems
14. wire run capacitor to CSR compressor motor
15. wire run capacitor to PSC compressor motor
16. start seized hermetic compressor motor
17. adjust high pressure switch
18. adjust low pressure switch
19. install oil pressure switch
20. match operating protection devices terms/definitions
21. identify electrical system protection device types
22. match electrical system protection devices /characteristics
23. identify pressure actuated protection device types
24. identify current overload protection device types
25. match pressure actuated protection devices/descriptions
26. match wiring diagrams terms/definitions
27. match schematic symbols/component names
28. list solid state component characteristics on wiring diagram
29. match 3-phase motor terms/definitions
30. list 3-phase motor electrical characteristics /components
31. describe 3-phase motor reverse rotation procedure
32. list shaded pole motor motor applications
33. list split-phase motor applications
34. draw domestic refrigerator wiring diagram
35. draw indoor air handler/outdoor condensing unit wiring diagram
36. draw domestic refrigerator ladder schematic

Developed/Revised: September 9, 1998