REFR2215 - Advanced Electrical Applications

Credits:	3 (0/3/0)
Description:	This course covers the application of electrical principles used in commercial, industrial, hospital and supermarket refrigeration systems. Safety is emphasized.
Prerequisites:	• Completion of HVAC/R diploma.
Corequisites:	
Pre/Corequisites*:	
Competencies:	1. Practice all safety guidelines regarding electricity. 2. Install a low-pressure time-delay bypass circuit for low ambient conditions. 3. Test run and start capacitors for opens, shorts and capacitance values using a volt-ohm meter. 4. Install a hard start kit on a single-phase air conditioner. 5. Demonstrate the use of current relays for compressor starting. 6. Program a commercial multistage electronic controller. 7. Diagnose compressor electrical failure using manufacturer's data. 8. Wire various advanced electrical circuits from wiring diagrams. 9. Employ ladder diagrams to evaluate large commercial refrigeration operating systems. 10. Replace a positive temperature coefficient (PTC) device with a potential relay and start capacitor. 11. Learn the correct ways to program and operate mechanical and electronic time clocks.
MnTC goal areas:	None

**Can be taking as a Prerequisite or Corequisite.*

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