Course Title

RV-11541 - 2020 NEC® Changes: Branch Circuit GFCI Protection

Contact Hours: 1

Believe it or not, GFCI protection first appeared in the 1962 edition of the NEC®, where it applied to underwater lighting for swimming pools. Many changes have been made to the Code since then. This interactive online course will help walk you through some of the most recent changes concerning this live safety device, as well as review other changes associated with branch circuits. We will address changes to Chapter 2 Wiring and Protection, noting updates to Articles 100, 200, and 210.

Course Objectives:

By the end of this course, you will be able to:

- Define terms located in Article 100
- Recall the changes to Article 200 Use and Identification of Grounded Conductors
- Describe the revisions to Sections 200.9 Means of Identification of Terminals and 200.10(B)
 Identification of Terminals for Receptacles, Plugs and Connectors concerning silver identification
- Recall the changes to Article 210 Branch Circuits
- Recall the revisions to Section 210.8(A) Dwelling Unit Ground Fault Circuit Interrupter Protection for Personnel and Section 210.8(B) Other Than Dwelling Unit GFCI Protection for Personnel
- Describe new Section 210.8(F) Outdoor Outlets and Section 210.8(E) Equipment Requiring Servicing and its correlation with Section 210.63

Content Outline

Introduction 5 Minutes

Course Overview

Article 100 Definitions 10 Minutes

• Clarification of Definitions

Article 200 Use and Identification of Grounded Conductors 15 Minutes

- Definitions
- Section 200.3 Connection to Grounded System
- Sections 200.9 and 200.10

Article 210 Branch Circuits 25 Minutes

- Definitions
- Section 210.5 Identification of Branch Circuit Ungrounded Conductors Supplies from More Than One Nominal Voltage System
- Section 210.6 Branch Circuit Voltage Limitations 277 Volts to Ground
- Section 210.8 Ground-Fault Circuit-Interrupter Protection for Personnel
- Section 210.8(A) GFCI Protection Dwelling Units
- Section 210.8(B) Other Than Dwelling Units
- Section 210.8(B) Specifically Sinks, and Receptacles in Health Care Facilities
- Section 210.8 Relocations

- Section 210.8 New
- The Relationship Between 210.8(E) and 210.63

Conclusion 5 Minutes

Summary & Implications

1. List of reference and source materials/bibliography

All material necessary to complete the course is included in the course. A subject matter expert using his or her own personal knowledge writes the course. Students are not directed to additional material as a requirement for course completion, only as added information for personal interest.

2. <u>Instructor Information</u>

Vincent Della Croce – Resume Attached

3. Totals hours of Instruction

1 Hour(s) – this course is online and available 365/24/7 to anyone with internet access

4. <u>Certificate of completion</u>

sample is attached

5. Proof of compliance with interactive distance learning requirements

- a. Courses are being developed with interactivity as a key component in its development. RedVector's 'rule of thumb' is to insert an activity every 3 to 5 minutes or 500 to 800 words of text. We offer a variety of activities through the coursework to keep the user involved and requiring knowledge of the course materials being reviewed in order to move forwards.
- b. Users sign into an account with a unique User Name and Password. We request that a user agree to an affidavit stating that they are the owner of the account before proceeding to the exam. Course completion is measured by passing the exam with a minimum score of 75%.
- c. FL Contractors are notified at the beginning of the course that they are required to spend 50 minutes per credit hour in the course in order to receive an accreditation certificate. The LMS will not allow a certificate to be issued or reflect course completion until the time requirement is not by the user.
- d. By one click of the button on each screen of the coursework, the user is given the option to obtain information in several ways. We have a FAQ page, direct email request to Client Support or they may call through a Toll Free number. Our Client Support Team is available from 8 am to 6 pm, Monday thru Friday. If there is a general question, RedVector consults with several Subject Matter Experts that respond to questions in a timely manner. If the question is more

- specific requiring a direct response from the course author, communication is made with the author to provide the user a response.
- e. There is a statement required to be agreed upon by the User confirming their identity before and after taking the test.
- f. Each account is established with a unique user name and password in order to access. If a user is taking a longer than normal time to review a section, they will receive a pop-up and have 90 seconds to respond or their session will time out requiring the user to sign into the site again if they wish to continue the coursework.