

# **Meeting The Requirements of NEC Code 210.8(B) --Class A GFCI Electrical Protection in Commercial Kitchen Installations**



Commercial Kitchen environments, by necessity, contain a concentration of high voltage appliances that can create a significant risk of electroshock injury or death should a damaged, malfunctioning or improperly installed device “leak” dangerous electrical current to its conductive surroundings.

To help mitigate the danger to personnel and property in the event such current leakage should occur, the National Electric Code (NEC) now requires Class A GFCI electrical protection be installed in conjunction with all cord connected appliances in the commercial kitchen environment under 2020 NEC Code 210.8(B) - This code applies to all single-phase receptacles rated at 150 volts to ground or less, 50 amperes or less, and 3-phase receptacles rated 150 volts to ground or less, 100 amperes or less.

To meet the challenge of protecting 3-phase applications in compliance with the NEC code, North Shore Safety located in Mentor, Ohio has developed a line of UL 943 listed products for use in 3-phase applications from 15 amps up to 60 amps, with an up to 100 amp device presently in development for release in 2020.



### **NSS UL Listed GFCI Protection Device in High Amperage, 3-Phase Field Application**

While the current NEC code only specifies Class A GFCI protection for cord connected appliances, best practice for assuring personnel protection within the commercial kitchen environment would be to apply Class A GFCI protection to hardwired appliances as well. The potential for electrical current leakage from appliances, faulty or defective wiring components, etc. is present regardless of the choice to cord connect or hardwire the devices.

Class A GFCI protection is designed to de-energize the applicable electrical circuit in the event that 5 mA +/- 1mA of leakage current is detected, removing the electric shock hazard before a harmful level of energy can be transmitted to personnel. More sophisticated devices, such as those illustrated above now employ self-testing technology to assure that the GFCI protection device is fully functional at all times, providing the expected level of protection for personnel and equipment in the application.

For additional information in meeting the NEC Code 210.8(B) or other electrical protection applications, please contact North Shore Safety at (440) 205-9188 or visit [www.nssltd.com](http://www.nssltd.com).