Multiple Voltage Capabilities

General

Today’s emergency lighting inverters are required to accommodate a number of lighting fixture types and technologies, including LED. The problem is that not all fixtures or drivers require the same nominal voltage, but the preferred electrical design is to have them all powered from the same emergency lighting inverter. In addition, other life safety systems may be wired to the inverter as allowed by code and the local authority having jurisdiction (AHJ), potentially creating additional needs for different nominal voltages. It is for this reason that having the ability to supply more than one nominal output voltage (e.g. single phase 120VAC and 277VAC) from a single inverter is a critical feature.

The “UltraLITE Model ELU” & “eLITE Model ELE”

The “ELU” and “ELE” inverter models are designed to supply multiple, pre-wired voltages at the same time without any inverter modifications. Both models are available with this voltage flexibility by using an internal, multi-tapped, isolation transformer capable of delivering full-rated output power at two or more nominal voltages. Each nominal voltage is pre-wired to terminal blocks for a clean, simple installation. Typical dual output voltage examples include 240/120VAC, 277/120VAC, or 347/120VAC. For illustration purposes, please see the “ELE”-specific diagram below.

Summary

Controlled Power Company provides lighting inverters which are designed to accommodate various emergency lighting fixture types and technologies on the same inverter, regardless of their nominal voltage requirements. Given a 277/120VAC or 347/120VAC example...load balancing is not required. As long as the output power rating of the inverter is not exceeded...full-rated power is available at either voltage. In addition, output distribution breakers are available, factory-wired to your specified voltage output. Installation made easy!