

ARTICLE 625

ELECTRIC VEHICLE POWER TRANSFER SYSTEM

Introduction to Article 625—Electric Vehicle Power Transfer System

This article covers the installation of wiring and equipment used to connect electric vehicle power transfer systems to premise wiring. Electric vehicles have evolved over the last decade into not only a load that consumes power, but one that also must be managed and may be used as an interconnected contribute power system. Many of these rules are outside of the scope of this material, however we do cover the following topics in this article:

- ▶ Scope
- ▶ Electric Vehicle Branch Circuit
- ▶ Overcurrent Protection
- ▶ Disconnecting Means
- ▶ Interactive Equipment
- ▶ Wireless Power Transfer Equipment
- ▶ GFCI

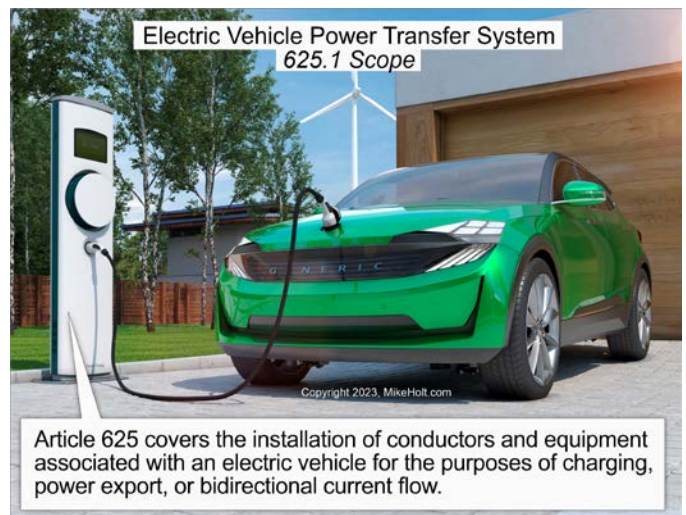
Part I. General

625.1 Scope

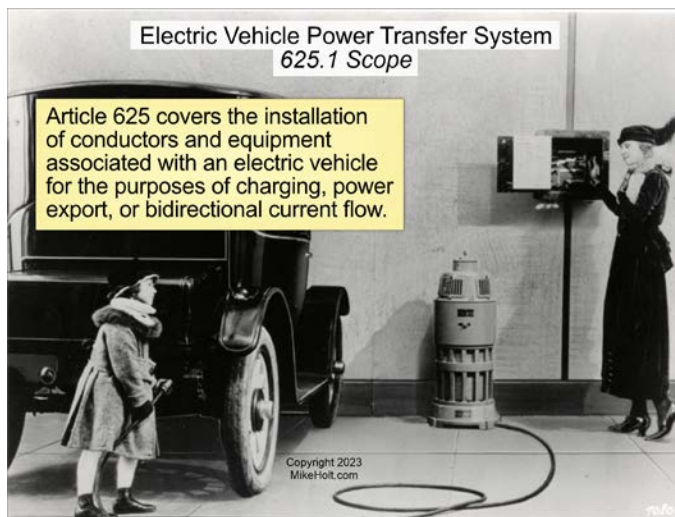
Article 625 covers the installation of conductors and equipment associated with an electric vehicle for the purposes of charging, power export, or bidirectional current flow. ▶[Figure 625-1](#) and ▶[Figure 625-2](#)

According to Article 100, “Electric Vehicle” is an on-road use automobile, bus, truck, van, neighborhood electric vehicle and motorcycle primarily powered by an electric motor. ▶[Figure 625-3](#)

Note: Off-road, self-propelled electric industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and boats are not electric vehicles for the purpose of the *NEC*. ▶[Figure 625-4](#)



▶[Figure 625-1](#)



►Figure 625-2



►Figure 625-4



►Figure 625-3