

UNIT 26

GFCIs, GFPEs, AFCIs, AND SPDs

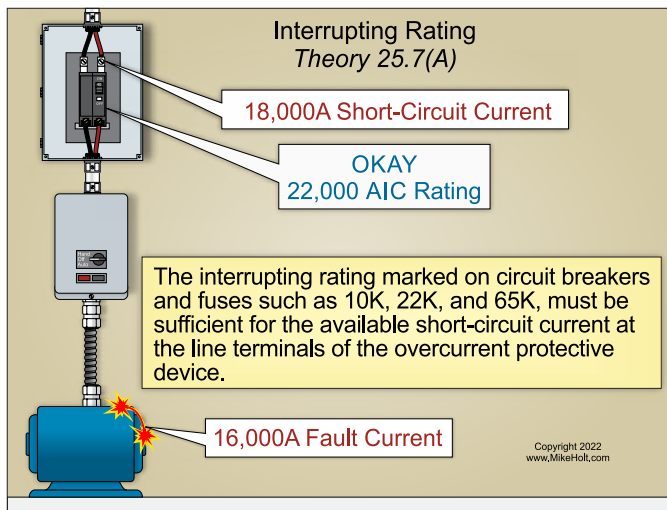
26.1 Introduction

In addition to overcurrent protection of electrical circuits, electronic devices with the technology to protect against electric shock and fire are used in the electrical system. In this unit you will learn:

- ▶ what a ground-fault circuit interrupter is
- ▶ what an arc-fault circuit interrupter is
- ▶ what ground-fault protection of equipment is
- ▶ what a surge protective device is

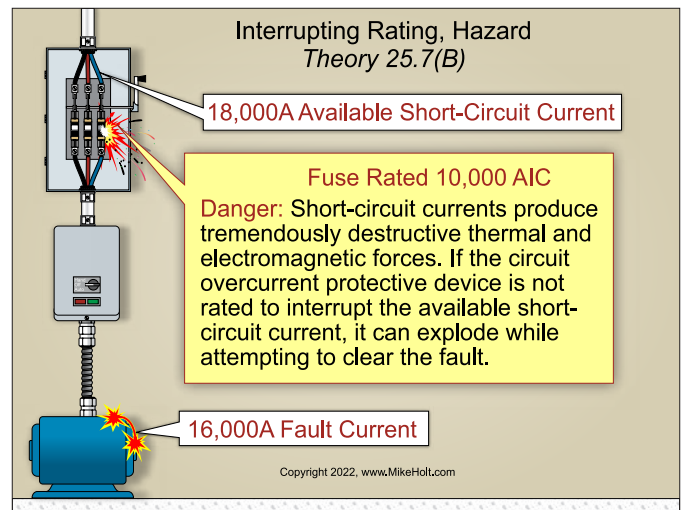
25.7 Overcurrent Protective Devices, Interrupting Rating

(A) General. Overcurrent protective devices are intended to interrupt a circuit during an overload, short circuit, and/or ground fault. The interrupting rating marked on circuit breakers and fuses such as 10K, 22K, and 65K, must be sufficient for the available short-circuit current at the line terminals of the overcurrent protective device. ▶Figure 25–25



▶Figure 25–25

(B) Hazard. Short-circuit currents can produce tremendously destructive thermal and electromagnetic forces. If the circuit overcurrent protective device is not rated to interrupt the available short-circuit current, it can explode while attempting to clear the fault. ▶Figure 25–26



▶Figure 25–26