



### *Summary*

## **IS 302 (Part 2/Sec 76): 1999**

### **SAFETY OF HOUSEHOLD AND SIMILAR ELECTRICAL APPLIANCES**

#### **PART 2 PARTICULAR REQUIREMENTS**

#### **Section 76 Electric Fence Energizers**

An **electric fence energizer** is a device that powers an electric fence by delivering electrical pulses along the wires, which can deter animals or intruders by delivering a mild shock when contact is made. Commonly used in agriculture for livestock control and for security purposes, electric fence energizers are designed to provide a controlled electric charge while minimizing risk to animals, people, or property.

The **IS 302-2-76: 1999** standard outlines the **safety requirements** for these energizers to ensure their safe operation in household and similar environments. Key safety aspects include protection against electric shock, fire hazards, and mechanical injuries. The standard sets requirements for the design and construction of energizers, focusing on **electrical insulation, grounding, and protection from accidental contact with live parts**. It also stipulates that the energizers must be **capable of operating reliably under varying environmental conditions**, such as humidity or temperature changes.

Additionally, the standard mandates specific testing procedures to confirm that the energizers meet safety benchmarks. This includes ensuring that the energizer delivers a **safe level of electrical pulse output** and that all **components are robust enough to withstand regular use**.

Energizer are categorized in two types

- a) **Mains Operated Energizer**: - Energizer designed for direct connection to the mains.
- b) **Battery-Operated Energizer Suitable for Connection to the Mains**: - these are further categorized in Four types, Type A, B, C and D Energizers.

***By adhering to these standards, manufacturers ensure that their electric fence energizers are both effective in operation and safe for consumers, preventing potential hazards in everyday use.***