IS 2082:2018 Stationary Storage Type Electric Water Heaters – Specification

Electric storage water heaters are among the most popular and widely used systems for providing a steady supply of hot water, commonly known as "electric geysers." These heaters include essential components such as an outer body, inner tank (made of copper or aluminium), heating element (typically copper), thermostat/thermal cut-off, safety valve, insulation, and electric cable.

These storage-type water heaters use a heating element within a tank to heat water to the desired temperature, which can be adjusted using the thermostat or thermal cut-off. They are available in various capacities, typically ranging from 6 to 200 liters, allowing users to choose the right size based on their hot water needs.

Modern electric water heaters come with advanced safety features, including temperature and pressure relief valves to prevent excessive pressure or temperature build-up. Many models also include automatic shutoff mechanisms to prevent overheating. In addition to safety, energy efficiency is a key performance factor in these water heaters.

This standard outlines the general, safety and performance requirements electric storage water heaters for household and similar purposes and intended for heating water below boiling temperature. The standard cover safety requirements which include protection against access to live parts, leakage current and electric strength at operating temperature, moisture resistance, provision for earthing, minimum creepage and clearance distances. Performance requirements covered in the standard include input (energy consumption), standing loss, capacity, hot water output, deviation of dial calibration, finish.