

## **IS 8148 : 2018 Ducted and Package Air-Conditioners — Specification ( *Second Revision* )**

Ducted and packaged air conditioners are commonly used in residential and commercial spaces, help cool or heat indoor environments through air distribution via ducts. The standard encompasses both single-unit and split-system configurations that utilize air-cooled or water-cooled condensers.

Consumers expect high performance, efficiency, easy maintenance, quiet operation and electrical safety from air conditioners. Essential quality parameters include effective cooling and heating capacity, energy efficiency, low noise levels, and durability. Reliability under different environmental conditions and compliance with safety norms, such as protection against electrical hazards and overheating, are also highly valued.

IS 8148 sets minimum performance requirements, including cooling and heating capacity that must reach at least 90% of the rated value. Energy efficiency is evaluated using the Indian Seasonal Energy Efficiency Ratio (ISEER), ensuring that the units are energy-efficient throughout varying conditions. Noise tests are conducted to verify that the units operate quietly, enhancing user comfort. The standard also mandates construction requirements to ensure that the units are robust, resistant to corrosion, and capable of safe operation without excessive vibration or noise. Additional tests include endurance checks, leakage assessments, and electrical safety tests, ensuring comprehensive compliance and consumer safety. Compliance to IS 8148 is mandatory, which ensures that air conditioners meet these rigorous standards.