



ENERGY SOLUTIONS (PVT) LIMITED

Engineering solutions for your power needs

Safety Considerations While Handling Generators

Safety Considerations

A. General Hazards

- 1. Installation, repair and maintenance should always be in accordance with the manufacturer's instructions and recommendations.
- 2. Exhaust fumes emitted by generator sets contain poisonous gases like carbon monoxide that can be life threatening and result in death. Exhaust systems must be properly installed, adequate ventilation must be provided to ensure unobstructed flow of cooling and ventilating air, and emissions must be directed away from inhabited zones.
- 3. The area around the generator must be clean and free of clutter and any combustible material that can be hazardous.
- 4. The equipment must be regularly inspected and defective or damaged parts must be replaced in a timely manner.
- 5. It is essential that the operating personnel remains alert at all times while working with the generator.
- 6. The unit should not be opened or dismantled while it is functioning. Moving or hot parts should not be tampered with. Battery cables should be disconnected before proceeding to work on the generator to eliminate any possibility of an accidental start-up.

B. Electrical Hazards

- 1. All power voltage supplies should be turned off at the source while installing or servicing the generator.
- 2. All electrical connections, such as wires, cables and terminals must be properly insulated and covered, and should not be touched with bare hands or while in contact with water. This is essential to prevent the occurrence of an electric shock.
- 3. The frame of the generator and any external conducting parts should have proper grounding / earthing wiring. This should never be disconnected.
- 4. Wiring, cable and cord sets must be of the recommended capacity.

C. Fire and Explosion Hazards

- 1. Smoking in the vicinity of the equipment can be fatal.
- 2. Fuel or oil spills around the generator, leakages from the unit's fuel system and fuel supply lines, and presence of combustible materials around the generator will pose a risk of an explosion.
- 3. A fire extinguisher should be readily available. Use of extinguishers that operate on carbon tetra-chloride is strictly prohibited since the fumes are toxic and can deteriorate the insulation on the wiring of generators.