

Voltage Drop thru Extension Cords

Recovery equipment is used primarily in the hot summer months when supply voltage can be at the lowest point of the year due to the demand from AC/R equipment operating at peak conditions. When low supply voltage and a long, undersized extension cord are combined, it will have a disastrous effect on equipment performance and can lead to electrical equipment failure.

- The **G5 Twin and G1 Single** are designed with features that allow the unit to shut itself off when subjected to overheating due to low voltage.

When sized properly and kept as short as possible, the extension cord will deliver the available supply power without excessive voltage drop to the equipment through the cord itself.

Oversized extension cords have less resistance, less voltage drop, and operate at lower temperatures, increasing the efficiency and life expectancy of both the equipment and cord itself.

However, extension cords that are **undersized**, or **longer than needed**, have higher resistance, greater voltage drop, run hotter, and are the primary reason for poor equipment performance and field service electrical equipment failures.

Recommended Extension cord sizes for industrial-duty field service electrical equipment:

- Up to 25 feet – 12/3 UL/CSA cord
- 25 to 100 feet – 10/3 UL/CSA cord

Service tip: Always use the shortest length and largest gauge extension cord possible when operating industrial-duty field service electrical equipment.