

Enhanced Generator Collector Brush Holder

Advanced Brush Holder

Applications

An Enhanced Collector Brush Holder delivers significant safety improvements by reducing the chance of contacting live brushes, increased reliability by eliminating incomplete installations, and increased availability by reducing the risk of collector flashovers.

Changing collector brushes is the most frequent generator maintenance activity.

Safety and RAM (Reliability, Availability, and Maintainability) of the collector and brush rigging is of prime importance to owners and operators.

In order to improve safety and RAM, GE has developed a new brush holder that includes sveral new features.



Brush Holder

This brush holder is initially offered for models H33 (7FH2), H35 (7FH2B), and H53 (324) Gas Turbine-Driven Generators.

Steam Turbine Generator applications will be offered on case by case basis.

Benefits

- •Enhanced safety using a light-weight yet robust holder with large separation from energized components
- •Improved reliability by eliminating risks of incomplete installation and brush hang-ups
- •Increased availability by reducing risk of collector flashovers
- •Improved maintainability by eliminating tools, permanently attaching the handle, decreasing time for brush change-out, and increasing brush life

Key Features

- •Double wide- change two brushes at a time
- •Integral, insulated brush changing handle
- •Advanced slide-in features, easy insertion using one hand
- •Integral handle rotates 90° to lock assembly in place and give clear visual feedback
- •Lightweight aluminum construction with durable, hard, anodized surface coating...minimized brush abrasion and dust build-up
- •No tools required for replacement of brush, brush terminal, or spring (integral pigtail snap ring, clip on springs, slide-in brush)
- •Taller brush box / brush to avoid brush hang-ups & reduce brush current selectivity, extended brush life
- •Cams firmly hold brush from sliding in box until fully inserted & disengage reliably
- •Direct replacement for single-wide holders without modification to the brush rigging
- •Confirmed to be superior to older designs by tests on GE rotating, energized test rigs
- •Extensive validation at 7FH2 customer site