



Wind Turbines

Wind Application Bulletin

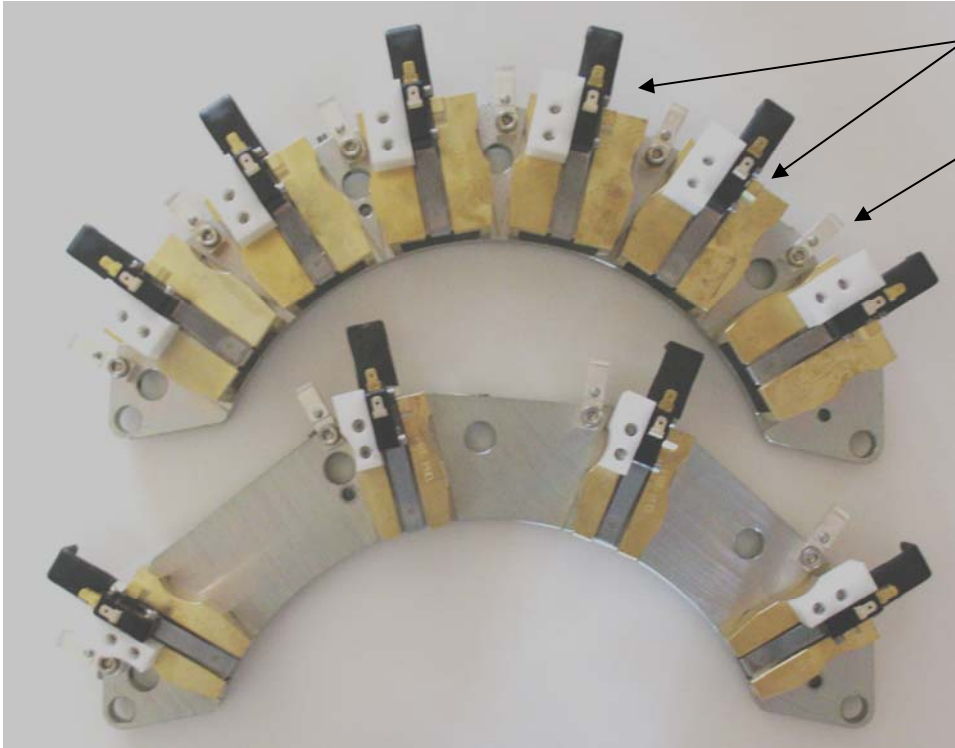
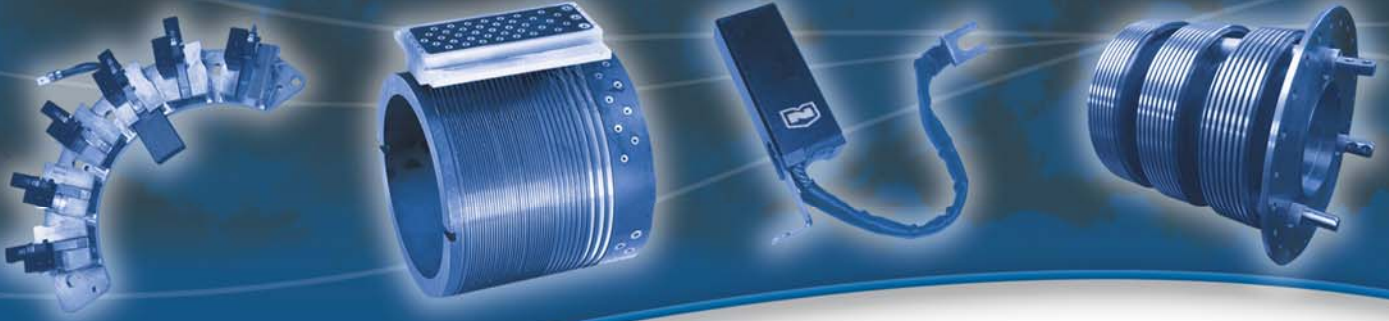
Hitachi 1.5 MW Doubly Fed Asynchronous Generators

Many Hitachi generators are experiencing **poor brush life, heavy dusting, and damaged slip rings**. These symptoms can be corrected with the right carbon brush application technology.

Morgan AM&T has developed a solution for these problems. The main improvements and results of this upgrade are:

- Brush life is easily extended to 18 months or more
- Reducing the amount of brush dust translates to reducing overall maintenance cost and reducing or eliminating flashovers
- Radial mounted brush holders eliminate friction chatter that occurs when brushes are placed in a stubbing or leading orientation (rotation into the toe of the brush)
- The brush holders are precision machined and polished and encompass the entire length of the brush, increasing brush stability and decreasing side wall friction
- The brush is an Aerospace grade material that films well in both low and high load conditions, and equally as well in low humidity atmospheres
- Constant pressure type of spring, which delivers the proper and equal force for a low wear differential from brush to brush
- The spring clip assembly is a revolutionary design which allows for easy, economical replacement of the spring while changing brushes to insure proper spring force
- A grounding system that circumferences 120° around the ring using 4 brushes to assure a stable and high integrity grounding circuit.
- This improved robust design stabilizes the entire brush rigging
- The upgrade utilizes an EZ Connector termination system allowing for easy brush change outs without the need for tools. Brush change out time is reduced in half and there is no wasted effort looking for dropped bolts and washers!
- The result of better brush life reduces the cost of replacing brushes and inventory costs. Morgan AM&T brushes are economical and long lasting

PB04 HIT 01-2009



**6 Radial Brush Holders
and Spring Clips**

**EZ Connector Receptacle
#65000325**



**EZ Connector &
Power Brush**



**Spring Clip (W61074828)
and Replaceable Spring
(W61074843 PWR)
(W61074844 GND)**

**Complete Assy Includes
3 Phases and 1 Ground
Item #W61074846**



**Power Brush
#W61049528
Ground Brush
#W61049731**



NEVER AGAIN !!

MorganAM&T™

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