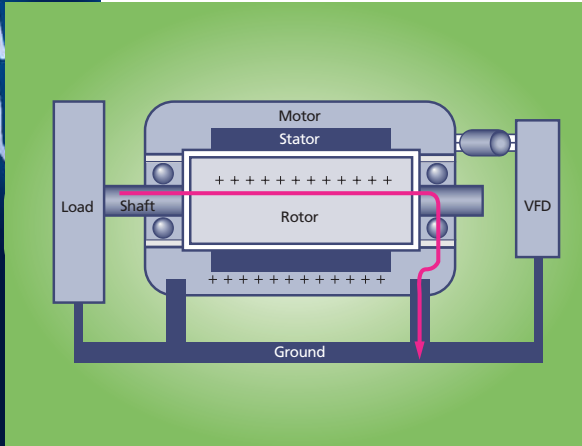


# Protect Your Motor From Electrical Bearing Damage



## PROBLEM: Induced Shaft Currents Damage Bearings

The use of variable-speed drives with AC motors induces electrical currents on the motor shaft. Once they exceed the resistance of the bearing lubricant, these currents discharge to ground (typically the motor housing), causing fusion craters in the bearings. Over time, these craters increase in size and number, resulting in frosting, pitting, fluting, and eventually bearing failure. This type of premature bearing failure can cost thousands of dollars in increased maintenance and lost production.



## SOLUTION: AEGIS™ SGR\*: The World's Most Effective Shaft Grounding Brush

The new AEGIS™ SGR Conductive MicroFiber™ shaft grounding brush prevents electrical damage to motor bearings by safely channeling harmful shaft currents to ground. Using proprietary Electron Transport Technology™, the conductive microfibers inside the AEGIS™ SGR provide the path of least resistance for damaging shaft currents, preventing electrical damage to motor bearings and dramatically extending motor life.



## The Longest Lasting Protection Available

Not only is the AEGIS™ SGR the world's most effective grounding brush, it offers the longest lasting protection available.

- Maintenance-free
- Unaffected by dirt, grease, or other contaminants
- Lasts for life of motor

## Fast, Easy Installation

- Easily installed in minutes—*even in the field*
- Mounts on either end of motor shaft
- Simple screw-on mounting brackets
- No machining required

\* Patents Pending

## Sizes for Most NEMA Motors

Available in standard sizes for:

- NEMA motors: 1 to 1500 HP
- Shaft diameters: 0.311" to 6.020" (8 mm to 153 mm)
- Larger sizes for shafts greater than 6" available
- No RPM limitations

Motor HP
1 - 2
2 - 5
3 - 10
5 - 30
10 - 75
20 - 100
30 - 300
50 - 100
75 - 400
300 - 800
800 - 1500

## NEMA Frame

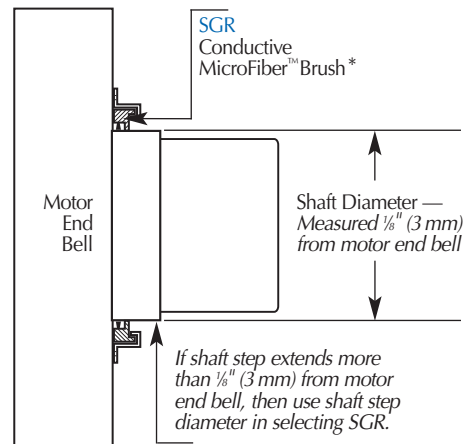
143T, 148T, 182, 184
182T, 184T, 213, 215
213T, 215T, 254U, 256U
254T, 256T, 284TS, 286TS, 284U, 286U
284T, 286T, 324TS, 326TS, 364TS, 365TS, 324U, 326U
324T, 326T, 404TS, 405TS, 364U, 365U
364T, 365T, 444TS, 445TS, 447TS, 449TS, 404U, 405U
404T, 405T, 444U, 445U
444T, 445T, 447T, 449T
5007L, 5009L, 5011L
5808, 5810, 5812

## Selecting the Right Size SGR for Your Motor

- Step 1: Measure shaft diameter at a point  $\frac{1}{8}$ " (3 mm) from motor end bell.
- Step 2: To select the correct SGR part number, refer to the SGR size chart provided.

NOTE: If you have any questions, please call Electro Static Technology Customer Service: **1-866-738-1857**, or e-mail: [sales@est-aegis.com](mailto:sales@est-aegis.com) for help with SGR selection.

\* Patents Pending



## Installation

For proper operation and optimum performance, install AEGIS™ SGR so that:

- The Conductive MicroFibers™ touch the shaft for effective shaft grounding.
- The aluminum brush holder frame extends out from the motor end bell approximately 0.28" (7 mm).
- The aluminum brush holder frame has even clearance around the shaft.

- 1) Slide SGR over motor shaft and position for even clearance around the shaft.
- 2) Drill two  $\frac{1}{4}$ " deep holes into the motor end bell and tap each with a 6-32 thread.
- 3) Lock SGR in place by fastening brackets to motor end bell using screws provided.

