### **AEGIS® Shaft Grounding Rings**





#### VFD-Driven Motors Are at Risk of Electrical Bearing Damage!

Motors operated by variable frequency drives (VFD) are vulnerable to VFDinduced shaft voltage and bearing currents that can cause premature bearing failure - often in as little as 3 months!

VFDs induce destructive shaft voltage that can discharge through motor bearings, burning bearing grease and reducing its effectiveness. Through electrical discharge machining (EDM), these discharges can also cause pitting, frosting, and fluting damage to the motor's bearings and eventual bearing failure. The result is costly repairs, downtime, and lost production.

#### **Protect Motor Bearings With AEGIS® Shaft Grounding Rings**

By channeling harmful VFD-induced shaft current away from bearings and safely to ground, AEGIS<sup>®</sup> Shaft Grounding Rings protect motors from costly bearing damage.

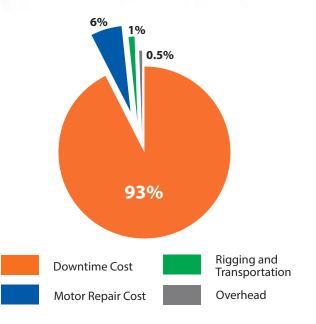
#### **Bearing Protection Best Practices**

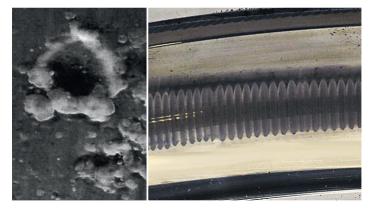
The AEGIS® Motor Repair Handbook details best practices for protecting VFD-driven motors from electrical bearing damage and preventing costly repairs, downtime and lost production.

Learn about:

- · Bearing currents and shaft voltage
- AEGIS<sup>®</sup> technology
- Shaft voltage testing
- Installation best practices

For detailed recommendations, refer to the AEGIS® Bearing Protection Handbook. An essential reference, the Handbook is available free at





Prevent EDM Pitting and Fluting Damage



# **AEGIS® Shaft Grounding Ring Options**



# Standard Mounting Clamps (-1)

Shaft diameters: 0.311" to 6.02" 3 to 4 mounting clamps, 6-32 x 1/4" cap screws and washers



# Split Ring (-1A4)

Shaft diameter: 0.311" to 6.02" 4 to 6 mounting clamps, 6-32 x 1/4" cap screws and washers Installs without decoupling motor



#### **Bolt Through Mounting (-3FH)** Shaft diameters: 0.311" to 6.02" 6.3

Shaft diameters: 0.311" to 6.02", 6-32 x 1/2" flat head screws 2 mounting holes up to shaft size 3.395" 4 mounting holes for larger sizes



#### Conductive Epoxy Mounting (-OAW, -OA4W) Shaft diameters: 0.311" to 6.02"

Solid and Split Ring Conductive Epoxy Included



# Press Fit Mounting (-0A6)

Shaft diameters: 0.311" to 6.02" Clean dry 0.004" press fit Custom sizes available



uKIT with Universal Mounting Bracket Sized for NEMA and IEC frame motors Solid and Split Ring

Can be mounted with hardware or conductive epoxy



# AEGIS® PRO Series

AEGIS® PROSL, PROSLR, PROMAX, PROMR



# AEGIS<sup>®</sup> Shaft Voltage Tester<sup>™</sup>

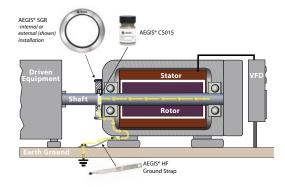
100 MHz Digital Oscilloscope, 10:1 probe with SVP tip for measuring voltages on a rotating shaft AEGIS® One-Touch™ instant image capture



## Accessories

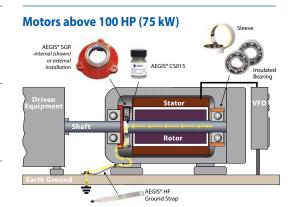
HFGS - AEGIS® High-Frequency Ground Strap CS015 - AEGIS® Colloidal Silver Shaft Coating EP2400 - AEGIS® Conductive Epoxy

## Motors up to and including 100 HP (75 kW)



Install AEGIS® Shaft Grounding Ring – either internally or externally – on drive end or the non-drive end of motor.

### Product recommendation: AEGIS® SGR



- Drive End: Install AEGIS® Shaft Grounding Ring - Internally on the back of the bearing cap or externally on the motor end bracket.
- Non-Drive End: Isolate bearing housing with insulated sleeve or coating or use insulated ceramic or hybrid bearing to disrupt circulating currents.

Product recommendation: LV Motors up to 500HP: AEGIS® SGR LV Motors over 500HP: AEGIS® PRO Series MV Motors: AEGIS® PRO Series

#### **Electro Static Technology**

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