VFD-Driven Motors Are at Risk of Electrical Bearing Damage!
Motors operated by variable frequency drives (VFD) are vulnerable to VFD-induced shaft voltages and bearing currents that can cause premature bearing failure - often in as little as 3 months!
VFDs induce destructive shaft voltages and high frequency currents which 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® Rings
By channeling harmful VFD-induced shaft voltages away from bearings and safely to ground, AEGIS® 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 voltages
- AEGIS® 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 www.est-aegis.com/handbook
Standard Mounting Clamps (-2)
Shaft diameters: 7.9 to 152.9mm
3 to 4 mounting clamps, M3 x 0.50 x 8mm cap screws and washers

Split Ring (-2A4)
Shaft diameter: 7.9 to 152.9mm
4 to 6 mounting clamps, M3 x 0.50 x 8mm cap screws and washers
Installs without decoupling motor

Bolt Through Mounting (-3MFH)
Shaft diameters: 7.9 to 152.9mm
M3 x 12mm flat head screws
2 mounting holes up to shaft size 98.9mm
4 mounting holes for larger sizes

Conductive Epoxy Mounting (-0AW, -0A4W)
Shaft diameters: 7.9 to 152.9mm
Solid and Split Ring
Conductive Epoxy Included

Press Fit Mounting (-0A6)
Shaft diameters: 7.9 to 152.9mm
Clean dry press fit
Custom sizes available

uKIT - SGR 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, Large SGR, WTG
AEGIS® PROSL, PROSLR, PROMAX, PROMR
Large SGR Rings over 153mm
AEGIS® WTG for Wind Turbine Generators

AEGIS® Shaft Voltage Tester™ Oscilloscope
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 75 - 100 kW
Low Voltage

• Install AEGIS® Bearing Protection Ring — either internally or externally — on drive end or the non-drive end of motor. Use AEGIS® Colloidal Silver Shaft Coating (PN CS015) on motor shaft where fibers touch.

Product recommendation: AEGIS® SGR

Motors Greater than 75 - 100 kW

• Drive End: Install AEGIS® Bearing Protection Ring - Internally on the back of the bearing cap or externally on the motor end bracket. Use AEGIS® Colloidal Silver Shaft Coating on motor shaft
• 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 375kW: AEGIS® SGR
LV Motors over 375kW: AEGIS® PRO Series
MV Motors: AEGIS® PRO Series

Download the AEGIS® Best Practices Handbook:
www.est-aegis.com/handbook