Mounting Kit Offers Simple, Effective Way to Protect Motor Bearings

To simplify the protection of bearings in VFD-driven motors, Electro Static Technology has introduced the Split-Ring AEGIS bearing protection ring with conductive epoxy mounting. Developed for fast, easy field installation without detaching coupled equipment, the new Split-Ring kit offers the most effective long-term protection of AC motor bearings from electrical damage, providing a path of least resistance and safely channeling VFD-induced bearing currents to ground. The unit has a 360-degree circumferential inner ring of conductive microfibers permanently secured in place by the patented AEGIS FiberLock channel. The unique FiberLock channel design not only prevents the microfiber brushes from loosening or falling out, but also protects them from breakage. When used by HVAC service contractors, motor repair shops, and plant maintenance departments, the conductive-epoxy-mounted Split-Ring AEGIS bearing protection ring prevents bearing noise, downtime, and costly motor repairs/replacements.
In addition to the ring, the kit contains engineered silver-filled conductive epoxy. After removing the paint from the installation area of the motor end bell, the installer mixes the epoxy resin and activator, applies the adhesive to the back side of the ring, centers the ring halves around the motor shaft, and holds them in place to allow the adhesive to set. The entire procedure, including cleaning the end bell, takes about 10 minutes. Unlike conventional shaft grounding brushes, the ring is maintenance-free and lasts for the life of the motor. It works with virtually no friction or wear, regardless of motor RPM, and is unaffected by dirt, grease, or other contaminants.

Used increasingly to save energy, variable frequency drives (VFDs, also known as inverters) induce currents on motor shafts. These currents discharge through bearings, causing fusion craters on bearing race walls. Over time, this “bearing fluting” can lead to noise, vibration, bearing failure, and catastrophic motor failure. By protecting bearings, the Spit-Ring kit extends motor life, locking in energy savings to make VFD-controlled systems sustainable and truly “green.”

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