

RE3 Series Shaft Grounding System

Shaft Grounding Systems, Inc.

The RE3000 series SGS™ patented shaft grounding system is designed to control shaft-to-frame capacitive discharge through bearings by providing a single low impedance pathway from the shaft to the frame of the motor and connected equipment.

The RE3 series system standard configuration mounts onto the resolver or tachometer (including Reliance or Tamagawa 800 123 R resolvers or similar pulse encoders and tachometers like the Avtron M737 or M727 (Note: This SGS™ unit does not mount directly onto the motor. If there is a need to mount an SGS™ system directly onto the motor, other custom SGS™ systems are available.)



Patented RE3000 mounted onto resolver
grounding systems can be installed to pass the eddy current around both motor bearings while also controlling the capacitive discharge.

The system requires about 1 inch of axial clearance and the tachometer or resolver must be connected to the motor shaft with a conductive coupling. Conductivity between the resolver body and the main part of the motor frame is necessary for proper function. This is normally provided through the existing resolver mounting bolts holding the resolver and support bracket to the motor. If resolver body and main motor frame conductivity is not present, a grounding link must be used. This system is not explosion proof rated.

If eddy current and capacitive discharge are both present please call to discuss proper application. If eddy currents or circulating currents are present, which in our experience is unlikely unless the motor is an AC motor 300 hp or larger, and no motor bearing is insulated, two shaft

grounding systems can be installed to pass the eddy current around both motor bearings while also controlling the capacitive discharge. If one motor bearing is insulated to control eddy current and an eddy current condition exists, one shaft grounding system can be used at the non-insulated bearing to control the shaft-to-frame capacitive discharge. A single insulated bearing will not control capacitive discharge through the non-insulated bearings. A single insulated bearing may not control electrical discharge through connected equipment bearings.

Please advise if data listed here or application is not correct. If specifications, dimensions, application or installation details change, another Shaft Grounding System may be required to fit and work properly and pricing may change. Many different SGS™ patented shaft grounding system models are available to fit the opposite and drive ends of electric motors, gearboxes, fans, tachometers, resolvers and pumps. Please call (541)997-4068 or email sales@dpa-sales.com if there are any questions.