Iris Power Stator Slot Couplers

Iris Power Stator Slot Couplers™ (SSCs) are sensors specifically designed to detect stator winding partial discharge activity in operating gas or steam turbine generators.

Used in conjunction with the Iris Power TGA-S™ portable test instrument or the Iris Power GuardII™ continuous monitoring platform, the Iris Power SSCs are permanently installed under the line end stator winding wedges (in existing machines), or between the top and bottom bars (in new or rewound machines). The Iris Power SSCs are not connected to the high voltage winding, and they are not subject to any high electrical stresses. Turbine generators rated up to 600 MVA normally require 6 SSCs, while higher rated turbine generators may require more.

SPECIFICATIONS

- made from epoxy glass laminate, NEMA FR4 (Class F)
- 10-1000 MHz bandwidth (3 dB cut-off)
- 50 Ω impedance
- Dual output to distinguish slot from endwinding partial discharges
- 2.0 mm thick, width cut to fit stator slot, length trimmable to 53 cm

ADDITIONAL INFORMATION

- NEMA FR5 (Class H) available on request
- Hydrogen penetration kits for 6, 9 or 12 SSCs – comprehensive penetration kit requires only 1 hole in generator casing, includes termination box assembly (default) or termination box and extension cables, and nitrogen gas pressure tested to 2750 kPa or 400 psi
- 50/60 Hz voltage reference signal required (use one of the following):
  - Isolation Transformer in enclosure, for connection to potential transformer
  - EMC

PATENTS

Argentina No. 247298
Brazil No. P8906170-5
Europe No. 89-309911.9
Korea No. 70374
USA No. 4949001

Australia No. 609019
Canada No. 1287372
Japan No. 2140724
Mexico No. 174353