

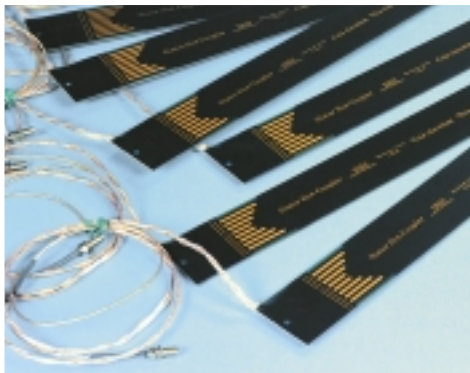
COUPLERS

Stator Slot Couplers



IRIS's stator slot couplers (SSCs) are specifically designed to detect stator winding partial discharge activity in operating gas or steam turbine generators.

Used in conjunction with IRIS's TGA-S test instrument, the SSCs (shown below) are permanently installed under the stator winding wedges (in existing machines), or between the top and bottom bars (in new or rewound machines). The 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 G10 (Class F)
- 10-1000 MHz bandwidth (3 dB cut-off)
- 50 Ω impedance
- dual output to distinguish slot discharge from end-winding partial discharges
- 2.0 mm thick, width cut to fit stator slot, 78 cm long (trimmable to 53 cm)

Options

- NEMA G11 (Class H) available on request
- Hydrogen penetration kits for 6 SSCs:
 - 12-connector penetration kit requires 12 small holes in suitable generator bulkhead panel
 - comprehensive penetration kit (shown at right) requires only 1 hole in generator casing, includes integral termination box assembly (default) or termination box and extension cables, hydrostatically tested to more than 2500 kPa and nitrogen gas pressure tested to 1300 kPa.

