

Iris Power Stator Slot Couplers

FOR DETECTION OF STATOR WINDING PARTIAL DISCHARGE

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



STATOR SLOT
COUPLERS

Used in conjunction with the Iris Power TGA-S portable test instrument or the Iris Power Guard II continuous monitoring platform, the Iris Power SSCs are permanently installed under the line end stator bar winding wedges (in existing machines), or between the top and bottom bars (in new or rewind 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

Material	Epoxy glass laminate, NEMA FR4 (Class F)
Bandwidth	10-1000 MHz bandwidth (3 dB cut-off)
Impedance	50 Ω impedance
Outputs	Dual output to distinguish slot from endwinding partial discharges

ADDITIONAL INFORMATION

- NEMA FR5 (Class H) or ATEX certified available on request
- Hydrogen penetration kits for 6, 9 or 12 SSCs – comprehensive penetration kit requires only one 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 is required (use one of the following):
 - Isolation Transformer in enclosure, for connection to potential transformer
 - Epoxy Mica Capacitor

ORDER NUMBER

S0500	SSC Package (Air-cooled machine) including: 7 Stator Slot Couplers FR4, 6 pairs of RG316 extension cables, a fibreglass polyester termination box and an AC reference source.
S0510	SSC Package (Air-cooled machine) including: 10 Stator Slot Couplers FR4, 9 pairs of RG316 extension cables, a fibreglass polyester termination box and an AC reference source.
S0600	SSC Package (Hydrogen-cooled machine) including: 7 Stator Slot Couplers FR4, 6 pairs of RG316 internal extension cables, hermetically sealed penetration, termination box and an AC reference source.
S0611	SSC Package (Hydrogen-cooled machine) including: 10 Stator Slot Couplers FR4, 9 pairs of RG316 internal extension cables, hermetically sealed penetration, termination box and an AC reference source.
ZAXS0601	ATEX hazardous location SSC Package (Hydrogen-cooled machine) including: 7 Stator Slot Couplers FR4, 6 pairs of RG316 internal extension cables, hermetically sealed penetration, stainless steel box with weatherproof gasket and hinged cover, termination box and an AC reference source.

GET IN TOUCH

Iris Power
3110 American Drive
Mississauga, Ontario
Canada, L4V 1T2

+1 905 677 4824
sales.iris@qualitrolcorp.com
www.irispower.com
www.qualitrolcorp.com