

# Iris Power TFProbe™

The Iris Power TFProbe™ is specifically designed to measure the total air gap flux and detect shorted rotor winding turns in synchronous motors, hydro generators, and in turbine generators. The probe, when connected to the portable Iris Power RFAII™ instrument or the Iris Power FluxTracII™ continuous monitor, allows the user to monitor the health of motor and generator field winding on-line, periodically and continuously.

The Iris Power TFProbe is a small, flexible, printed circuit board which is affixed to a stator tooth with epoxy. No drilling of wedges is required, and no fragile components intrude into the air-gap. In many machine designs, it is even possible to install the probe without removing the rotor – a definite advantage in retrofit applications.

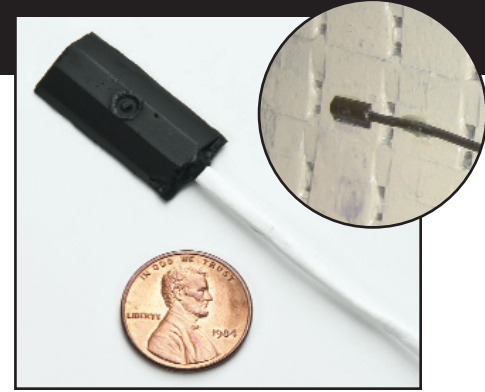
An optional hermetically sealed single penetration feedthrough is available for hydrogen cooled machines.

## INSTALLATION KIT

- TFProbe 12mm (wide) x 25mm (long) x 4mm (thick) with attached shielded, twisted-pair, heat resistant cable (15m long)
- Termination box (148 mm x 94mm x 151 mm) to be mounted at a convenient location to terminate the sensor
- Kit shipping weight approximately 3 kg
- Epoxy and grounding cable

## OPTIONS

- Hydrogen penetration kit consisting of comprehensive penetration requiring only 1 hole in the generator casing, nitrogen gas pressure tested to 2758 kPa or 4000 PSI.
- Shaft sync sensor, needed to identify the location of any shorted turns.



TFProbe

*Inset: Iris Power TFProbe glued to a turbine generator stator tooth*



## ORDER

Part Nr.	Description
M1511	TFProbe kit for salient pole machines with an air-gap size less than 60mm. Includes TFProbe with a 15.2m probe cable, fiberglass termination box, sync sensor with 30.5m cable, epoxy and installation guide.
M1513	TFProbe kit for round rotor machines with an air-gap size less than 60mm. Includes TFProbe with a 15.2m probe cable, fiberglass termination box, epoxy and installation guide.
M1521	TFProbe kit for hydrogen-cooled machines with an air-gap size less than 60mm. Includes TFProbe with a 15.2m probe cable, SMA-twisted pair adapter, sync sensor with 30.5m cable, two SMA feedthrough connectors, flux probe termination box, epoxy and installation guide.

For other options, contact your sales representative

The TFProbe™ is patented in the United States and licensed by Qualitrol-Iris Power. RFAII, FluxTracII are trademarks of Qualitrol-Iris Power.

QUALITROL-IRIS POWER HAS BEEN THE WORLD LEADER IN MOTOR AND GENERATOR WINDING DIAGNOSTICS SINCE 1990, PROVIDING A FULL LINE OF ON-LINE AND OFF-LINE TOOLS, AS WELL AS COMMISSIONING AND CONSULTING SERVICES.



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