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# Iris Power EL CID™ Evolution Low-Flux Core Tester



Testing with EL CID<sup>™</sup> Evolution low-flux core tester is accepted world-wide for reliable and safe detection of stator core inter-laminar insulation faults.

Originally developed by the CEGB utility in England, the Iris Power EL CID<sup>™</sup> Evolution low-flux core tester is the third generation of this reliable, easy-to-use, stator core test.

Tests with the Iris Power EL CID<sup>™</sup> Evolution low-flux core tester can be equally applied to turbine generators, hydrogenerators, and large motors.



### ELAN software V6

- Remote PC operation allowing one-man test
- Integrated test and analysis functions
- Comprehensive excitation calculation functions:
  - 1 Supporting turns-per-phase
  - 2 Winding computations
  - 3 Geometry of core and flux method
- Multiple window system for easy results comparisons and analysis
- Simple scan mode that allows time-based data recording
- Multiple tests on same slot for comparison (up to 26)
- Support for offset traces adjustment
- Large test display panel for distant viewing of key parameters
- Quad peak polarity selectable for fault validation respecting the test Phase polarity
- Streamlined set up process including using previous set ups
- Combine main traces and step-iron traces into one main plot
- Data export to multiple formats including MS Excel
- Generation of report in MS Word or PDF format for easy reporting
- Addition of notes to slot data allows annotation of analysis
- Software is available in multiple languages
- Integrated user manual for support
- Supports latest Windows Operating System, Windows 10



Test traces display of either or both Quad and Phase on all traces.





Windowing system allowing multiple views simultaneously

WHY CORE TEST? Stator cores are made of thin laminations of magnetic steel separated by insulation to prevent axial currents.

If lamination shorts occur, the high temperatures that result can burn stator coil insulation and even lead to melting of stator cores.



**3D core visualization** 

#### TESTING WITH EL CID<sup>™</sup> LOW-FLUX CORE TESTER VS FULL FLUX TESTING

The only alternative to the Iris Power EL CID<sup>™</sup> low-flux core testing is the Full (Ring) Flux test. The Full Flux test requires large single line power supplies, considerable manpower, and expensive infrared viewing cameras. The EL CID<sup>™</sup> Evolution tester has the following advantages compared to the Ring Flux test:

- EL CID<sup>™</sup> Evolution tester provides rapid testing of the machine, often less than one work shift for turbogenerators and motors. The Ring Flux test typically takes 3 work shifts.
- Only one technician is needed to perform the low-flux core test using the EL CID<sup>™</sup> Evolution tester.
- Typical labor is reduced from 150 to 200 man-hours for a major turbogenerator Ring Flux test to just 8 to 10 man hours for low-flux core test using the EL CID<sup>™</sup> Evolution tester.
- Rapid setup to retest after any repair ensures quick turnaround.
- Minimize intrusive repairs by instantly verifying the results.
- Safe for core and operator, unlike Ring Flux test which is potentially damaging to the uncooled core.

#### **KIT CONTENTS**

- Iris Power EL CID™ Evolution low-flux core tester
- Chattock Sensors (10, 20, 25 and 30 cm)
- Reference Sensor
- Magnetic Manual Trolley
- Step Iron Trolley
- Calibration Unit
- Switched Turbo Excitation System (30 m, 6 turns)
- Volt Meter and Clamp-on
  Ammeter
- Handbook
- Kit is delivered in two Wheeled Transit Cases



## **GET IN TOUCH**

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