

Robotic Inspection Vehicle™ (RIV)

Low Profile Robotic System for Stator Core Testing and Inspection Model RIV-702

The Iris Power Robotic Inspection Vehicle enables remote scanning of the stator core of large motors and generators with or without the rotor in place. Controlled from outside the stator bore, the Iris Power RIV provides easier and more efficient testing of stator lamination insulation when used with Iris Power's EL CID™. The RIV can also carry other lightweight transducers for stator inspection such as slot wedge tightness probes (Iris Power SWA™) and allows for visual inspection (Iris Power Camera System Type 752).

- Fits into the air-gap for rotor-in-place testing
- Carries multiple modules: EL CID, Stator Wedge Analyzer (optional), Camera (optional)
- Tests faster with reduced human fatigue and stress
- Enables one-person testing
- Follows a straight line along the stator teeth
- Scans the stator and rotor surface with optional Iris Power Camera System Type 752



KIT CONTENTS – MODEL RIV 702

- Signal processor unit
- Tractor vehicle
- Vehicle control cable
- Output lead
- Main lead
- Spare fuses
- Adjustment tools
- User manual
- Rugged shipping case
- Two 30 cm flat Chattock sensors for EL CID testing

OPTIONAL ACCESSORIES

- Camera System Type 752
- Miniature SWA probe for wedge tightness detection
- 20, 25, 35cm flat Chattock sensors for EL CID testing

FEATURES

- Auto-stop setting ensures RIV stops at preset distance
- Control unit outside stator core connects via single multi-core cable for power and signals
- Can be configured for various slot widths
- Curvature adjustment for various core diameters
- Low height (30mm) allows rotor-in-place testing
- Magnetically self-supporting on steel surface
- Automatically detects the edges of the stator teeth to follow a straight line
- Side plates give additional guidance when wedges are recessed or when wedges and coils are removed
- Distance measurement via encoder wheel

ROBOTIC INSPECTION VEHICLE (RIV)

SPECIFICATIONS*

Overall Length	350mm with Chattock holders
Overall Width	Adjustable from 18 to 30cm
Instrument Weight	10.5 kg
Maximum Payload	2 kg in vertical climb mode
Slot Pitch	65mm to 210mm
Guidance	Automatic using magnetic sensors
Distance Measurement	Optical encoder wheel, 0 to 9.99m
Tractor Speeds	Nominally 2, 4 or 6 m/min
Controls	Speed, direction and auto-stop distance
Outputs	X axis pulses for EL CID
Power Requirement	85-264 V, 50/60 Hz (<50VA) CAT II
Operating Temperature	0° to +50°C (+32° to +122°F)
Case Dimensions	63.2 x 60.2 x 33.3 cm 24.9 x 23.7 x 13.1 in
Standards	EN61010-1, EN61326, CE marked



Robotic test in progress on a turbo generator

*Specifications are subject to change without notice

ORDER

PART#	DESCRIPTION
70090022	Remote Inspection Vehicle Kit – Model RIV 702 including: 2 (30cm) flat Chattock sensors, signal processor unit, tractor vehicle, operation manual and shipping case.
Optional Accessories	
70091223	20 cm flat Chattock sensor
70091224	25 cm flat Chattock sensor
70091225	35 cm flat Chattock sensor

For other options, contact your sales representative.

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