

Stator Test Machine

TECHNICAL SPECIFICATION





Equipment Dimensions: H: 2100mm W: 960mm D: 800mm Weight: 340Kg - Approx.

Product info

Runs diagnostics of stators at multiple build stages: post electrical connection, pre and post encapsulation and complete motors.

Electrical connections

Electrical connecting / disconnecting are automated for cycle time and safety.

Guarding

Resistance free counterbalanced guarding to limit operator fatigue.

Fixture

System design to be future proofed with system changeable fixtures. Fixtures designed for quick change and easy set-up.

Efficiency

Our stator test machine will improve process controls, thereby reducing product fails, returned products and field breakdowns.

Ergonomics

System ergonomics have been designed to aid fast and easy product load and unload, with resistance free guarding and extending fixture, which pulls out for rapid throughput.

The loading of the stator onto the fixture is at an ergonomic height (operator standing). Achieving a quick release mechanical and electrical connection to achieve best takt time.

Email: operations@electrifiedautomation.com

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Resistance test

Resistance is recorded and compared against a set value with ambient temperature compensation included.

Insulation test

Insulation test carried out 500VDC (IR > 100 MOhms).

Insulation test carried out at 2000VDC (IR > 100 MOhms).

Resistance and current measurement is recorded against pass/fail criteria.

Visual examination

Visual inspection pass/fail can be recorded by the operator to capture any non electrical issues.

Standalone full motor test

A custom profile test is auto selected after scanning the motor barcode. This test will auto cycle through the winding resistance test and DC hipot via manual connections.

Surge test

Surge test at 1200VDC between each phase with correlation analysis of the waveform.

Surge compare test 1-2-3 @ 1200 VDC.

Inductance measurement is recorded against a pass/fail criteria.

Partial discharge test

Test to confirm there is no partial discharge.

Inductance test

Line-to line inductance and imbalance @ 1kHz.

Temp sensor test

Simple continuity or resistance check that can identify issues and prevent poor product.

Services required

Power – 230V/50Hz/16A 1ph – Total kVA for system = 3.7kVA.

Clean dry compressed air at 6Bar minimum to standard quality class 5.4.3 or better according to DIN ISO 8573-1.

Normal, clean, factory environment temperature 10-30°c, humidity 45-95% RH.

Safety

UKCA Certified (which includes Low Voltage Directive (2014/35/EU) and EMC Directive (Directive 2014/30/EU)).

PUWER assessed.

Meets Machinery Directive 2006/42/EC requirements.

Guarding is fitted with interlocks to ensure user safety.

Data logging

All process parameters for each moulding cycle can be stored locally or sent to a central database.

Local memory stored on device with port capability for removing data (SD card, USB or ethernet).

Communication

ProfiNet

Modes

Semi-automated

Control system

SIEMENS safety PLC with 10" HMI.

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