# **L SERIES GENERAL FEATURES**

- Management via industrial 15 "Panel PC with color touch-screen monitor and built-in keyboard
  - Possibility of tele-assistance through TEAM VIEWER
  - · DATA BANK to record all outcomes, with easy search filters
  - · Predisposition for connection to company SERVER and to automatic production lines
    - 40 column printer for test receipt

SELF-TEST

- · Data archive and parameterization under password
- · Production batch and serial number management
- · Results recording on DATA BANK with search filters in Excel or Access format
- Power supply with the possibility of: stabilization, variable frequency, continuous regulation
- · Indication of partial results on the monitor and final result by means of LED indicators and a rejection

acoustic warning device

- STOP CYCLE button to interrupt the test or cancel the result
- · Management of results and machine status to line PLC
  - · Selectable multilingual SW

# **OPTIONS**

#### According to the various types:

- KIT for external unit
- Special custom furniture Conditioner

Laser printer

Pneumatic stamping machine

- Diversified tests on the 2 workplaces
- Infrared sensor for winding temperature
- Barcode reader
- 40 column printer for test receipts •

## **OUR OTHER REALIZATIONS**

(see specific documentation)



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#### Z4/NCP

Final testing for engines or the like. Safety tests (earth efficiency, insulation, rigidity and dispersion.) Functional tests.



#### O6/C

Test diecast rotors. Detection of all possible defects: interruption of bars, blowholes, porosity, angle of inclination, quality of aluminum, bonding of bars / iron, etc.



### H3/CPS

Multifunctional tester for laboratory and service: Surge tests, ohmic resistance, insulation resistance, rigidity, IP, DAR, partial discharges, rotor tests, etc.

SERIES

# TEST SYSTEMS FOR COILED - INDUCED MOTORS



# **TESTS**

- OHMIC RESISTANCE
- INSULATION RESISTANCE
- DIELECTRIC RIGIDITY
- SURGE TEST
- RESISTANCE OF THE WELDING

**RISATTI INSTRUMENTS SRL** Strada Goretta 92/N - 10079 Mappano (TO) Tel: 011-280289 Fax: 011-858027 www.risatti.it - info@risatti.it **SINCE 1948 QUALITY - INNOVATION** EXPERIENCE







**OPTIONS**  DOUBLE WORKING PLACE INTERCHANGEABLE MECHANICS LASER PRINTER



Series of equipment suitable for testing wound (induced) rotors of any size, for small and large production volumes, and for repair. The complete range of tests available covers all the required needs.



### L6/M

Microprocessor version for testing small rotors.

- Ohmic resistance
- Insulation resistance max 5,000 V d.c.
- Surge max 1.000 V
- · Welding resistance on rotors (Option) with winding resistance greater than  $1\Omega$
- Cycle time 0.5 "per manifold blade

#### L5/NCP

Almost universal testing system within the foreseen size ranges. A particular regulation system allows contact on collectors with anv number of blades. • All tests are available





### L16/NCP

System for high production volumes but constant types. Through a simultaneous specific pneumatic contact system on all blades, it allows a very rapid cycle. Arrangement for automatic loading and unloading.

All tests are available

### L166/NCP

Automatic tests on large rotors (railway type) consisting of a mechanics which, in addition to positioning the rotor, makes it rotate step-by-step and makes contact with a 4-wire system suitable for the current of minimum ohmic resistance and at the rigidity voltage (max 15.000V). All tests are available





# TECHNICAL FEATURES OF TESTS

#### MEASUREMENT OF THE OHM RESISTANCE:

- 'KELVIN' four-wire measuring system •
- Measurement range: from  $0.001\Omega$  to  $2k\Omega$  in 8 automatic scales
- Minimum resolution 0.05 mΩ
- Accuracy: better than 0.5% of f.s. •

#### **MEASUREMENT OF THE INSULATION RESISTANCE (CEI 60204-1):**

- Test voltage: 40 2800 V.d.c. stabilized\* •
- Test voltage with ramp (OPTION)
- Measurement range: from 200 K $\Omega$  to 1 G $\Omega$  autoranging
- Maximum current: 3.3 mA
- Reading accuracy: 1%
- Test time: 0.5-999 sec

### DIELECTRIC RIGIDITY TEST (CEI 50106-CEI 60204-1):

- Test voltage: 0 3,000 V a.c. steps of 20 V\*
- Tripping current: 0.5 30 mA\* •
- Test time: 0.5 100 sec
- Reading accuracy: 1%

#### SURGE:

- Adjustable voltage between 0 and 3,000 V \* •
- Energy of pulses 0.25 J \*
- Pulse frequency: 20 msec.
- Maximum peak current: 300 A •
- Taxable tolerance: 0 30%
- Sample curve storage up to 100 MS / sec
- Sampling tolerance better than 0.1%
- Minimum measurable inductance 20 µH
- Tolerances can be set separately for errors of: - Impedance L (wrong turns, wrong connections, reversed windings, iron differences, etc.); - Quality factor Q (cortospire, short hank, etc.)
- Display on the monitor, always present, of the sample curve and the one under examination superimposed for an analysis of the type and entity of the defect
- Partial discharge survey (OPTION)

#### **RESISTANCE OF WELDS:**

- The resistance of the welding in the winding is measured with the blades of the collector. •
- At the same time the resistance is measured

#### **INDEX OF POLARIZATION:**

- Test voltage: 100 2,700 V adjustable
- Measurement range 2 M $\Omega$  to 50 G $\Omega$ •
- Maximum current 3.3 mA Test time 10 minutes
- \*Other values on request in OPTION

Compensation of the resistance value measured at ambient temperature, by means of a thermometric or infrared probe\*