



# SCR ELEKTRONIKS

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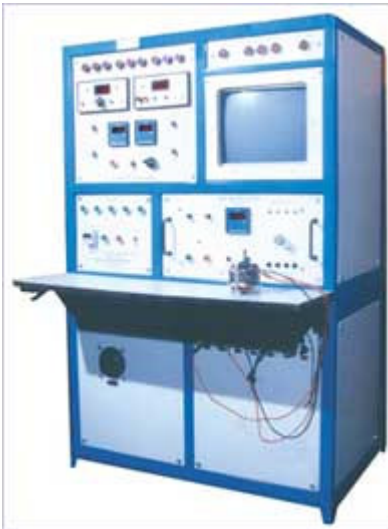
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## STATOR COIL TEST PANELS

### INTRODUCTION :

This panel provides the facility to test the Stator Coil, for all its parameters, one by one automatically. The values are indicated on meters; compared with the set limits and test decision as OK/NOT OK are indicated. In case any test has "NOT OK" result the testing is stopped.

### Following Test are performed :-



#### 1. DC Resistance Test :

The resistance value of the coil is measured and compared with Lower & upper limits. In case the value does not fall within the limits NOT OK signal is flashed and test is terminated. Two limits can be set with 2 Pot meter provided.

#### 2. HV Test :

The test voltage 0-3 KV and the tripping current is set before starting the test. The test voltage is applied to the winding with body as ground for set time(0 to 60 Sec.) The Voltage and leakage Current is display on digital meters. If there is no failure OK indication will be given and next test will be started.

#### 3. Insulation Test (Meggar) :

Digital Meggar is provided to give the insulation value. The lower insulation resistance limit is set with Pot meter. In case the insulation value is less than the limit set, NOT OK signal is given otherwise with OK signal it proceeds for next test.

#### 4. Surge Comparison Test :

In this test High Voltage pulse / Surge is applied to the winding under test and Voltage delay waveform is compared with identical winding. If winding is healthy then both waveforms will be identical. Depending upon the type of defect the waveform will differ. Observing the waveform one can identify the nature of

defect.

Normally, for universal motors, two stator winding are identical. Therefore two winding are compared with each other and the waveform displayed on screen give the nature of the fault.

Surge tester scans through the entire insulation system & detect insulation faults such as turn-to-turn ; layer-to-layer ; coil-to-coil ; winding-to-winding ; & phase-to-phase shorts as well as open circuits & grounds.

#### 5. Coil Polarity Test :

The direction of winding in stator coil is vital. If it is not proper either heavy current will damage the winding or the direction will be reverse. This test checks direction of both the coils (with series shorting) and gives the decision as OK/NOT OK.