



SCR ELEKTRONIKS

SALES PRESENTATION FOR TESTING EQUIPMENTS FOR MIXER





LIST OF TEST EQUIPMENT

1. TEST SETUP FOR DOMESTIC MIXER MOTOR
2. SAFETY TEST PANEL FOR DOMESTIC MIXER WITH PC DATALOGGING
3. ENDURANCE TEST PANEL FOR DOMESTIC MIXER
4. TEST BENCH FOR CIRCUIT BREAKER
5. COMMUTATOR TEST UNIT

1. TEST SETUP FOR DOMESTIC MIXER MOTOR

- **What It Is?**

- SCR ELEKTRONIKS have developed TESTING SET UP FOR MIXER MOTOR for carrying out performance test and High Voltage test of mixer at final stage.
- It consists of Voltmeter, Ammeter and Watt meter for observing the values of different parameters.
- HV test is provided with tripping cut off concept.
- Output Socket is provided for quick connections and disconnections of the equipment to be tested.

- **Models Available :**

- The tester can be customized with respect to number of stations, range of the current (wattage), voltage, and also the maximum value of high voltage.
- The tester can also be customized w r t PLC / PC based or microcontroller based semi automatic version



- **Salient Features :**

- Digital indicating meters with class 1 accuracy
- Indicating Lap for OK,NOT OK ,TEST ON indications.
- The test will be selected with push button & contactors and there will not be necessity to change the connections.

- **Key Benefits :**

- The tester conducts high voltage test on the mixer and also electrical performance test.
- Expected current is pre-programmed in the test system and if the current exceeds the range, the test bench declares overload / no load depending upon the test outcome

● Basic Specifications :

- Input Supply : 230V AC , 10A with MCB protection.
- Variable Voltage Source to give 0 - 300 V / 4 Amps AC.
- Digital Wattmeter 0 - 1 KW.
- Digital Voltmeter 0 - 300 Volt.
- Digital Ammeter 0 - 4 Amps.
- Facility to carryout Leakage Current Test at 240 V. The current will be indicated on Digital Ammeter. If the current exceeds 210 Micro Amps. "NOT OK" lamp will glow. If the Timers are provided for test time and for changing the polarity of output supply.
- HV tester 0 - 1.5 KV / 5 mA with timer to set time 0 - 10 sec. Digital Voltmeter will read the out put HV Voltage. At the end of time the indication of "OK" & "NOT OK" will be given on lamps.
- Digital RPM Indication 5 digit.
- Tripping current selection: 2mA , 5mA ,10mA , 25 mA ,50 mA.

• Key Photos :



Test Setup For Domestic Mixer Motor

2. SAFETY TEST PANEL FOR DOMESTIC MIXER WITH PC DATALOGGING

- **What It Is?**

- SCR ELEKTRONIKS introduces Safety Test Panel for Domestic Mixer with PC Data logging. The tests are Performed as Prescribed in IS the Panel Carries out different tests one by one and provides indication of the Test results as OK or NOT-OK.
- It is very useful and handy in line testing on Mass production line as well as type Testing. Special fixture can be provided for the specific product. This avoids the connections & disconnections of the product for different tests.

- **Models Available :**

- The test bench can be customized as per various user defined parameters such as high voltage and corresponding leakage current, constant current for earth contact, insulation resistance range as well as range of voltage and current



● Salient Features :

- Adjustable High Voltage, 0 to 2 KV for HV test.
- Parameter limits setting for different tests.
- Digital meters: 3 ½ digit for all the tests to indicate different parameters.
- Leakage Current checked for both the polarities.
- Individual / All Tests mode selection.
- Micro-Controller based Digital Sequential Timer to carry out the tests automatically.
- Selector switches and Push Buttons to adjust test parameters
- Lamps to indicate test results namely: OK and NOT OK.
- TEST FAIL indication with Alarm, if Fault is detected & TEST PASS indication at the end of the tests.
- PC Connectivity through USB port provided for data logging on PC.
- PC Based, interfaced with Labview based Testware SCADA



- **Key Benefits :**

- The total time for entire testing is less than 20 seconds.
- Micro controller based sequential timer maintains the sequence of operation and displays the test status.
- In case of Fault detection, test will be terminated giving alarm.
- The tester tests various safety tests of the domestic appliance and ensures safety to the end user (consumer) before being shipped.
- The mixer, as it comes in direct contact with the person, makes the tests an absolute must for the manufacturing company to enhance the reliability and brand value.

● **Basic Specifications :**

- Mains ON MCB for switching ON the input supply
- Indicator Lamps for TEST ON, OK, NOT OK, HT ON, Individual, ALL Tests, TEST Fail
- Programmable Timer for controlling and carrying out all the tests automatically in ALL tests mode of operation. Different parameters can be set through the keypad provided on this unit. For details on programming of Timer please refer the Timer manual provided in the Next section
- Select Test Switch for selecting the Individual / All Test Mode of operation
- Emergency Stop pushbutton
- START Test Push Button to start the Test Process
- STOP Test Push Button is used to stop the test when required
- Reset pushbutton to reset the conditions before starting a new test
- Output Terminals for connecting the product to be tested and is present on the right hand side of the panel

● Key Photos :



3. ENDURANCE TEST PANEL FOR DOMESTIC MIXER

- **What It Is?**

- SCR ELEKTRONIKS have developed ENDURANCE TEST PANEL FOR MIXER for carrying out endurance test of mixer at final stage. This test comes under IS 4250 / IS 302.
- It consists of Voltmeter, Ammeter, Wattmeter & Temperature Indicator for observing the values of different parameters.
- Output Socket is provided for quick connections and disconnections of the equipment to be tested.

- **Models Available :**

- The tester can be custom built as per the number of stations as well as current range.
- Plus, if the customer desires, the tester can be made PC based or otherwise.
- In PC based option, the PC software assess the performance in every on cycle of the mixer and statistical analysis can be conducted

● **Salient Features :**

- Digital indicating meters with class 1 accuracy
- Fault Detection Switch – Over Current/No Current
- In case of Fault detection, test will be terminated giving alarm.

● **Key Benefits :**

- The test bench is meant to check the endurance of the mixer.
- As it repetitively makes the mixer ON and OFF as per user defined cycles, it assesses the performance and checks if the CB trips in between.
- After the test is concluded, the mixer is subjected to safety testing (on a different system)



- **Basic Specifications :**

- Variable Voltage Source – 0 to 270V AC/6A max.
- Digital Voltmeter, ammeter, watt meter
- ON/OFF Timer- 3 digit 0-999 min. presentable
- Electrical loading arrangement using motors a generator
- Temperature Indicator 3 channel switch selectable 0 to 200 Deg.C with 'K' Type Thermocouple Sensor.
- Press To Set: 0 -6.00A adjustable current with LOW and HIGH setting.
- Indicating Lamp for NO LOAD, OVERLOAD, TEST ON & TEST OVER.
- Fault Detection Switch – Over Current/No Current
- Electrical loading arrangement using your motors a generator

Key Photos :



4. TEST BENCH FOR CIRCUIT BREAKER

- **What It Is?**

- SCR ELEKTRONIKS have developed Test Bench for Circuit Breaker to test 2, 5 & 10 at a time. Panel is provided with constant DC current source.
- The tester is used to check the overload tripping characteristics (trip time vs set current) of the small circuit breaker used in the domestic mixer

- **Models Available :**

- The tester can be customized w r t the current range (generally standard) and number of test stations.
- Also the fixture made is custom made as per the CB under test.

● Salient Features :

1. Two Stations CB Testing Machine

- Accuracy of class 1 %.
- Two Individual Fixtures for Circuit Breakers, with separate Meters for Trip time measurement.
- Trip Sensing Circuit and Solid State bypass arrangement for each station.
- Operates on 230 V +/- 10 % Supply

2. Five Stations CB Testing Machine

- Accuracy of class 1 %.
- 5 Individual Fixtures for Circuit Breakers, with separate Meters for Trip time measurement.
- Trip Sensing Circuit and Solid State bypass arrangement for each station.

3. Ten Stations CB Testing Machine

- Accuracy of class 1 %.
- 10 Individual Fixtures for Circuit Breakers, with separate Meters for Trip time measurement.
- Trip Sensing Circuit and Solid State bypass arrangement for each station.

• General Specifications :

1. Two Stations CB Testing Machine

- DC constant current source from 0 A to 10 A.
- Digital Time Interval Meters having range 1 SEC. to 9999 SEC.
- 3 ½ Digits Ampere Meter to read test current 0 to 10 A.
- Push Buttons and POT Meters to adjust test Current
- Lamps to indicate : Mains ON & Test ON

2. Five Stations CB Testing Machine

- DC constant current source from 0 A to 20 A.
- Digital Time Interval Meters having range 1 SEC. to 9999 SEC.
- 3 ½ Digits Ampere Meter to read test current 0 to 20 A.
- POT Meters to adjust test Current

3. Ten Stations CB Testing Machine

- DC constant current source from 0 A to 10 A.
- Digital Time Interval Meters having range 1 SEC. to 9999 SEC.
- 3 ½ Digits Ampere Meter to read test current 0 to 10 A.
- Push Buttons and POT Meters to adjust test Current
- Lamps to indicate : Mains ON & Test ON

● **Key Photos :**



2 Station Test Bench For
Circuit Breaker



10 Station Test Bench For Circuit Breaker



5 Station Test Bench For
Circuit Breaker

5. COMMUTATOR TEST UNIT

- **What It Is?**

- SCR ELEKTRONIKS have designed “Commutator Testing Setup” to provide Commutator manufacturers and users a simple and speedy method for testing their Commutators.

- **Models Available :**

- The tester can be customized w r t voltage level and number of stations.
- This single station commutator testing set up therefore user can test one commutator at a time.
- In Automatic mode of testing this set up performs two tests automatically.



- **Salient Features :**

- Sequential Timer for carrying out both the tests one by one.
- Specially designed Fixtures.

- **Key Benefits :**

- The tester is used to test the dielectric withstand capacity of the mixer commutator w.r.t. insulation.



- **Basic Specifications :**

- Auto or Manual Test Selection:
- Variable HV Source adjustable 0 - 550 Volt / 0 - 1500 V.
- Motor drive to rotate Commutator @ 4 - 6 RPM.
- Internal tripping current setting-1mA.

Key Photos :



1 Station Commutator Test Unit



2 Station Commutator Test Unit



- **Documentation That Will Be Provided With Product :**

- Layout (dimensions, etc.)
- Metering and PCB termination diagram
- Power wiring diagram
- Control wiring diagram
- User manual
- Data acquisition module details (for PC based variants)
- Signed warranty certificate
- Calibration certificates (NABL optional)



• **Why SCR Elektroniks ?**

- Since 1975: Rich Experience In Test And Measurement
- Customized Solution
- Dedicated After Sales Support Team
- Designed More Than 100 Different Products
- In- House Team Of Micro-controller Design, Electrical And Electronic Design, Micro Controller Development, Labview (PC) Software And PLC Logic, Production, Testing And Commissioning And Support
- In-house Development Of Critical Electronic And Electrical Meters, Modules And Components
- ISO 9001 : 2015 Certified By Bureau Veritas – Maintaining High Quality In Our Internal Process
- Listed By IEC In The Past
- Fair And Consistent Pricing
- Our Ultimate Prize: Customer Delight

• Our Recent Clients List For Mixer :

Sr. No	Customer Name
1	Bajaj
2	Canbara
3	Havells
4	Suvidha Appliances
5	Elin Appliances
6	Home Appliances
7	Starlite
8	Comrade Appliances
9	Maya Appliances
10	Eveready
11	Bhagyanagar

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THANK YOU