

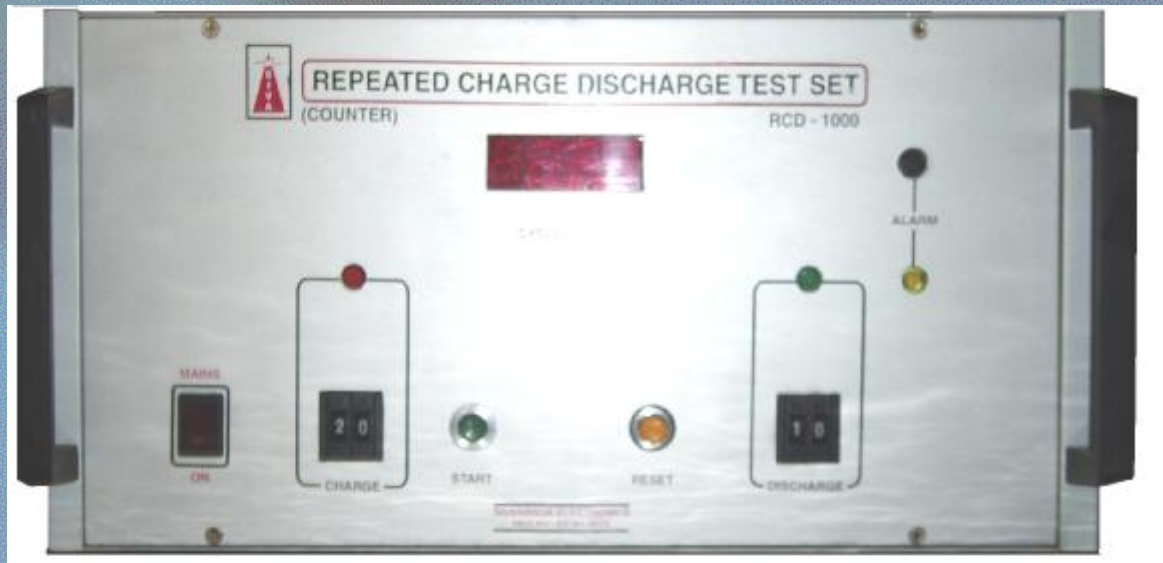


# SIVA INSTRUMENTS



## Repeated Charge Discharge Test Set

Model : RCD-1000

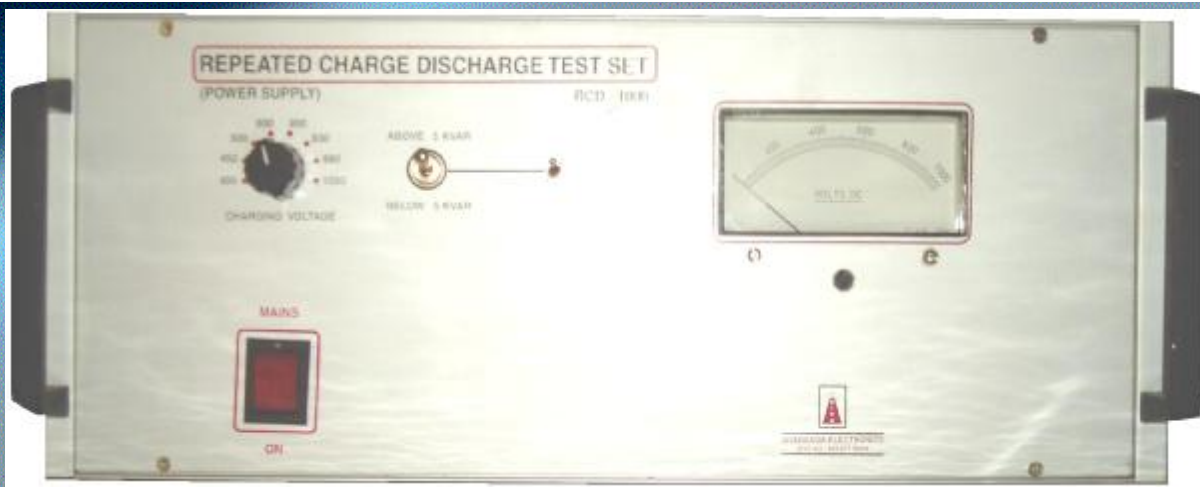


### Introduction

The IS 13341 : 1992 has laid down the requirements for Ageing Test, Self-Healing Test and Destruction Test on Shunt Capacitors of the self healing type for AC Power Systems. The Ageing Test is to be performed at a specified voltage of 1.25 times the rated voltage for 750 hours. The test is to be followed with a repeated discharge cycle test which involves charging of the capacitor to a DC voltage and discharge of the same through an Inductance. Sivananda Electronics has developed this equipment for the benefit of capacitor manufacturers, for the first time in India.

### Sailent Features

- Microprocessor based control
- Battery back-up to retain data during power failure.
- User settable charge and discharge timings.
- Automatic tripping and alarm indication in case the capacitor fails during the test
- Piezo-electric buzzer for alarm



## Technical Specifications

### (A) Power Supply

Range	: 1 KVAR to 25 KVAR
Charging Supply	: Variable 0 to 1000V DC
Charging Current	: 20 mA maximum
Input Supply	: 230 V AC, 50 Hz
Dimensions	: 420mm X 260mm X 220mm

### (B) Controller

Charging time setting	: 99 Seconds maximum
Discharge time setting	: 99 Seconds maximum
Display	: 4 digit 7 segment LED
Input Supply	: 230 VAC, 50 Hz
Dimensions	: 355mm X 170mm X 215mm

## Operating Procedure

Set the charging voltage to 2 times the rated voltage of the capacitor under test. Select appropriate charging and discharging time on the thumbwheels provided. Select appropriate value of the inductance depending upon the rating of the capacitor as provided in the specification. Now by pressing the 'Start Switch', testing can be started and the presence further of the operator is not required.

The display indicates the number of discharge cycles. The equipment gives beeps after 1000 discharge cycles are over. In case the power fails before the capacitor undergoes 100 or less discharge cycles, the count is reset to zero and the entire testing is carried out for a fresh 1000 discharge cycles, once the power is restored. However, if the power fails after the capacitor has undergone more than 100 discharge cycles, this count is retained and the testing is continued automatically for the rest of the discharge cycles after power is resumed. A separate switch is provided to read the last count during power failure. In case the capacitor fails during the test, the power supply is cut off automatically and a buzzer sounds an alarm. The control comes out of alarm when it is reset manually.

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