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## **OIL BDV TEST SET**

Oil BDV Test set is helpful to test Dielectric strength of insulating oil of Transformers and Circuit Breakers. The most important function of insulating oil is to provide electrical insulation under high electrical potential. The dielectric strength of insulating oil is a measure of the oil's ability to withstand electrical stress without failure. Any significant reduction in the dielectric strength will indicate that the oil is no longer able to perform this vital function, and could lead to failure of equipment. We had designed three different models, 60KV/80KV/100KV - all are motorized operated type.





### PRIMARY INJECTION TEST SET

The Primary Injection Test set is useful for Testing of Cts, Relays and Tripping Circuits performance as high current injector, high current source. Also useful for testing of Bus Bar, MCBs, MCCBs, etc. These sets are also useful for commissioning of performance of high current panels as well commissioning of protection system after repair in power substation. Some of application are of this instrument is to test the overhead cable for temperature elongation test. They could be designed for single phase supply as well three phase supply as per request. Also they could construct in single unit or multiple unit for easy handing as per capacity and necessity.

#### CIRCUIT BREAKER TIMER

We had developed Circuit Breaker Timer to measure "Making" and "Breaking" Time of HT/LT Breaker. The instrument is microprocessor based and having resolution of 1 mili second. The instrument is consists of Jumbo sized back light LCD, inbuilt memory to store up to 100 results and Thermal Printer to take print out of results at site. We had also developed PC interface software so all results can be stored in Hard Disk of PC or Laptop and then it could be converted in PDF format. The instrument is much light weight and very compact to carry out at site. The accessories we do supply is also compatible to carry out test as fast as possible.





# **HIGH VOLTAGE TEST SET (AC/DC)**

Our High Voltage Test set is useful for testing a high voltage withstand capacity for any insulation level in electrical or electronic systems. This is done by applying a high voltage to the insulation of the equipment and measuring the resulting leakage current flowing through its insulation. The high voltage applied is much higher than the normal working voltage of the equipment. After applying high voltage leakage current is sensed by very precise electronic circuit for tripping level control. If the leakage current is exceed the set value than at the same instant it gives the signal to trip the High Voltage Output.

#### TRANSFORMER TURNS RATIO TEST SET

For testing a Transformer from its design stage to final stage our Turns Ratio Test set is easy to operate and having high accuracy. Deviations in turns ratio readings indicate problems in one or both windings or the magnetic core circuit. Transformer Turns Ratio can identify shorted coils, open coils, incorrect connection, internal fault or tap changer defects. Our automatic test set reduces the test time and gives accurate readings. The instruments is designed on a simple concept, that LV of the Transformer is excited with very low voltage - the supply should be also low impedance for better measurement or else it causes the fluctuation - and the HV is measured, now both readings LV excited Volt and HV measured volt are measured simultaneously and then their division is displayed on the display.





## **RELAY TEST SET (SECONDARY INJECTION TEST SET)**

The Secondary Injection Test set or Relay Test set is comprise easy test of different type of Relay. This is portable equipment, which is designed to check the operating characteristics of protective devices. Protective devices such as Relays are used in system to deal with various fault conditions and its failure to operate for any reason can cause serious damage to substations causing plant shutdown or power outgoes resulting financial losses. We had developed Relay test set which mostly covers all ranges of power supply by which means we could test almost all kind of relays.

# **CONTACT RESISTANCE TEST SET (CRM)**

Contact Resistance Test set is used to measure very low resistance in Contactor, HV/LV Breakers, Bus Bar joints etc. The concept of the instrument is, pass very high DC Current from under test object and then measure the voltage drop across it. The measurement of current and voltage drop should be done simultaneously, and then resistance should be calculated by division of both readings. R = V/I. The DC current source should be such selected that it gives minimum ripple and very smooth DC current, so it reduce the measurement error. Our contact resistance test set is microprocessor based, and consists of inbuilt memory to store results, inbuilt thermal printer and also PC interface facility.



# WINDING RESISTANCE TEST SET (WRM)

As the need of electricity increases, the need of Transformers will also not hold it position in global market. Other heavy electrical installations such as Motors will also get its remarkable state. Such kind of heavy electrical installations need to be in continuous observations. So one of the most common tests to be conducted on it is Resistance measurement of the internal conducting material. To measure the resistance of winding means inductance, we need to feed DC current through the winding and then the voltage drop across the winding should be measured simultaneously, the resistance is calculated by R = V/I.

#### **LOAD BANK**

We are leading manufacturer of Load Bank, we have a wide range of Load Bank. Load bank are constructed in various type as Resistive Load Bank, Inductive Load Bank, as well Dry type Load Bank, Water tank type Load bank etc,. Load Bank is used to test the Supply equipment like DG Sets, inverter etc,. Load bank is used as dummy load to the under test equipment and by that means we could get the different characteristics of the under test equipment. Some how at some field load bank is used to synchronize the supply. In Solar Power Plant inverter is feed with DC supply generated by Solar Panels and then converted to 3 Phase AC supply, then after it is feed in greed. Here before feeding the supply in greed it should be synchronized and for that purpose Load Bank is used as dummy load. We can supply load bank up to any capacity as well in different steps as per requirement. We had supplied load bank at various industries as well institutes for educational purposes.





## TRANSFORMER ROUTINE TEST SET

In today's world, Transformers are used as a conventional source. The wide use of transformer also increase the maintenance responsibility. We had develop the Transformer Routine Test set which is most useful to carry out the Routine Test on Transformer, and for the task - it consumes minimum time and manpower. The test set is such designed, and accessories are such choose, the time and manpower is minimized. The Routine Test set covers most routine tests of transformer to prove healthiness of transformer, like Voltage Ratio Test, Magnetic Balance Test, Vector Group Test, No Load Test of Transformer etc,.

#### TRANSFORMER TEST BENCH

For quality assurance, testing of products is very needful. We make single phase as well three phase testing panels useful for transformer, motors etc,. The total applied voltage, appropriate current and total losses of the testing device can be measured at a time. Applied voltage can be controlled by means of auto transformer. Panels can be designed in single phase as well three phase supply. Other testing parameters could be added as per demand. The panels could be designed to test the different type of tests on Transformers. Now a days power analyzer is used in Testing Panels to measure the different panels.





# **AUTO TRANSFORMER (VARIAC)**

Auto transformer is most common product in industry. Auto transformer is well known as Variac or Dimmer. Variac is used to supply variable voltage, they are constructed in various types. Single phase- three phase, hand operated-motorized operated, open type-enclouse type, air cooled-oil cooled type. We are manufacturing all kind of variacs of most commonly range starts from 2A to 200A. In oil cooled type variac, they are mostly constructed above 50A capacity. We are also doing repairing of Variac like rewinding, carbon brush replacement, wiper setting etc,.

### **TRANSFORMERS**

We have a vast experience in transformer designing. You could have a better option here for your any kind of requirement. We are manufacturing all kind of transformers. We are dealing with control transformer useful for power supply in various types of panels, single phase as well three phase type.





#### **INDUCTOR**

Inductor is well know as Reactor. It plays important role for absorbing surges, line transients, spikes etc,. The are arrested in choke and gives smooth supply to machine. And hence they are also know as surge suppressor. They are generally used with Drives, APFC panels. We are manufacturing all range of Inductors.

## **CABLE ROUTE MARKER**

Cable Route Marker Plates are used to mark the route of underground cables. When a cable needs to travel a long distance in underground then it is necessary to mark the route of that cable. In cable route marker plates indication of direction of cable and cable type as LT cable or HT cable or communications cable or telephone cable or internet cable etc,. Cable route marker plates are of two types: Aluminum Casting and Iron Casting.





#### **ACCESSORIES**

We are supplying all kind of accessories of good quality for testing and measuring purpose like test prodes, banana sockets, retracable sheathed banana pins, fully moulded clips of 2 mm as well 4 mm size, also high current heavy duty crockodile clamps as well test probes for multimeters, high current probe useful for Primary Injection Test set.

#### "TESTING INSTRUMENTS"

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