

Ajit

ELECTRONICS CO.



Manufacturers:

Electrical/ Electronics Test & Measuring Instruments

AN ISO 9001 : 2008 CERTIFIED COMPANY



AJIT ELECTRONICS CO. is reputed and leading company in manufacturing dealing activities, in field of Electronics / Electrical testing measuring instruments in India.

Led by young technocrats who are qualified, experienced have indigenously developed and manufactured high voltage, high current and other electrical / electronics testing instruments.

We are one of the leading manufacturers and dealers of electronics & electrical testing and measuring instruments.

Manufactured using quality material, these are fitted with high - grade components that makes it most reliable and accurate measuring and testing equipment.

Our range of instruments in exclusively designed to catered to the needs of industry based all over the world.

Our domestic as well as our global clients appreciate our electronics & electrical testing and measuring instruments owing to versatile features.

PRODUCT LIST

High Voltage Breakdown Tests.

Transformer Oil Test sets.

Transformer Ratio Meters etc.

Winding Resistance Meters.

Transformer Test Setups.

DVDF Test Setups.

Three Phase Shifters.

Capacitance & Tan Delta Test Sets.

Oil Tan Delta Test Sets.

Relay Test Sets.

Secondary Current Injection Sets.

Primary Current Injection Sets.

Circuit Breaker Timers.

Contact Resistance Meters.

And Other Instruments As Per Customers Requirement.

TRANSFORMER RATIO METERS

GENERAL

AJIT Transformer Ratio Meters are the most modern turn's ratio meters widely used to test the turn's ratio of high voltage windings, to low voltage windings, of Transformer. These meters are accurate, compact & light in weight.

FEATURES

- Design with latest Technology
- 4 1/2 Digit Direct read - out in Digital Type
- Compact and light weight
- Full range of measurement
- Economical



TECHNICAL SPECIFICATIONS

MODEL /TYPE	MEASURING RANGE	DISPLAY	POWER/REQUIREMENT	ACCESSORIES
TRM - 1000 DIGITAL TYPE (SINGLE PHASE)	A) 0 TO 200 B) 20 TO 200	4 1/2 Digit, LED Type	230V AC, 50Hz, Single Phase	A) Mains Cor
				B) Test Leads
				C) Instruction Manual
TRM - 3000 DIGITAL TYPE (3 PHASE)	A) 0 TO 200 B) 20 TO 200	4 1/2 Digit, LED Type	230V AC, 50Hz, Single Phase	A) Mains Cor
				B) Test Leads
				C) Instruction Manual

OIL TEST SET

GENERAL

AJIT Transformer Oil Set is completely self contained, compact & portable unit giving smooth variable output voltage from zero to 60/80/100KV for testing the dielectric strength of insulating oil. The set has been specially designed for the testing the die electric breakdown Voltage of insulating liquids.

FEATURES

- Manual or Motorised Version.
- Highly Sensitive Electronics Circuit Breaker
- Heavy Duty H.V. Transformer (Epoxy Cast)
- Tried, Proven & Tested design.
- Zero Interlock for output.
- Door Micro s/w for operator's safety.
- Digital or Analog KV Meters.

SAFETY

Maximum possible safety of the operator as well as the equipment is ensured by a safety concious design. The voltage controller is interlocked at it's minimum position so that H.V. can be switched ON only when the voltage controller is brought to zero after every test or interruption. The acrylic door leading to H.V. Terminals has a micro switch fitted so that opening of the acrylic door shuts the H.V. OFF.



The oil cups are made of Acrylic & have removable electrodes for easy cleaning & polishing. The unique design of the lectrode holders eliminate oil leakages around shafts.

ACCESSORIES SUPPLIED WITH EACH SET :

1. OIL CUP WITH ONE SET OF ELECTRODES.
2. ONSE SET OF GO/NO-GO GAUGES
3. ONE SET OF INSTRUCTION MANUAL.

TECHNICAL SPECIFICATIONS

MODEL	INPUT	OUTPUT	ACCURACY	RATE OF RISE OF VOLTAGE	DIMENSIONS LXBXH
A/60	220V / 250V 10% AC ± 50Hz	0-60KV	± 4% of full Scale	MANUAL	55x35x42 cm Approx.
A/80		0-80KV			70x40x48 cm Approx.
A/100		0-100KV			70x40x48 cm Approx.
A/60 M		Automactic 2 KV/Sec. (Motorised)		0-60KV	55x35x42 cm Approx.
A/80 M				0-80KV	70x40x48 cm Approx.
A/100 M				0-100KV	70x40x48 cm Approx.

HV TEST SET

APPLICATION

For High Voltage withstand, breakdown testing of electrical insulating systems.
 For Dielectric Strength testing of electrical / electronic components, small appliances, tools, motors, machines etc.



FEATURES

- Compact & Simple to Operate
- Zero Interlock for H.V. Output
- Analog or Digital read outs
- Adjustable, selectable leakage current.
- Audio visual indication for presence of high voltage
- Continuously variable test voltage
- Highly sensitive electronics circuit for tripping
- Available in AC,DC as well as AC & DC Combined Outputs upto 100KV.
- Available with built - in printer and or /RS 232 interface.
- H.V. Test sets of other specifications as per requirement can be supplied.



TECHNICAL SPECIFICATIONS

Sr. No.	Model No.	O/P Voltage	Trip Current
1	HV.1	0 To 5Kv	30mA
2	HV.2	0 To 5Kv	100mA
3	HV.3	0 To 10kV	30mA
4	HV.4	0 To 10kV	100mA
5	HV.5	0 To 20Kv	30mA
6	HV.6	0 To 20Kv	100mA
7	HV.7	0 TO 30 Kv	20mA
8	HV.8	0 To 30 Kv	100mA
9	HV.9	0 To 50 kv	20mA
10	HV.10	0 To 50 kv	50mA

Sr. No.	Model No.	O/P Voltage	Trip Current
11	HV.11	0 To 5Kv	100mA
12	HV.12	0 To 60Kv	50mA
13	HV.13	0 To 60kV	75mA
14	HV.14	0 To 60kV	100mA
15	HV.15	0 To 75Kv	50mA
16	HV.16	0 To 75Kv	75mA
17	HV.17	0 To 75 Kv	100mA
18	HV.18	0 To 100 Kv	50mA
19	HV.19	0 To 100 kv	75mA
20	HV.20	0 To 100 kv	100mA

" Trip current can be settable by potentiometer for 10 % to 100 % of the current specified OR selectable in four ranges by a selector switch. PLEASE SPECIFY"

AUTOMATIC VERSION

Following parameters can be set by 4x4 matrix keypad

- A) Output Test Voltage
- B) Leakage / Trip Current Limit
- C) Test Duration (Time)

HV built in printer, with Rs232 interface & with both the feature are considered as Automatic version HV test set. In Automatic HV Test Set both types like with AC output & with DC output instruments are available.

SEMI AUTOMATIC VERSION

Following parameters can be set by push button with potentiometer / thumb wheel switch.

- A) Output Test Voltage
- B) Leakage / Trip Current Limit
- C) Test Duration (Time)

Once above parameters set and the high voltage is started the instrument will automatically raise the voltage. On reaching of the test voltage, control circuit will start to command to timer.

After completion of duration motor will come back.

Object Test Fail Indication is given.

FEATURES

Input Supply : 230V AC, Single Phase, 50 Hz

Metering : a) Analog / Digital Kv meter. b) Analog /Digital mA Meter c) Digital Timer

Transformer : a) Upto 5 Kv- oven baked varnished type b) Upto 50Kv - Epoxy Resin Cast Type

Indications : a) H.T. ON b) H.T. OFF c) Mains ON

Enclosure : H.V. Test Sets are housed in powder coated sheet metal cabinets

H. V. Probe : H.V. Test probe with 1.5 mtr. Cable will be supplied along with H.V. Testers upto 10Kv range .

TECHNICAL SPECIFICATIONS

OUTPUT	Analog Meters	Analog Meters with Digital Timer	Digital Meters	Digital Meters with Digital Timer	Digital Meters with built in Printer	Digital Meters with RS 232 Interface	Digital Meters with Printers & RS 232Interface	Semi Automatic
AC	HV#	HV# T	HV# DIGI	HV# TDIGI	HV# P	HV# RS	HV# PRS	HV# SEMI
DC			HV# D	HV# D T	HV# D P	HV# DR S	HV# D P RS	HV# D SEMI
AC/DC Combined			HV# AD	HV# AD T	HV# AD P	HV# ADR S	HV# AD P RS	HV# A D SEMI

WINDING RESISTANCE METER

FEATURES

- Selectable four resistance ranges.
- 4 1/2 digits LED display
- High measurement Current (10A)
- True four Technique eliminates lead resistance errors Systems
- Fully protected against overloads
- Proven design
- Computer connectivity through RS 232



TECHNICAL SPECIFICATIONS

PARAMETER	TWRM 1	TWRM 1 PRS
Display	4 1/2 digit LED Type	4 1/2 digit LED Type
Range	10 A / 1A / 100mA / 10 mA depending on range	10 A / 1A / 100mA / 10 mA depending on range
Max. Current	10 A / 1A / 100mA / 10 mA depending on range	10 A / 1A / 100mA / 10 mA depending on range
Power	230V AC, 50 Hz.	230V AC, 50 Hz.
4 Wire Measurement	Yes	Yes
Warm Up Time	10 Min.	10 Min.
Printer	No	50 inches thermal printer
PC Communication	No	RS 232
Application Software	No	Supplied at Extra Cost

CURRENT INJECTION SET

FEATURES

- Built in μ based Time Interval Meter measuring from 1 millisecond to 9999 sec.
- Panel with easy and clear legends to read.
- Continuously variable outputs.
- Auto Cut-off & output isolated.
- Self sensing of contacts i.e. NO or NC
- Potential free star stop signals
- Available in Portable / Lab type models with metal cover



INDOOR

Supply Voltage : 230V AC +/- 10%, 50Hz
 Indications : Mains ON, Output ON, Output OFF.
 Operation : Contactor controlled push buttons for output ON/OFF.
 Duty Cycled : 5Min ON/ 5 Min OFF.
 Protection : a) Fuse /MCB b) Over Current protection
 Termination : The outputs are brought out on the suitable bus bars.



OUTDOOR

TECHNICAL SPECIFICATIONS INDOOR TYPE

MODEL	Current Output AC			No. of Units	Metering
AEP-1	1000A - 2V	500 A / 4V	250 A / 8V	Single Unit	a) Digital Ammeter for CT primary & secondary b) μ based time interval meter
AEP-2	1000A - 5V	500 A / 10V	250 A / 20V	Two units. A) Transformer B) Control unit	
AEP-3	2000A - 2V	1000A / 4V	500A / 8V		
AEP-4	2000A - 4V	1000A / 8V	500A / 16V		
AEP-5	3000A - 2V	1500A / 4V	750A / 8V	Three units. A) Transformer unit B) Control unit C) Dimmer unit.	
AEP-6	4000A - 2V	2000A / 4V	1000A / 8V		
AEP-7	5000A - 2V	2500A / 4V	1250A / 8V		

TECHNICAL SPECIFICATIONS OUTDOOR TYPE

The Instrument is constructed in 2/3 units depending on the rating.

Loading Transformer Unit

The transformer primary will be wound on Toroidal Lamination and fitted with handles to make it portable and light weight. The secondary winding wire cum test lead is supplied separately.

Control Unit

This unit consists of a variable auto transformer, control circuit and measuring meters.

MODEL	Current Output AC	Test Lead Length (With luges crimped at the end)	Metering
PIK 500 / 2	500A - 2V	2 x 2 meters	a) Digital Ammeter for CT primary & secondary b) μ c based time interval meter
PIK 500/10	500A - 5V	2 x 10 meters	
PIK 1000/2	1000A - 2V	2 x 2 meters	
PIK 1000/10	1000A - 6V	2 x 10 meters	
PIK 2000/2	2000A - 2V	2 x 2 meters	
PIK 2000/10	2000A - 8V	2 x 10 meters	
PIK 3000/2	3000A - 2V	2 x 2 meters	
PIK 3000/10	3000A - 8V	2 x 10 meters	
PIK 5000/2	5000A - 2V	2 x 2 meters	
PIK 5000/10	5000A - 8V	2 x 10 meters	

RELAY TEST SET

FEATURES

- Potential -Free start and stop signal
- Continuously adjustable outputs
- Portable Models
- Automatic Self Sensing of Contacts, i.e. NO /NC
- Digital ammeter, voltmeter and time interval meter (UniTimer)
- UniTimer automatically puts OFF the output, when timer reaches to its maximum value of the selected range to ensure safety of the instruments as well as the item under test. Wide range of measurement, i.e. from 1 millisecond. To 9999 secs In four ranges.



APPLICATION

The protective devices such as relays, overload coils, circuit breakers must be checked regularly to ensure that, they are always ready to operate correctly. If a fault occurs in the equipment, which they are protecting, routine relay testing will quickly detect the faulty, incorrectly adjusted protection circuits correctly. It is usually necessary to measure its operating time. The micro controller based time interval meter is used for this purpose in all AJIT brand relay testers.

TECHNICAL SPECIFICATIONS :

- Input Supply : 230V, AC, + 10% single phase.
- Metering : a) 3 ½ digit, ammeter / voltmeter b) micro controlled based time interval meter
- Range : 0-9.999 - 99.99 - 999.9-9999 sec selectable by a push button.
- Display : 4 digit LED Type.
- Protection : Fuse /MCB, Over current protection.

MODEL	AC Current O/P-I	AC Current O/P-II	AC Voltage O/P	DC Voltage O/P	Aux. Voltage
RTS - 1	0-1A - 5A	-	250V	-	250V
RTS - 25	0 - 2.5A - 25A	-	-	-	250V
RTS - 25AV	0 - 2.5A - 25A	-	250V	-	250V
RTS 50	0-1A-10A-50	-	250V	250V	250V
AE 1 500 VA	0-1A-10A-100A	-	250V	-	250V
AE 1-2 VAD	0-1A-10-100A	0-10A	250V	250V	250V
AE 2 AVD	0-1A-10-200A	-	250V	250V	250V
AE 1 500 VAD	0-1A-10-100A	-	250V	250V	250V
AE 100 Automatic with CT test function and built in printer	0-1A-10-100A	0-10A	500V	300V	250V

CIRCUIT BREAKER TIMER

Features :

- ❖ Micro - Controller based technology
- ❖ Very Compact and lightweight
- ❖ Very accurate measurements
- ❖ Available with built - in thermal printer or RS 232 interface
- ❖ Available in bench top and industrial suit case models.
- ❖ Economical

Technical Specifications

Range : Upto 9999 millisecond

Display : 16 X 2 LCD Type

Accuracy : 0.5%

Commands : Close & trip for breakers

Trip Free : CO timing of breakers

Reset : Resets the counter to zero

Input : a) Potential free contacts R-Y-B and common
 b) +ve and close or +ve and trip can withstands for
 220V AC/DC and 6Amp.

Supply : 230V AC, single phase, 50 Hz.



Special Notes :

The timer will not start if all three contacts are not in same condition.

The timer will not start for trip free mode if all poles are not open. Display will state the condition of each pole.

Can check the bounce when close command is issued.

The timer will scroll for R, Y and B phase with indicating No. of bounces and close duration for each bounce.

Duration is indication by a,b,c and so on for 6 bounces. Each phase scrolled for approximately 6 seconds.

If timer does not stop it will indicate that time has exceeded 10 seconds and it will be displayed according to phase.

MODEL	DESCRIPTION
CBT -1	Circuit breaker timer
CBT -1P	Circuit breaker timer with built in thermal printer
CBT -1PRS	Circuit breaker timer with printer & RS 232 interface

THREE PHASE SHIFTER

TECHNICAL SPECIFICATIONS

This instrument is capable of producing 3 Phase AC Voltage with phase shifting arrangement between the phases simultaneously

Voltage Output

Range : 0 to 415V ph-ph variable.

Measurement : 3 Digit Digital voltmeter with selector switch

Phase Angle Setting : With the help of selector switches and a variac.

Angle Measurement : Switch positions and a digital meter

Indications : LED indicators for input and output

Protection : Glass fuses in the input supply and output.

Power Supply : Three Phase, 415V AC 50 Hz, 120 degree apart

Cabinet : Powder Coated sheet metal cabinet.



VARIABLE

TECHNICAL SPECIFICATIONS

This instrument is capable of producing 3 Phase AC Voltage with phase shifting arrangement between the phases simultaneously

Voltage Output

Range : 415V ph-ph

Phase Shift : settable by selector switches

Phase angle setting : A rotary switch will be provided to select the phase angle in Lead or Lag in steps of 15 Degree.

Protection : Glass fuses in the input supply and output.

Power Supply : Three Phase, 415V AC 50 Hz, 120 degree apart

Cabinet : Powder Coated sheet metal cabinet.



SELECTABLE

MODEL	PHASE ANGLE BY SELECTOR SWITCH	PHASE ANGLE BY VARIAC	VOLTMETER	FINE ANGLE METER	CAPACITY
PS 30	90° Lag & Lead in steps of 15°	±7.5° in selected angle range	0 TO 500 V, AC	YES	30VA per ph
PS 500	90° Lag & Lead in steps of 15°	±7.5° in selected angle range	0 TO 500 V, AC	YES	30VA per ph
PS 30 S	90° Lag & Lead in steps of 15°	NO	NO	NO	250VA per ph

CONTACT RESISTANCE METER



FEATURES :

4.5 Digits LED display

3.5 Digits digital ammeter

High Measurement Current : 100A DC max.

True Four wire resistance measuring technique eliminates lead resistance errors inherent in 2 wire systems.

Fully protected against overloads.

Proven design

TECHNICAL SPECIFICATIONS: MODEL:CRM 100-1

Display : 4 ½ digits, digital LED display

3.5 Digits digital ammeter

Selectable by a range selector switch

Test current switch : 0 - 100 A DC max

Protection : Electronic type short circuit & overload protection on output.

Meter provided : 4.5 digit, digital resistance meter.

Power : 230V AC, 50 Hz

Type of measurement : 4 Wire Measurement System

TECHNICAL SPECIFICATIONS: MODEL:CRM 100-3

Display : 4 ½ digits, digital LED display

3.5 Digits digital ammeter

Selectable by a range selector switch

Test current switch : 0 - 100 A DC max

Protection : Electronic type short circuit & overload protection on output.

Meter provided : a) 4.5 digit, digital resistance meter.

: b) 3.5 digit, digital ammeter.

: b) 3.5 digit, digital DC mV meter.

Power : 230V AC, 50 Hz

Type of measurement : 4 Wire Measurement System

DOUBLE VOLTAGE DOUBLE (DVDF) TEST SETUP

MOTOR GENERATOR UNIT

This test setup is generally used to perform induced voltage test on the transformers. This set up consists of the USED motor and generator combination to develop the required voltage and frequency. Both generating unit and the drive motor are mounted on a common metallic frame.

GENERATING UNIT

Input : 0 to 415 V three phase, 50 Hz through the dimmer unit.
 Output : 50 to 900 V three phase, 100 Hz.
 Capacity : Suitable to test the distribution transformers
 Transformers KVA ratings shall be specified by the customer.

The input and output are terminated on the suitable terminals on the unit.
 Make : KIRLOSKAR / CROMPTON / AEC / SIEMENS / NGEF (OR EQUIVALENT)



Motor Generator Assembled Unit

DRIVING UNIT

Input : 415 V three phase, 50 Hz through the DOL /Star Delta starter.
 RPM : 1440 OR ANY SUITABLE SPEED (OR EQUIVALENT)
 The input supply terminals are terminated on the suitable terminals on the unit.
 Make : KIRLOSKAR / CROMPTON / AEC / SIEMENS / NGEF (OR EQUIVALENT)

CONTROL PANEL UNIT.

This unit is housed in sheet metal wall mounting type, seven tank process powder coated cabinet. The control panel consists of the following :

- ❖ A Rotary switch for power ON /OFF.
- ❖ A contactor controlled push button or rotary switch for o/p ON/OFF.
- ❖ 3.5 digit digital ammeter with CT and an ammeter selector switch to indicate the output current 01 No.
- ❖ 3.5 digit digital voltmeter with selector switch to indicate the output voltage 1 No.
- ❖ A digital frequency meter to indicate input or output frequency.
- ❖ A DOL / Star Delta starter suitable for the driving motor will be provided.
- ❖ Push button of ELCOM make to start and stop the driving motor.
- ❖ Input and output indicators will be provided.
- ❖ Fuse Protection in Input and output will be provided.

c) Dimmerstat Unit :
 Input : 415 V AC 50 Hz three phase.
 Output : 0 470 V AC variable.
 Output current : Depending upon kVA Rating of the transformer under test.

ORDERING INFORMATION

MG XXXXX P D



Control Panel Unit

TRANSFORMER TEST PANEL / SETUP



APPLICATION

This is a common test panel for distribution/ power transformers of different specifications. The user can perform most of the factory tests, as per the relevant IS standard for the transformers. The panel consists of power analyser, meters for high voltage test, meters for induced voltage test etc, control for all the tests, protection and interlock circuits so that a single panel can be used to conduct a number of tests using only one dimmerstat and the associated devices.

FEATURES

- A single measurement and control center.
- Simple & Easy to use.
- All digital & accurate meters.
- Electrically interlocked for safe operation.
- Wide range of transformers can be tested.

TECHNICAL SPECIFICATIONS :

MODEL	DVDF MG SET	Three Phase Dimmerstat	Power Analyzer	High Voltage Transformer	Common Panel
TSP XXXXX	X	X	X	X	✓
TSP XXXXX A	X	X	✓	X	✓
TSP XXXXX MG	✓	X	X	X	✓
TSP XXXXX MG D HV	✓	✓	✓	✓	✓

Following Tests can be conducted :

1. Induced voltage test using DVDF motor generator setup, dimmer & common panel.
2. High voltage test using HV transformer, dimmer & common panel.
3. Open circuit and short circuit test using common panel, dimmerstat & intermediate transformer (if required & offered).
4. Magnetic balance tests using dimmer & common panel.

MOTOR GENERATOR SET FOR DVDF

Motor Generator set made from the used and rewound motors fitted on a common metallic frame and coupled together.

TECHNICAL SPECIFICATIONS :

Generating unit :

Input : 0 to 415 V three phase, 50 Hz through the dimmer unit.

Output : 50 to 900 V three phase, 100 Hz or 150 Hz as per customers specifications.

Capacity : Suitable to test the distribution transformers. Transformers KVA ratings shall be specified by the customer.

The input and output are terminated on the suitable terminals on the unit.

Make : KIRLOSKAR / CROMPTON / AEC / SIEMENS / NGEF (or any other equivalent).

DRIVING UNIT :

Input : 415 V three phase, 50 Hz through a starter.

RPM : 1440 or any other suitable speed.

The input supply terminals are terminated on the suitable terminals on the unit.

Make : KIRLOSKAR / CROMPTON / AEC / SIEMENS / NGEF (or any other equivalent).

VARIABLE 3 PH MOTORIZED AUTOTRANSFORMER (DIMMER-STAT)

TECHNICAL SPECIFICATIONS :

Cooling type : Air Cooled/ Oil Cooled Type.

Input : 415 V 3 phase, 50 Hz.

Output : 0 470 V 3 phase, 50 Hz, variable.

Operation : Motor driven for increase and decrease. The motor control push buttons will be in the common panel.

Current capacity : Selected depending upon the kVA rating of transformer under test.

Termination : Input, Signals, Motor wires & Output are terminated on insulated terminals with appropriate legend marking.

The dimmer-stat will have caster wheels to make it portable.

Housing : The dimmer-stat will be housed in powder coated sheet metal cabinet.

HIGH VOLTAGE TRANSFORMER

TECHNICAL SPECIFICATIONS :

INPUT : 230V Single Phase / 415V Two Phase, 50Hz (as specified by customer).

OUTPUT : 0-30kV / 60kV / 80kV / 100kV (as specified by customer) with one end of HV winding at ground potential.

OUTPUT CURRENT : 100 mAmp / 200 mAmp / 250 mAmp / 300 mAmp / 500 mAamp or as specified by customer.

" Trip current can be settable by potentiometer for 10 % to 100 % of the current specified OR selectable in four ranges by a selector switch. PLEASE SPECIFY"

Insulation / Cooling : Epoxy resin cast / Oil immersed.

Note : HV Transformer of any other specifications can be supplied.

COMPREHENSIVE CONTROL CUM MEASUREMENT PANEL

Technical specifications :

Input : 415 V, three phase 50 Hz.

Inter locks : a) Zero start inter lock.

b) One test will be enabled at a time. When one test is in process other tests will be electrically disabled.

c) Test Cabin / Chamber door interlock.

The panel will have following.:

a) 3 ½ Digit Digital Kv meter, mA meter and 3 Digit settable timer for high voltage test

b) 3 ½ Digit Digital Ammeter with selector switch, 3 ½ Digit Digital voltmeter and 4 Digit digital frequency meter for DVDF test

c) Three Phase power analyzer as under

i) Model DPA TT 3B - 600 Volts (PH-PH) & 80 Amps without CT & PT.

ii) Model DPA TT 3Bi- 2000 Volts (PH-PH) & 80 Amps without CT & PT.

c) DOL / Star Delta starter for the driving motor of DVDF

d) Main MCB for incoming to panel.

F) Illuminated push buttons are provided for the following:

i) O/C - S/C Test ON/OFF

ii) HV Test ON/OFF

iii) DVDF Test ON / OFF

iv) Dimmer Output Raise / Lower.

V) Timer Start

vi) Timer Reset.

g) Zero start interlock facility for all the tests.

h) One test at a time interlock facility.

i) Arrangement to use a single three phase dimmer for all tests with the help of contactor controlled push buttons.

J) Input and outputs are terminated on the suitable terminal blocks in the panel.

Operation : All test operations will be independent contactor controlled and push button operated for enabling the test. The output variation by push buttons to raise and lower the output.

OIL TAN DELTA TEST SYSTEMS

APPLICATION

Insulation Oil
Liquid / Semi Liquid Insulations.
Petroleum Jelly



PARAMETERS

Tan Delta
Dielectric Constant
Volume Resistivity

RESISTANCE & RESISTIVITY

Test Voltage DC : 500 VDC
Resistance Range : 10^6 - 10^{12} Ohm
Resistance Accuracy : $\pm 3\%$ of reading upto 1GOhm
& $\pm 10\%$ at high end.
Resistivity Range : 10^9 - 10^{15} Ohm - cm

OIL CELL HEATER

Power Supply : 230VAC $\pm 10\%$, 50Hz.
Test Temperature : Room Temp. To 110°C
Accuracy : ± 1 Deg C
Over Shoot : $\pm 4^\circ$ C

GENERAL SPECIFICATIONS

Power Supply : 230VAC $\pm 10\%$, 50Hz.
Operating Temp : -10 to 50°C
Humidity : Ambient to 90% RH

TECHNICAL SPECIFICATION

Tan Delta & Volume Resistivity
Test Voltage 0 to 600 VAC
Accuracy : $\pm 1.0\% \pm 1$ Volt,
Resolution : 1Volt
Test Frequency : 50Hz
Dielectric Constant Range : 1.0 to 20.0 accuracy ± 1
Resolution : 0.01
Dielectric Tan Delta Range : 0.01 % to 200%
Accuracy : $\pm 1\% \pm 0.05\%$
Resolution : 0.01
Dielectric Loss : 0 to 10.00
Accuracy : $\pm 1\% \pm 1$ digit

THREE TERMINAL OIL CELL

Construction : 3 Terminal Configuration
Cell Capacitance : 55pF ± 1 pF
Material : Stainless Steel with Teflon spacers.
Electrode Spacing : 2mm
Volume : 45 to 55ml

Standard Calibrator (Optional)

Capacitance 1 value, Tan Delta 3 value & Resistivity 4 value standard calibrator with traceable calibration certificate operating voltage 500VAC/DC.