



Certificate No.:C-0713

NABL (ISO/IEC 17025:2005) accredited Lab

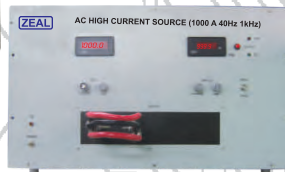
ZEAL



ZEAL SERVICES

MANUFACTURER & EXPORTERS OF MEASURING INSTRUMENTS.

(AN ISO 9001 : 2008 Certified Company)



Company profile :

Incepted in August 1996, Zeal Services is an ISO 9001:2008 certified company engaged in manufacturing & export of Electronics Test & Measuring Instruments, Calibration Standards for Electro Technical Parameters.

Our product range includes Calibrators, Power Sources, Panel Meters, and Testers. Our range of testing equipment have been appreciated by our clients for their features such as Reliability, Precision and Accuracy. Hence, these equipments are being used in various industry segments such as Power Electronics, Heavy Electrical engineering, Control Panel Manufacturers, Components manufacturers etc. Our products are also being used in R&D organization and educational institutes.

Calibration standards are popular amongst Calibration & Testing Laboratories, Digital / analog meter manufacturers.

Apart from this we also offer Calibration Services (As per NABL/ISO 17025 : 2005) for Electronic Test and measuring Instruments.

Vision :

To be a globally recognized corporation that provides best electronic test and measuring solutions developed by best-in-class people.

Mission :

To achieve our vision through fairness, business ethics, global reach, technological expertise, building long term relationship with all our associates, customers, partners and employees.



Director's profile :

Our company has been engaged in manufacturing of Electronic Test and Measuring Instruments from past 16 years. We have been supported by our Director, Mr. Vikas B. Rathod who has completed B. E. Electronics from SGGGS College of Engineering & Technology, Nanded. He has wide experience of more than 21 years in our field.

Experience of the Director:

- Worked with Electronics Test and Development Center (ETDC), Pune (India), which is established by STQC Directorate Govt. Of India, from 1990 to 1996 as head of Testing, Calibration and Maintenance department
- Worked as a skilled service Engineer of all types & brands of Electronics Test and measurement Equipment during initial days of Zeal Services, as the company started with zero.
- Now responsible for R & D, marketing and Calibration departments of Zeal Services

Our Limited Customer List :

- | | | |
|-------------------------------|-------------------------------------|----------------------------------|
| 1. BOSCH Ltd. | 8. Secure Meters Ltd. | 15. EPCOS India Pvt. Ltd. |
| 2. L & T Ltd. | 9. Bharat Electronics Ltd. | 16. NELCO Ltd. |
| 3. Whirlpool of India Ltd. | 10. Bharat Heavy Electricals Ltd. | 17. Airport Authority of India |
| 4. Siemens Ltd. | 11. Hindustan Aeronautics Ltd. | 18. Air India |
| 5. Honeywell Automation IPL | 12. Rishab Instruments Pvt. Ltd. | 19. Naval Dockyard |
| 6. Emerson Power Network Ltd. | 13. Radix Electro Systems Pvt. Ltd. | 20. College of Engineering, Pune |
| 7. LG Ltd. | 14. Electronic Regional Test Lab. | 21. IIT Bombay |

Multi Function Calibrator (5½ digit)



Make: ZEAL

Model: ZSMFC5.5

Input Power: 230 V AC @ 50 Hz

DC Voltage Ranges: 200mV, 2V, 20V, 200V, 1000V

AC Voltage (45 Hz to 1000 Hz) Ranges: 200mV, 2V, 20V, 200V, 900V

DC Current Ranges: 2mA, 20mA, 200mA, 2A, 10A

AC Current(45 Hz to 1000Hz) Ranges: 2mA, 20mA, 200mA, 2A, 10A

Accuracy: DC V: 0.10%, AC V: 0.15%, DC Current(2mA to 2A):0.10%,

AC Current(2mA to 2A): 0.15%, For DC & AC 10 A: 0.15%

(Accuracies specified at 25 deg C, RH <70%,

basic accuracy ± 10 digits for DC parameters & basic accuracy ± 15 digits for AC parameters.

Basic accuracies of AC parameters defined at 60Hz for all other frequencies : 0.35%)

Features:

- Overload and short circuit protection
- Pure Sine wave with variable frequency
- Setting by Decade switches for V/A in 5½ digit MFC
- Frequency setting by potentiometer
- Parameter and range selection by inbuilt micro controller based unit and relays. Bar of LEDs to indicate parameter and range.
- Separate output ports for V (Hi), mA (Hi), 10A(Hi) and com

Accessory: X 100 AC/DC current coil for clamp on meter calibration up to 900A

Note: Current beyond 10A is also available.

Tachometer Calibrator (Non contact)



Make: ZEAL

Model: ZSDTC

Ranges: 100, 1000, 10000, 100000 RPM

Total Settable range: 1 rpm to 1 lac rpm

No. of digits: 6 digits for each range

Accuracy: 0.1% \pm 2 digit

Optical Pulse by high bright white LED

Other output: 5 V pulse

Three Phase Power / Energy Meter Calibrator

TECHNICAL SPECIFICATION



Make: ZEAL

Model: ZS3ΦPEC

Input: 230 Volt AC

Output Voltage Ranges: 0 to 300 V (L-N) or 0 to 520 Phase to Phase

Output Current Ranges: 0 to 6 A per phase

Mode: 3 Phase, 4 Wire

Independent setting for each current channel & Independent setting for ON/OFF switch for each output channel.

Output ports: Vr , Vy, Vb, -N & Ir (Hi, Lo), Iy (Hi, Lo), Ib (Hi, Lo)

PF Range: 0.1 lag to Unity to 0.1 lead

Compliance: 20 VA, at FS on V ranges,

Compliance: 20 VA, at FS on A channels

Frequency: 45 to 60 Hz

With programmable timer counter to keep output ON for fix duration. Duration programmable in minute.

Setting: Voltage, current, frequency by potentiometer.

Power Factor by push button keys, timer by thumb wheel switches

Metering:

Digital AC Voltmeter, Digital AC Ammeter , Universal meter to indicate PF, W, VA, VAR of each phase. Also average of all phases, WHr Programmable current display to accommodate any CT ratio

Accuracy: 0.15% FS±10 dgts for voltage & current , 0.05%± 1 dgts for PF , 0.3% FS for watt meter, 0.02% for time duration Whr: 0.35%

Sinusoidal Outputs: THD 1.5%

Protections : Overload and Short circuit

Dimensions: W600 x D 600 x H 270 mm

Weight: 40 kg without packing

Linear Transmitter Simulator



TECHNICAL SPECIFICATIONS:

Make: ZEAL

Model : ZSLTS

Technical Specifications:

Input power: 24 V ± 10% DC C single phase

DC Current Range: 4 to 20mA (with percentage selector switch)

0%= 4mA, 25%= 8mA, 50%= 12mA, 75%= 16mA, 100%= 20mA

Accuracy of settings: 0.15 % With Transmitter ON indication by LED

Note: High voltage & High Current can be customized as per customer requirement

mV/mA/RTD Calibrator



Make: ZEAL

Model : ZSPCM

Technical Specification (Mains operated)

INPUT POWER DIGITAL METER :

230 V \pm 10% AC single phase (4½dgt)LED

DC Current source Range : 0 to 20mA

Accuracy : 0.1 % \pm 3 digits

DC Voltage source Range : 0 to 200 mV

Accuracy : 0.1 % \pm 3 digits RTD(fix 10 positions)

-50,-25,0,25,50,75,100,200,300,400 °C

DIMENSIONS : (272 x 150 x 200) mm

WEIGHT : 1.25 kg Approx

ACCURACY OF RTD SOURCE 0.1% OF SET TEMPERATURE

Make: ZEAL

Model : ZSPCB Technical Specification

(Battery operated)

INPUT POWER :

9V x 2 Batteries100mAH,
with charger

DIGITAL METER

(4½dgt)LED

DC Current source

Range : 0 to 20mA

Accuracy :0.1 % \pm 3 digits

DC Voltage source Range : 0 to 200 mV

Accuracy : 0.1 % \pm 3 digits

RTD(fix 10 positions)

-50,-25,0,25,50,75,100,200,300,400 °C

DIMENSIONS :(170 x 90 x 44) mm

WEIGHT : 0.5 kg

ACCURACY OF RTD SOURCE 0.1% OF SET TEMPERATURE



DC Low Current Source



Make: ZEAL

Model: ZSLCS

Input Power: Battery operated, 9V x 2

Output Ranges: 0 to 25.00 nA

Output Setting : Manually by multi turn Potentiometer

Display: 4½ Digit LCD

Accuracy: 0.75% rdg \pm 10 dgt

Decade Resistance Box

Make: ZEAL, Model : ZSDRB

Technical Specifications:

Decades of 1 Ω -10 Ω ,
10 Ω - 100 Ω ,
100 Ω - 1k Ω ,
1k Ω - 10k Ω ,
10k Ω - 100k Ω ,
100k Ω - 1M Ω ,
1M Ω - 10 M Ω

Total resistance range: Minimum 1 Ω to maximum 100 M Ω

Accuracy: 1.0% for 1 Ω decade.0.5% for 10 Ω to 10M Ω

Basic stability for decades of 10 Ω to 10 M Ω : 100 ppm



Decade Capacitance Box

Make: ZEAL, Model: ZSDCB

Technical Specifications:

Decades of 10 pF-100 pF,
100 pF- 0.001 μ F,
0.001 μ F- 0.01 μ F
0.01 μ F-0.1 μ F
0.1 μ F-1 μ F
1 μ F- 10 μ F

Total Capacitance range: Minimum 10 pF to maximum 10 μ F

Accuracy: 2.5% for all decades.



Decade Inductance Box

Make: ZEAL, Model: ZSDIB

Technical Specifications:

Decades of 10 μ H - 100 μ H
100 μ H - 1mH
1mH - 10mH
10mH - 100mH
100mH - 1H
1H - 10H

Total Inductance range: Minimum 10 μ H to maximum 10 H

Accuracy: 2.5% for all decades.



Precision Decade Resistance Box



General Technical Specifications:

Make: ZEAL

Model : ZSPDRB

Decade of 1 m Ω , 10 m Ω , 100 m Ω , 1 Ω , 10 Ω , 100 Ω

Resistance Range: 0.001 Ω to 1k Ω

DECADE POSITIONS WITH ACCURACY

$\pm 5\%$ for 0.001 Ω

$\pm 2.5\%$ for 0.01 Ω

$\pm 1.5\%$ for 0.1 Ω

$\pm 0.5\%$ for 1 Ω

$\pm 0.1\%$ for 10 Ω

$\pm 0.1\%$ for 100 Ω

Residual Resistance < 10m Ω

Low Resistance Jig



Technical Specification:

Make: ZEAL

Model : ZSLRJ

Set of 4 wire Low Resistance standards

Fixed resistors: 10 $\mu\Omega$, 50 $\mu\Omega$, 100 $\mu\Omega$, 1m Ω ,
10m Ω , 100m Ω , 1000m Ω

Maximum Test currents: For 10 $\mu\Omega$, 50 $\mu\Omega$: 20 A
For 100 $\mu\Omega$ to 10m Ω : 10 A
For 100m Ω : 1 A
For 1000m Ω : 1 A

Accuracy class: 0.25% for 10 $\mu\Omega$, 50 $\mu\Omega$,
0.1% for 100 $\mu\Omega$, 1m Ω ,
10m Ω , 100m Ω , 1000m Ω

High Resistance Jig



Technical Specification:

Make: ZEAL

Model: ZSHRJ

Description:

Ranges: 1G Ω , 2G Ω , 5G Ω , 7G Ω , 10G Ω , 50G Ω , 100G Ω

Max DC Test Voltage: 1000V/2000V

Accuracy: 2%

AC / DC High Current Source

Make: ZEAL

Model: ZSHCS

Power: 230V AC , single phase

Range: 0 to 1000.00 A

Resolution: 0.01A

Accuracy: DC A: 0.1%± 15 digits

AC A: 0.1%± 15 digits



Variable Voltage/Current Variable Frequency Source



TECHNICAL SPECIFICATION

Make: ZEAL

Model : ZSVCVFS

Output Voltage Range : 0 to 440 V

Single Phase or 3 Phase(for Voltage Source)

Output Current Source:0 to 1000 A

(for Current Source)

Output Wattage :12 kVA

Frequency Range:40 to 1000 Hz

Total Harmonic :Less than 1.25% for

Distortion Precision Voltage and
Current Source.

3.5% for Power sources

Stability:0.1% (After Warm-up)

Digital Meters:4½digit Voltage/Current,

4 digit Frequency

Protection:Overload and short circuit

Operating Temperature:35 +/- 100C

Line / Load Regulation:0.25 % for
(230 +/- 10%)

Dual DC Regulated Power Supply

Model	Voltage & Current range
ZS2PS302	30V, 2A
ZS2PS305	30V, 5A
ZS2PS3010	30V, 10A
ZS2PS3020	30V, 20A

TYPICAL TECHNICAL SPECIFICATION

Make: ZEAL

Model : ZS2PS

Output Voltage Range : 0 to 30 V (Dual)

Output Current : 0 to 2 Amp.

Load Regulation : 0.1 %

(From No Load to Full Load)

Line Regulation : 0.1 %

(For Input 230 VAC \pm 10%)

Ripple : 0.5 m Vrms Max.

(With /Without Load)

Output Stability : 0.1 % (After warm-up of 20 minute)

Digital Meter : DC Voltage & Current



Accuracy : For Voltage : 0.5 %

For Current: 0.5 %

Protection : Overload & Short circuit

Dimensions : (360 x 265 x 140) mm.

Operating Temp. : 0 to 50 ° C

Input Power : 230 V \pm 10 % , 50 Hz.

Requirement

Weight : 08 kg. Appox

FEATURES:

* Power supplies of High Voltage upto 2kv @ 0.5A and high current upto 100A @ 10 V are available

* Above 100 W power supplies have triac based preregulator.

* Switching frequency above 100 KHz for SMPS.

Electronic Load Tester

Make: ZEAL

Model: ZSEL

TYPICAL TECHNICAL SPECIFICATIONS:

• Typical Load Range: 0 - 20 A (settable by multi turn potentiometer)*

• Load Current Regulation: \pm 0.05 % (for a change of battery voltage from no load voltage to end voltage level)

• Line Regulation: \pm 0.05 % (for \pm 10% change in mains supply)

• Power Requirement: 230 V AC \pm 10% 50Hz

- Metering: 3 Digit Voltage, Amp meter to indicate battery voltage and current
- Timer
- Totaliser(Optional)
- Press to set end voltage for battery discharging application



Parameter	Range	Resolution	Accuracy
DC Volt	15 V	0.01V	0.5% rdg \pm 2 digits
DC Current	20 A	0.01A	0.5% rdg \pm 2 digits

Note : Loads of high current are also available.

Ground / Earth Continuity Tester

TECHNICAL SPECIFICATIONS:

Make: ZEAL

Model: ZSGCT

- Power: 230V AC, $\pm 10\%$, 50 Hz
- Resistance Measurement Range: 0 to 200 milli Ohm
- Test Current: 30A $\pm 1\%$ AC
- Open Circuit Voltage: 8V, AC
- Current Waveform: Sinusoidal
- Acceptable setting: by press to set switch and potentiometer, using digital milli Ohm meter
- Programmable Timer: 1 to 60 sec
- Metering: 3 1/2 digit Digital V, A and milli Ohm meter
- Indication Accuracy: V: 1.5% of reading, A: 1.5% of reading, m Ω : 1.5% of reading ± 5 dgt



- Accuracy of trip resistance: ± 5 m Ω
- Indications: Trip, Test On, Test Off
- Output test current through high current wire and Earth pin of 3 pin socket
- Accessory: High Current Crocodile wire/Test Probe
- **Method of measurement:** Passing a constant AC current (30A) and measuring a voltage drop across the resistance to be measured

Digital Panel Meters



Sr.No.	Description	Accuracy	Size
01	3 1/2 Digital DC Voltmeter	(0.5 % rdg + 1 dgt)	48 x 96 x 90
02	3 1/2 Digital DC Ammeter	(0.5 % rdg + 1 dgt)	48 x 96 x 90
03	3 1/2 Digital AC Voltmeter	(0.75 % rdg + 1 dgt)	48 x 96 x 90
04	3 1/2 Digital AC Ammeter	(0.75 % rdg + 1 dgt)	48 x 96 x 90
05	3 1/2 Digital AC True RMS Voltmeter	(0.75 % rdg + 1 dgt)	48 x 96 x 90
06	3 1/2 Digital AC True RMS Ammeter	(0.75 % rdg + 1 dgt)	48 x 96 x 90
07	3 Digit Line Frequency Meter	1 dgt	48 x 96 x 70
08	4 Digit Line Frequency Meter	1 dgt	48 x 96 x 70
09	RPM Indicator	1 dgt	48 x 96 x 70

Also available 4 1/2 digit meter size (48x96x120)mm

Also All meters are available in Size 96 X 96 mm

Digital UPS, Stabilizer, Genset Scanner

Specifications :

Parameter	Range	Accuracy	Revolution
AC Voltage	0 to 450 V AC	(0.75 % rdg + 1 dgt)	1 Volt
AC Current	As Per CT ratio	(0.75 % rdg + 1 dgt)	0.1 Amp.
Frequency	45 to 65 Hz	(+ 2 dgt)	0.1 Hz
DC Voltage	0 to 500 V DC	(0.75 % rdg + 1 dgt)	1 volt
DC Current	As per shunt ratio	(0.75 % rdg + 1 dgt)	0.1 Amp.

Dimension : (96 x 96 x 50) mm

Panel Cutout : (92 x 92) mm

Power : + 5 V , Com. , - 5 V

Operating: Ambient to 65o C

Temp. Features

• Electrical Isolation between all parameters

• Parameter Selection by Push Button Select Switch & bar of LEDs

• Gain, Offset setting for all parameters are accessible.



Digital Variac

TECHNICAL SPECIFICATION

Make: ZEAL

Model: ZSDV

Digital Meter : (With Select Switch or separate)

For Voltage and Current

Output Range : 270 V AC

Voltage Accuracy : 0.75 %

Current Range :

2.0 Amp AC, 5.0 Amp. AC,
10 Amp AC

Accuracy : 0.75 %

Dimensions Typical:

(130 x 240 x 160) mm For
2 Amp.

(180 x 300 x 160) mm For
5 Amp. & 10 Amp



Insulation Resistance Testers (Mains Operated)



TECHNICAL SPECIFICATION

Make: ZEAL

Model: ZSIRT

Insulation Resistance Tester

Power: 230V AC, $\pm 10\%$, 50 Hz

Test Voltage: 0.50 kV to 5.00 kV DC (Regulated), Ripple $< 0.1\%$ rms

Test Voltage setting by coarse and fine potentiometers



Resistance measurement Ranges: 0-2.00 G Ω ,
20.00 G Ω Range selection by toggle switch

Metering: 3 1/2 digit Digital V and Resistance meter

Accuracy: V: 1.0% of reading ± 5 dgt @ 100M Ω , G Ω : 1.5% of FS ± 3 dgt

Protection: against short circuit.

Accessory: Banana to crocodile (Fully insulated)Hi, Lo & Guard

AC/DC High Voltage Probe

Make: ZEAL

Model: ZSHVP-AC/DC

Range : 0-40 kV AC & DC

Attenuation Ratio : 1kV:100mV

Input Impedance > 100 M Ω

Accuracy : kV:1 % for DC

kV:1.5 % for AC



AC High Voltage Breakdown Tester

AC HV TESTER			
Model	Range	Model	Range
ZSHV5A-10	5kV, 10mA	ZSHV20A-20	20kV, 20mA
ZSHV5A-20	5kV, 20mA	ZSHV20A-30	20kV, 30mA
ZSHV5A-30	5kV, 30mA	ZSHV20A-50	20kV, 50mA
ZSHV5A-50	5kV, 50mA	ZSHV20A-100	20kV, 100mA
ZSHV5A-100	5kV, 100mA	ZSHV20A-500	20kV, 500mA
ZSHV5A-500	5kV, 500mA	ZSHV30A-20	30kV, 20mA
ZSHV10A-20	10kV, 20mA	ZSHV30A-30	30kV, 30mA
ZSHV10A-30	10kV, 30mA	ZSHV30A-50	30kV, 50mA
ZSHV10A-50	10kV, 50mA	ZSHV30A-100	30kV, 100mA
ZSHV10A-100	10kV, 100mA	ZSHV30A-500	30kV, 500mA



Technical Specifications:

AC High Voltage Breakdown Tester

Make : Zeal

Model : ZSHV

Power: 230V AC $\pm 10\%$, 50 Hz

Trip Current setting: by press to set switch & potentiometer, using digital mA meter

Timer (programmable): 0 to 999 second with timer ON/OFF switch.

Timer: 0 to 999 second with timer ON/OFF switch

Metering: 3 ½ digits Digital kV and mA meter

Accuracy: kV: 1.5 % of FS ± 2 dgt, mA: 1.5% of reading ± 2 dgt, Time: ± 0.5 second

Indications: Trip, HV On, HV Off

Accessory: HV Test probe



Type	Maximum Test Voltage (kV)	Typical Leakage currents (mA)
AC HV Tester	5, 10, 80	20,30,100,350
DC HV Tester	5, 10, 40	20,30,100,350
AC/DC HV Tester	5, 10, 20	20,100,350

Note: High test voltage & High leakage Current can be customized as per customer requirement

DC High Voltage Breakdown Tester

DC HV Tester Table

Model	Range	Model	Range
ZSHV5D-10	5kV, 10mA	ZSHV20D-20	20kV, 20mA
ZSHV5D-20	5kV, 20mA	ZSHV20D-30	20kV, 30mA
ZSHV5D-30	5kV, 30mA	ZSHV20D-50	20kV, 50mA
ZSHV5D-50	5kV, 50mA	ZSHV20D-100	20kV, 100mA
ZSHV5D-100	5kV, 100mA	ZSHV20D-500	20kV, 500mA
ZSHV5D-500	5kV, 500mA	ZSHV30D-20	30kV, 20mA
ZSHV10D-20	10kV, 20mA	ZSHV30D-30	30kV, 30mA
ZSHV10D-30	10kV, 30mA	ZSHV30D-50	30kV, 50mA
ZSHV10D-50	10kV, 50mA	ZSHV30D-100	30kV, 100mA
ZSHV10D-100	10kV, 100mA	ZSHV30D-500	30kV, 500mA



Technical Specifications:

DC High Voltage Breakdown Tester

Make : Zeal

Model : ZSHV

Power: 230V AC $\pm 10\%$, 50 Hz

Trip Current setting: by press to set switch & potentiometer, using digital mA meter

Timer (programmable): 0 to 999 second with timer ON/OFF switch.

Timer: 0 to 999 second with timer ON/OFF switch

Metering: 3 ½ digits Digital kV and mA meter

Accuracy: kV: 1.5 % of FS ± 2 dgt, mA: 1.5% of reading ± 2 dgt, Time: ± 0.5 second

Indications: Trip, HV On, HV Off

Accessory: HV Test probe



Type	Maximum Test Voltage (kV)	Typical Leakage currents (mA)
AC HV Tester	5, 10, 80	20,30,100,350
DC HV Tester	5, 10, 40	20,30,100,350
AC/DC HV Tester	5, 10, 20	20,100,350

Note: High test voltage & High leakage Current can be customized as per customer requirement

AC / DC High Voltage Breakdown Tester

AC/DC HV TESTER			
Model	Range	Model	Range
ZSHV5A5D-10	5kV, 10mA	ZSHV20A20D-20	20kV, 20mA
ZSHV5A5D-20	5kV, 20mA	ZSHV20A20D-30	20kV, 30mA
ZSHV5A5D-30	5kV, 30mA	ZSHV20A20D-50	20kV, 50mA
ZSHV5A5D-50	5kV, 50mA	ZSHV20A20D-100	20kV, 100mA
ZSHV5A5D-100	5kV, 100mA	ZSHV20A20D-500	20kV, 500mA
ZSHV5A5D-500	5kV, 500mA	ZSHV30A30D-20	30kV, 20mA
ZSHV10A10D-20	10kV, 20mA	ZSHV30A30D-30	30kV, 30mA
ZSHV10A10D-30	10kV, 30mA	ZSHV30A30D-50	30kV, 50mA
ZSHV10A10D-50	10kV, 50mA	ZSHV30A30D-100	30kV, 100mA
ZSHV10A10D-100	10kV, 100mA	ZSHV30A30D-500	30kV, 500mA



(Solid State)

AC/DC High Voltage Breakdown Tester

Make: Zeal

Model : ZSHV

Power: 230V AC $\pm 10\%$, 50 Hz

(AC / DC Range selection mode)

Trip Current setting: by press to set switch & potentiometer, using digital mA meter

Timer (programmable): 0 to 999 second with timer ON/OFF switch.

Timer: 0 to 999 second with timer ON/OFF switch

Metering: 3 ½ digits Digital kV and mA meter

Accuracy: kV: 1.5 % of FS ± 2 dgt, mA: 1.5% of reading ± 2 dgt, Time: ± 0.5 second

Indications: Trip, HV On, HV Off

Accessory: HV Test probe



(Variat Controlled)

Type	Maximum Test Voltage (kV)	Typical Leakage currents (mA)
AC HV Tester	5, 10, 80	20,30,100,350
DC HV Tester	5, 10, 40	20,30,100,350
AC/DC HV Tester	5, 10, 20	20,100,350

Note: High test voltage & High leakage Current can be customized as per customer requirement

DC Regulated Power Supply

Low Wattage

High Wattage

Model	Voltage & Current range	Model	Voltage & Current range
ZSPS24-1	24V, 1A	ZSPS30-30	30V, 30A
ZSPS24-2	24V, 2A	ZSPS30-50	30V, 50A
ZSPS24-5	24V, 5A	ZSPS30-100	30V, 100A
ZSPS24-10	24V, 10A	ZSPS60-10	60V, 10A
ZSPS24-20	24V, 20A	ZSPS60-20	60V, 20A
ZSPS30-1	30V, 1A	ZSPS60-40	60V, 40A
ZSPS30-2	30V, 2A	ZSPS100-2	100V, 2A
ZSPS30-5	30V, 5A	ZSPS100-10	100V, 10A
ZSPS30-10	30V, 10A	ZSPS100-25	100V, 25A
ZSPS30-20	30V, 20A	ZSPS150-2	150V, 2A
ZSPS60-2	60V, 2A	ZSPS150-10	150, 10A
ZSPS60-10	60V, 10A	ZSPS200-10	100V, 10A
ZSPS60-20	60V, 20A	ZSPS200-100	200V, 100A

General Specifications:

Input Power: 230 V / 415 V \pm 10% AC, 50Hz,

Line & Load Regulation: \pm 0.1% (Low Wattage), \pm 1% (High Wattage)

Meters: Output DC Volt Meter & Ammeter (Digital 3½ digit)

Accuracy: 0.5% \pm 3 digit (Low Wattage), \pm 2% (High Wattage)

Controls: Voltage setting: By course & fine potentiometer.

Power ON / OFF switch

Other Features: Protection against short circuit and overload.



(High Current)



Low Wattage



High Wattage



High Voltage

Note: High voltage & High Current range can be customized as per customer requirement

Secondary Injection Kit

Three Phase Secondary Injection Kit -
Technical Specifications:-

Make: ZEAL

Model: ZS3ΦSIK

Input: 230 Volt AC

Output Voltage Range: 0 to 300 V (L-N) or
0 to 520 Phase to Phase

Output Current Range: 0 to 6 A per phase

Mode: 3 Phases, 4 Wires

Output ports: Vr, Vy, Vb - N, Ir (Hi, Lo), Iy
(Hi, Lo), Ib (Hi, Lo)

PF Range: 0.5 to Unity

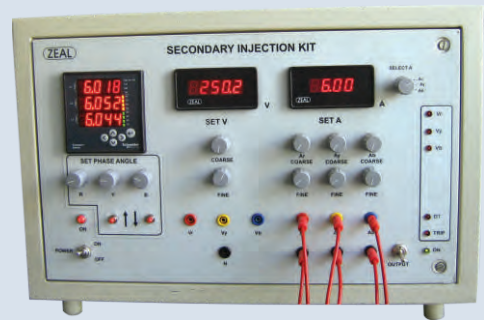
Compliance: 20 VA, at FS on V ranges,

Compliance: 30 VA, at FS on A channels

Frequency: 45 to 60 Hz

Programmable Timer: With programmable
timer counter to keep output ON for fix
duration. Duration programmable in
minute

Setting: By coarse and fine set of
potentiometer for Voltage and Current



By push button keys for Power Factor.
Metering: Digital AC Voltmeter, Digital AC
Ammeter,
Universal meter to indicate PF, W, VA, VAR
of each phase, also average of all phases,
WHr Programmable current display to
accommodate any CT ratio.
Accuracy: Class 0.15%
Sinusoidal Outputs: THD 1.5%
Protections: Overload and Short circuit

Digital Low Resistance Meter

Make: Zeal

Power: 230V AC, 50Hz, $\pm 10\%$

Measurement Range: 0 to 50.0 m Ohm

Test Current: 100 mA

Open circuit voltage: 20 mV

Meter: 3 ½ Digit

Accuracy: $1.5\% \pm 3$ dgt



Automatic Sequential Tester:



Technical Specifications:

Make: Zeal

Model: ZSAST

Power: 230V AC, $\pm 10\%$, 50 Hz

Test 1. High Voltage Test

Test condition: 750V AC

Trip Current: 10mA

Test duration: 2 second

If Test Ok then next test will be performed

(Test points: all windings of stator & body)

Test 2, 3, 4. Winding Resistance Test:

Test current: 0.1 to 2.5A (adjustable by potentiometer) CC Mode.

Measurement method: 4 wire

i.e passing constant current measuring low voltage drop.

Test duration: 1 second

If Test Ok then testing of the UUT will come to halt.

(Test points: all windings individually)

User to remove the UUT and connect next unit.

All test durations and off time between two consecutive tests will be programmable.

Metering: 3 ½ digit Voltage, current and resistance meter

Note: Sample once failed in any of the test should be removed and rectified and again subjected for the entire test. Range of Test Voltage: 10 to 1000 V @ 25 μ A

Accuracy of Zener Voltage Indication: $\pm 1\%$

Transistor Zener Diode Tester



Technical Specifications:

Make: Zeal

Model: ZSTZDT

- Hfe Measurement:

Hfe measurement is done at Test Voltage: 3.6 Volt VCC

Base current: 8 μ A

Accuracy of Test Voltage and Base Current: $\pm 1\%$

- Iceo Measurement:

Range of Test Voltage: 35 to 130 Volt.

Range of display of Leakage Current Meter: 1.999 mA

Accuracy of Test Voltage and Leakage Current: $\pm 1\%$

- Diode Forward Drop Measurement:

Range of Test Current: 0 to 10 Amp

Range of Forward Drop Display: 0 to 1.999 V

Accuracy of Forward Drop and Test Current: $\pm 1\%$

- Diode Reverse Breakdown Voltage Measurement:

Range of Test Voltage: 10 to 1000 V

Accuracy of Reverse Breakdown Voltage Indication: $\pm 1\%$

- Zener Voltage Measurement:

Range of Test Voltage: 10 to 1000 V @ 25 μ A

Accuracy of Zener Voltage Indication: $\pm 1\%$
With operating manual & test report

Single Phase Power / Energy Meter Calibrator:



Technical Specifications:-

Make: ZEAL

Model: ZSSΦPEC

Input: 230 Volt AC

Output Voltage Range: 0 to 300 V (L-N)

Output Current Range: 0 to 6 A

Mode: 1 Phase,

Output ports: V Hi, V Lo), I (Hi, Lo)

PF Range: 0.1 lag to Unity to 0.1 lead

Compliance: 20 VA, at FS on V ranges,

Compliance: 30 VA, at FS on A channel

Frequency: 45 to 60 Hz

With programmable timer counter to keep output ON for fix duration. Duration programmable in minute.

Setting: By coarse and fine set of potentiometer for Voltage and Current By push button keys for power factor.

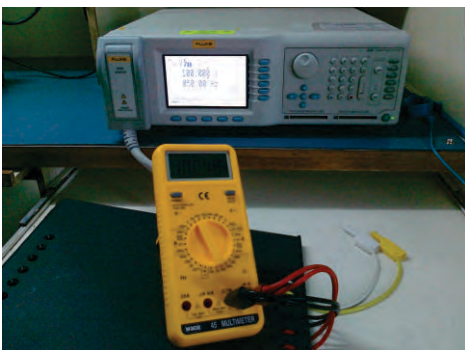
Metering: Digital AC Voltmeter, Digital AC Ammeter, Universal meter to indicate PF, W, Whr

Accuracy class: 0.15% for V, A, W, Whr

Sinusoidal Outputs: THD 2.0%

Protections : Overload and Short circuit

Setting: Voltage, current, frequency, Power Factor by potentiometers, timer by push button keys.



Certificate No.:C-0713



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