



MODEL 90A Universal Calibrator gives a standard output for AC Voltage, DC Voltage, AC Current & DC Current. Keys or Knob help to adjust the magnitude of the output signals. Important features include wide range, high accuracy, good stabilization, easy operation and portability. The Calibrator is ideal for testing ammeters and voltmeters upto 0.2 accuracy class.

Applications

- Calibration of AC Volt, Amp, Frequency Meters
- Calibration of DC Volt, Amp Meters
- Calibration of Resistance Meters, Clamp Meters, Multimeters

Standard Accessories

- 1 x Key Adjuster
- 1 x Power Cord
- 1 x Pair of Output Leads
- 2 x Fuse (2A)
- 1 x Data Cable for PC Connectivity
- 1 x Operation Manual

Optional Accessories

- Standard Current Coil



Turns Ratio	50 / 1
Input Max.	20A
Current	1000A
Clamp Jaw	> 28mm
DC Impedance	0.9Ω
DC Burden	20A / 1.3V
AC Burden	20A / 3V
Frequencies	DC to 60Hz
Accuracy	± 0.3% rdg

Technical Specifications

Voltage Control	Output Voltage Range : Basic Error :	200mV, 1V, 2V, 5V, 10V, 20V, 50V, 100V, 200V, 500V, 1000V DCV : ± (0.03 %RD + 0.02 %FS) ACV : ± (0.05 %RD + 0.03 %FS)
Current Control	Output Current Range : Basic Error :	100μA, 500μA, 2mA, 5mA, 20mA, 50mA, 200mA, 500mA, 2A, 5A, 20A DCI : ± (0.05 %RD + 0.02 %FS) ACI : ± (0.07 %RD + 0.03 %FS)
Frequency Control	Frequency Range : Frequency Error :	50Hz, 60Hz, 400Hz < 1 %
Resistance Control	Resistance Range : Basic Error :	10, 24, 50, 100, 240, 500 (Ω), 1, 2.4, 5, 10, 24 (kΩ), 10x1k, 24x1k, 50x1k, 100x1k, 240x1k, 500x1k, 1kx1k, 2.4kx1k, 5kx1k, 10kx1k, 24kx1k ± 0.2 % +20mΩ

General Specifications

Note - RD : Reading, FS : Full Scale

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|---|---|
| <ul style="list-style-type: none"> ■ Stability DC : < 0.01 %FS / 2 min, AC : < 0.03 %FS / 2 min ■ Ripple : < 0.1 % ■ Power Supply : 230 VAC, 50 (60) Hz ■ Power Consumption : < 180 VA ■ Operating Temperature : 5°C to 35°C ■ Relative Humidity : ≤ 80 % | <ul style="list-style-type: none"> ■ Distortion : < 0.5 % ■ Display : 5½ Digit LED Digital Display ■ Step adjustment of Output Signal : 10 %FS, 1 %FS, 0.1 %FS, 0.05 %FS ■ Dimensions : 147 x 480 x 480mm (approx.) ■ Total Weight : 17 kgs (approx.) |
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FEATURES / PARAMETERS		90A	90DQ	90P
DISPLAY	5½ Digit Display	✓	✓	✓
SYSTEM (1 PHASE)	DC	✓	✓	-
	AC	✓	✓	✓
VOLTAGE (V)	AC/DC V : (0 - 200mV to 1000V)	✓	-	-
	AC/DC V : (0 - 250mV to 1000V)	-	✓	-
	AC V : (0 - 1V to 1000V)	-	-	✓
CURRENT (A)	AC/DC A : (0 - 100µA to 20A)	✓	-	-
	AC/DC A : (0 - 100µA to 50A)	-	✓	-
	AC A : (0 - 10mA to 100A)	-	-	✓
FREQUENCY (Hz)	SYNCH	-	✓	-
	50 Hz	✓	✓	-
	60 Hz	✓	✓	-
	400 Hz	✓	✓	-
	1 KHz	-	✓	-
	40 Hz to 70 Hz	-	-	✓
RESISTANCE	10Ω to 24k x 1kΩ	✓	✓	-
PHASE ANGLE	0 to 359.99°	-	-	✓
POWER (1 PHASE)	Range : 0 to 100kW	-	-	✓
POWER FACTOR	Range : -1 to +1	-	-	✓
COMMUNICATION PORT	RS232	✓	✓	✓
KEY ADJUSTOR		✓	✓	✓
WORKS CALIBRATION CERTIFICATE TRACEABLE TO NPL		✓	✓	✓
STANDARD CURRENT COIL (OPTIONAL)	Input 5A (Max.), Turn Ratio 100 / 1	-	✓	✓
	Input 10A (Max.), Turn Ratio 100 / 1	-	✓	✓
	Input 20A (Max.), Turn Ratio 50 / 1	✓	-	-

Applications

- R & D Labs
- NABL Labs
- Educational Institutes
- Paper & Pulp Industries
- Automobile Industries
- Textile Industries
- Calibration Labs
- Chemical Process Industries
- Cement Plants
- Instrument Manufacturing Companies
- Medical Industries
- Petrochemical Industries

