



MODEL 90DQ Multifunctional Calibrator can output standard AC Voltage, DC Voltage, AC Current & DC Current. Output actual value, percent and FS display at the same time. Calibrator may select FS (full scale) and relevant step in according with scale of UUT (unit under test). Keys or knobs adjust magnitude of the output signals. Wide range, high accuracy, good stabilization, easy operation and portable. The calibrator is ideal to test amperemeter and voltmeter upto 0.2 class.

Applications

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

Standard Accessories

- 1 x Key Adjuster
- 1 x Power Cord
- 1 x Pair of Output Leads
- 1 x Pair of Output Leads (50A)
- 2 x Fuse (4A)
- 1 x Data Cable for PC Connectivity
- 1 x Operation Manual

Optional Accessories

- Standard Current Coil



Turns Ratio	100 / 1	100 / 1
Input Max.	5A	10A
Current	500A	1000A
Clamp Jaw	> 20mm	> 28mm
DC Impedance	0.7Ω	0.9Ω
DC Burden	5A / 3.5V	10A / 2.5V
AC Burden	5A / 6V	10A / 5V
Frequencies	DC to 60Hz	DC to 60Hz
Accuracy	± 0.3% rdg	± 0.3% rdg

Technical Specifications

Voltage Control	Output Voltage Range : Basic Error :	250mV, 1V, 2.5V, 5V, 10V, 25V, 50V, 100V, 250V, 500V, 1000V DCV : ± (0.02 %RD + 0.01 %FS) ACV : ± (0.05 %RD + 0.02 %FS)
Current Control	Output Current Range : Basic Error :	100μA, 500μA, 2.5mA, 10mA, 25mA, 100mA, 250mA, 1A, 2.5A, 10A, 50A DCI : ± (0.03 %RD + 0.02 %FS) ACI : ± (0.05 %RD + 0.03 %FS)
Frequency Control	Frequency Range : Frequency Error :	50Hz, 60Hz, 400Hz, 1kHz < 0.1 %
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

- Stability DC : < 0.01 %FS / 3 min, AC : < 0.02 %FS / 3 min
- Ripple : < 0.2 %
- Power Supply : 230 VAC, 50 (60) Hz
- Power Consumption : < 250 VA
- Operating Temperature : 5°C to 35°C
- Relative Humidity : ≤ 80 %
- Distortion : < 0.5 %
- Display : 5½ Digit LED Digital Display
- Step adjustment of Output Signal : 100 %FS/N, 10 %FS/N, 1 %FS/N, 0.1 %FS/N (N = 4, 5, 6, 10 and 15)
- Dimensions : 190 x 480 x 545mm (approx.)
- Total Weight : 22.5 kgs (approx.)



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

