KUSAM-MECO®
An ISO 9001:2015 Company

4½ DIGITS 19999 COUNTS DIGITAL MULTIMETER

THINK SAFETY
THINK KUSAM-MECO®

13 FUNCTIONS 29 RANGES

Model- DMM 90



FEATURES :

- **DMM-90 has a unique feature wherein the LCD display shows the terminals where the test leads are to be inserted to avoid wrong connection & damage to the meter.**
- **Low Power Consumption CMOS double integration A / D transform integrated circuit**
- **Auto Zero Calibration**
- **Auto Polarity display**
- **Selected Range displayed on LCD**
- **Instant Continuity Buzzer.**
- **"DATA - HOLD" switch freezes reading.**
- **Low Battery & Over range indication.**

GENERAL SPECIFICATIONS:

- ✶ **Sensing :** Average Sensing.
- ✶ **Display:** 4½ digit (19999 Counts) LCD. With display height 53mm and digit height 20mm and function / units sign annunciators.
- ✶ **Over range indication:** Highest digit of (1) or (-1) is displayed.
- ✶ **Low battery:** The "🔋"sign is displayed when the battery voltage drops below the operating Voltage.
- ✶ **Polarity:** Automatic (-) negative polarity indication,
- ✶ **Measurement rate:** 2.5 measurements per second,
- ✶ **Operating Temperature :** 0°C to 50°C,<70% R.H.
- ✶ **Storage Temperature :** -20°C to 60°C,<80% R.H. (With battery removed).
- ✶ **Accuracy :** Accuracy specifications at 23 ± 5°C; <75% RH.
- ✶ **Auto Power Off :** The meter will shut off automatically about 15 minutes after power is ON if the meter is not in use.
- ✶ **Power:** Single 9 V Battery.
- ✶ **Dimension :** 179(L) x 88(W) x 39(H)mm.
- ✶ **Weight :** Approx. 380 gms. (including battery)

ACCESSORIES :

Test leads, User Manual, Batteries Installed, Carrying Case, Protective Holster, Thermocouple Plug Test Clip. & K - Type Thermocouple

OPTIONAL ACCESSORIES :

Current Clamp Adaptor CA500, CA1000, CA2000, High Voltage Probe PD-28.

SAFETY :

- LCD display shows the terminals where the test leads are to be inserted to avoid wrong connection and damage to the meter.
- Overload Protection in all Ranges.
- Recessed Safety Designed Input Jacks
- CE approved IEC-1010 overload CAT II

ELECTRICAL SPECIFICATIONS : DMM 90

Accuracy specification at 23°C±5°C less than 75% R.H.

DC VOLTAGE

Range	Resolution	Accuracy
200 mV	10 µV	±(0.05%rdg+3dgts)
2 V	100 µV	±(0.1%rdg+3dgts)
20 V	1 mV	
200 V	10 mV	
1000 V	100 mV	±(0.15%rdg+5dgts)

Input impedance : 10MΩ
Overload protection:200mV range -250V AC/DC
1000V range -1000Vrms

AC VOLTAGE

Range	Resolution	Accuracy
2 V	100 µV	±(0.5%rdg+10dgts)
20 V	1 mV	
200 V	10 mV	
1000 V	100 mV	±(1%rdg +10dgts)

Input impedance : 2MΩ
Overload protection :200mV range-250V AC/DC;
1000V range - 1000Vrms

AC CURRENT

Range	Resolution	Accuracy
20 mA	1 µA	±(0.8%rdg+10dgts)
200 mA	10 µA	±(1.2%rdg+10dgts)
20 A	1 mA	±(2.5%rdg+10dgts)

Overload protection:0.5A/250V fuse for 200mA range
20A unfused max.10sec.

DC CURRENT

Range	Resolution	Accuracy
2 mA	0.1 µA	±(0.5%rdg+5dgts)
200 mA	10 µA	±(0.8%rdg+5dgts)
20 A	1 mA	±(2%rdg+10dgts)

Overload protection:0.5A/250V fuse for 200mA range
20A unfused max.10sec.

RESISTANCE

Range	Resolution	Accuracy
200 Ω	10 mΩ	±(0.5%rdg+10dgts)
2 kΩ	0.1 Ω	±(0.3%rdg +1dgts)
20 kΩ	1 Ω	
2 MΩ	100 Ω	
200 MΩ	10 kΩ	±(5% rdg +10dgts)

Overload protection : 250V rms

CAPACITANCE

Range	Resolution	Accuracy
2 nF	0.1 pF	±(3%rdg+40dgts)
20 nF	1 pF	±(4%rdg+10dgts)
2 µF	100 pF	
20 µF	1 nF	

Overload protection : 250V rms
Test Frequency : 400Hz / 40mV rms

FREQUENCY

Range	Resolution	Accuracy
20kHz	1Hz	±(1.5%rdg+3dgts)

Overload protection : 250V rms

DIODE TEST

Test Current	Open Circuit Volts
1.0mA	3.3V DC Typical

Overload Protection : 250V DC or AC rms

TEMPERATURE(K-Type Thermocouple)

Range	Resolution	Accuracy
-40°C~0°C	0.1°C	±(3%rdg+40dgts)
0°C~400°C		±(1%rdg+30dgts)
400°C~1000°C		±(2%rdg+50dgts)

Overload protection : 250V rms
Thermocouple accuracy not included
Supplied Thermocouple suitable for measurement upto 250°C

TRANSISTOR TEST

Range	Test Voltage	Basic DC Current
0 to 1000	2.8 V	10µA

Overload protection : 250V rms

CONTINUITY TEST

AUDIBLE BUZZER	Less than 100 Ω

Overload Protection : 250V DC or AC rms

All Specifications are subject to change without prior notice

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