

**GENERAL SPECIFICATIONS :**

- \* AC Current : 0.01A ~ 1000A
- \* AC Voltage : 1V ~ 750V
- \* DC Voltage : 1V ~ 1000V
- \* Resistance : 0.1Ω ~ 2MΩ
- \* Frequency : 1Hz ~ 2KHz
- \* Sampling rate : 3 reading/sec.
- \* Polarity : Automatic.
- \* Power Supply : 9V Alkaline Battery.
- \* Dimension : 228(L) x 75(W) x 36(H)mm
- \* Weight : approx 465 gms.(including battery).

**SPECIAL FEATURES :**

- Display : 3 ½ digits LCD,1999 counts
- Jaw size : Φ40mm
- Date hold
- Black Light
- Resistance, Frequency test
- Diode & Continuity test

**ACCESSORIES :**

Test leads set, Users Manual, Battery & Carrying Case.



Preliminary Data

**ELECTRICAL SPECIFICATIONS : KM 3060**

**AC CURRENT**

Range	Resolution	Accuracy
<b>50Hz ~ 60Hz</b>		
20 A	0.01 mA	± (3%rdg + 5dgts)
200 A	0.1 mA	± (2%rdg + 5dgts)
1000 A	1 A	± (2%rdg + 5dgts) for 800A & below ± (3%rdg + 5dgts) for others current.

Overload Protection : 1200A within 60 seconds.

**AC VOLTAGE**

Range	Resolution	Accuracy
<b>50Hz ~ 60Hz</b>		
750 V	1 V	± (1.2%rdg + 10dgts)

Overload Protection : 750V AC / DC on all ranges.  
Input Impedance : 9MΩ

**DC VOLTAGE**

Range	Resolution	Accuracy
1000 V	1 V	± (1%rdg + 1dgts)

Overload Protection : 1000V DC / Peak AC on all ranges.  
Input Impedance : 9MΩ

**CONTINUITY TEST**

Range	200 Ω
Buzzer Sound	With resistance less than 50Ω

Overload Protection : 500V DC / rms AC

**RESISTANCE**

Range	Resolution	Accuracy
200 Ω	0.1 Ω	± (1.2%rdg + 5dgts)
2 KΩ	0.001 KΩ	± (1%rdg + 5dgts)
20 KΩ	0.01 KΩ	
2 MΩ	0.001 MΩ	

Overload Protection : 250V DC / rms AC on all ranges.

**FREQUENCY**

Range	Accuracy
1Hz ~ 2KHz	± (2.0% rdg + 5 dgts)

**DIODE TEST**

Test Current	< 1.2mA
Open Circuit Voltage	≤ 3.2V
Relative Humidity	max. 80%

Overload Protection : 500V DC / rms AC  
Application : Display reading approx. Diode forward voltage value.

All Specifications are subject to change without prior notice

**KUSAM-MECO**<sup>®</sup>

**LIST OF PRODUCTS**

- \* Digital Multimeter
- \* AC Clamp Adaptor
- \* Thermo Anemometer
- \* Distance Meter
- \* Network Cable Tester
- \* Earth Resistance Tester
- \* DC Power Supplies
- \* Calibrators
- \* Frequency Counter
- \* Phasing Sticks
- \* Waterproof Pen Testers
- \* EMF Detector
- \* Wood, Paper & Grain Moisture Meter
- \* Transistorised Electronic Analog & Digital Insulation Resistance Testers(upto 10 KV)
- \* Digital Sound Level Meter & Sound Level Calibrator
- \* Digital contact & Non-contact Type Tachometer
- \* Digital Non-contact (infrared) Thermometer
- \* Maximum Demand Controller/Digital Power Meter
- \* Digital Hand Held Temperature Indicators
- \* Digital AC & AC/DC Clampmeter
- \* AC/DC Current Adaptor
- \* Thermo Hygrometer
- \* Digital Lux Meter
- \* Power Factor Regulator
- \* Digital Panel Meters
- \* High Voltage Detector
- \* Gas Analysers
- \* Function Generator
- \* Battery Tester
- \* Solar Power Meter

**KUSAM-MECO**<sup>®</sup>

G 17, Bharat Industrial Estate, T. J. Road,  
Sewree (W), Mumbai - 400 015. INDIA.

**Sales Direct :** (022) 24156638

**Tel. :** (022) 24124540, 24181649. **Fax :** (022) 24149659

**Email :** kusam\_meco@vsnl.net

**Website :** www.kusamelectrical.com

**KUSAM-MECO**<sup>®</sup>

**KUSAM-MECO**<sup>®</sup>

AN ISO 9001:2015 COMPANY

**DIGITAL CLAMP MULTIMETER  
MODEL - KM 3060**



**OPERATION MANUAL**

### **WARRANTY**

Each "KUSAM-MECO" product is warranted to be free from defects in material and workmanship under normal use & service. The warranty period is one year (12 months) and begins from the date of despatch of goods. In case any defect occurs in functioning of the instrument, under proper use, within the warranty period, the same will be rectified by us free of charges, provided the to and fro freight charges are borne by you.

This warranty extends only to the original buyer or end-user customer of a "KUSAM-MECO" authorized dealer.

This warranty does not apply for damaged IC's, fuses, burnt PCB's, disposable batteries, carrying case, test leads, or to any product which in "KUSAM-MECO's" opinion, has been misused, altered, neglected, contaminated or damaged by accident or abnormal conditions of operation or handling.

"KUSAM-MECO" authorized dealer shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of "KUSAM-MECO".

"KUSAM-MECO's" warranty obligation is limited, at option, free of charge repair, or replacement of a defective product which is returned to a "KUSAM-MECO" authorized service center within the warranty period.

THIS WARRANTY IS BUYER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. "KUSAM-MECO" SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, ARISING FROM ANY CAUSE WHATSOEVER.

All transactions are subject to Mumbai Jurisdiction.

**TEST CERTIFICATE**  
**DIGITAL CLAMP MULTIMETER**

This Test Certificate warrants that the product has been inspected and tested in accordance with the published specifications.

The instrument has been calibrated by using equipment which has already been calibrated to standards traceable to national standards.

MODEL NO.     **KM - 3060**    

SERIAL NO. \_\_\_\_\_

DATE: \_\_\_\_\_

**ISO 9001  
REGISTERED**



**Instruction Manual**

This meter is completely portable, LCD, 3 1/2 digit clamp meter. Designed for use by electricians, technicians, serviceman. It's rugged structure design is good feeling to hold in operator's hand and convenient to use.

**1. OPERATING FEATURES:**

- AC Current 0.01A to 1000A
- AC Voltage 1V to 750V
- DC Voltage 1V to 1000V
- Resistance 0.1n to 2Mf
- Continuity Test 50c2±2552 with audio tone
- Diode Test Semiconductor PN junction
- Frequency 1Hz-2KHz

Calibration temperature of 18°C to 28°C (64°F to 82°F) at relative humidity under 80%, unless otherwise noted.

**2.1 AC Current**

20A	10mA	±(3% of reading + 5 d)
200A	100mA	±(2% of reading + 5 d)
1000A	1A	±(2% of reading + 5 d) for 800A and below ±(3% of reading + 5 d) for others current.
Overload Protection		1200A within 60 seconds.
Jaw opening		2" (5cm)

**2.2 AC Voltage**

Range	Resolution	Accuracy (50Hz-60Hz)
750 V	1V	±(1.2% of reading + 10 d)
Input impedance :		9MΩ
Overload Protection :		750V AC/DC on all ranges.

**2.3 DC Voltage**

Range	Resolution	Accuracy (50Hz-60Hz)
1000V	1V	±(1% of reading+ 1 d)
Input impedance :		9MΩ
Overload Protection :		1000V DC/peak AC on all ranges.

**2.4 Resistance**

Range	Accuracy (50Hz-60Hz)
200Ω	±(1.2% of reading + 5 d)
2K0,20K0,2M0	±(1% of reading + 5 d)
Overload Protection :	250VDC/rmsAC on all ranges

**2.5 Continuity Test**

Range	200Ω
Buzzer sound	With resistance less than 50Ω
Overload Protection	500V DC/rms AC

**3.4 Resistance and Continuity Measurements**

3.4.1 Set the Function/Range switch to the resistance range or continuity position.

3.4.2 Turn off the power from the circuit under test.

3.4.3 Connect the red test lead to the "VGA" jack and the black test lead to the "COM" jack.

3.4.4 Touch the probes to the test points In ohms, the value indicated in the display is the measured value of resistance. In continuity test, the beeper sounds continuously, if the resistance is less than 50G.

**3.5 FREQUENCY Measurement**

3.5.1 Connect the red test lead to the "VG" jack and the black test lead to the "COM" jack.

3.5.2 Set the switch to Hz range and connect the test leads to the frequency source to get the frequency value.

**4. Battery Replacement**

A 9-volt "transistor" batterr TEDA1604, IEC 6F22) is the supply power. The " " appears on the LCD display when replacement is needed. Open the meter and lift off the front case. Then,remove the battery from battery contacts and replace with a new one

**3.1 DC/AC VOLTAGE MEASUREMENT**

- 3.1.1 Connect red test lead to '+' ;Black test lead to "COW.
- 3.1.2 Set RANGE switch to ACV or DCV desired position.
- 3.1.3 Connect test leads to device or circuit being tested.
- 3.1.4 Read voltage value on Digital Display.

**3.2 AC Current Measurement**

3.2.1 Set Function/Range Switch to the ACA 1000A range, if the display indicates one or more leading zeros, shift to the 200A or 20A range to improve the resolution of the measurements.

3.2.3 Press the trigger to open the transformer jaws and clamp one conductor only. It is impossible to make measurements when two or three conductors(wires) are clamped at the same time.

3.2.4 Display reading is the AC current flowing through the conductor

3.2.5 Press the trigger to open the transformer jaws and remove clamp meter from the conductor.

**3.3 Diode Tests**

- 3.3.1 Connect the red test lead to the "VG" jack and the black test lead to the "COM" jack.
- 3.3.2 Set Function /Range Switch to the diode test position.
- 3.3.3 Turn off power to the circuit under test.
- 3.3.4 Read the forward voltage value on digital display.
- 3.3.5 Reverse probes. If the diode is good, "1" is displayed. If the diode is shorted, ".000" or another number is displayed.
- 3.3.6 If the diode is open circuit, "1" will be displayed in both directions of the diode.

**2.6 Diode Test**

Test current	< 1.2mA
Open circuit voltage	< 3.2V
Overload Protection	500V DC/rms AC
Application	Display reading approx. Diode forward voltage value
Relative Humidity	max. 80%

**2.7 FREQUENCY**

Range	Accuracy
1Hz-2KHz	±(2.0%rdg+5d)

**2.8 Function Characteristics**

Measurement method	Dual slope integration technical
Reading Rate	3 reading/Sec.
Polarity	Automatic, indicated minus assumed plus.
Overload indication	Blanking of all digits. Except MSD. decimal point and sign.appropriate

Power requirements 9V Battery

Battery life	Up to 200 hours typical with Alkaline Up to 150 hours typical with Zinc carbon
Display	LCD 3 1/2 digit (1999 count) 0.5" high

Data hold	All function and Ranges with this feature.
Dimension	228(L)X75(W)X36(H)mm
Weight	465gr.aprox.(batteryincluded)

**2.9 Accessories**

Instruction manual	Test leads
9V battery	Carrying Case

**3. Operating And Recalibration:**

**1. Transformer jaws**

Pick up the AC current flowing through the conductor.

**2. Trigger**

Press the level to open the transformer jaw. When the finger press on the level is released the jaws will close again.

**3. Display**

372 digit (1999). decimal point, minus polarity, over-range and LO BAT indicators.

**4. Data Hold Switch**

A push switch, (Push ON, Push OFF, do not pull to select function). Push ON to hold the measured value and store the value in memory\_ Push OFF to release hold function.

**5. Rotary Switch**

A rotary switch is used to select measurement Function and Range switch.

**6. "+ " connector**

High input terminal for voltage, resistance, continuity, measurement. Accept banana plugs.

**7. "COM " input connector**

Low input terminal for voltage, resistance, continuity, measurement. Accept banana plugs.

**8. Back light Switch**

A push switch, (Push ON, Push OFF, do not pull to select function). A Push ON, the back light will be on. Another Push OFF, the back light will be off.

