KUSAM-MECO®

LIST OF PRODUCTS

- ✶ Digital Multimeter
- ✶ Digital AC & AC/DC Clampmeter
- ✶ AC Clamp Adaptor
- ✶ AC/DC Current Adaptor
- ✶ Thermo Anemometer
- ✶ Thermo Hygrometer
- ✶ Distance Meter
- ✶ Digital Lux Meter
- ✶ Network Cable Tester
- ✶ Power Factor Regulator
- ✶ Earth Resistance Tester
- ✶ Digital Panel Meters
- ✶ DC Power Supplies
- ✶ High Voltage Detector
- ✶ Calibrators
- ✶ Gas Analysers
- ✶ Frequency Counter
- ✶ Function Generator
- ✶ Phasing Sticks
- ✶ Battery Tester
- ✶ Waterproof Pen Testers
- ✶ Solar Power Meter
- ✶ 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

KUSAM-MECO®

OFFICE ADDRESS / SERVICE CENTER

Shop no.18, 1st Floor, CIDCO Shopping Complex, Plot # 9, Sector-7,
Rajiv Gandhi Marg, Sanpada, Navi Mumbai - 400705.

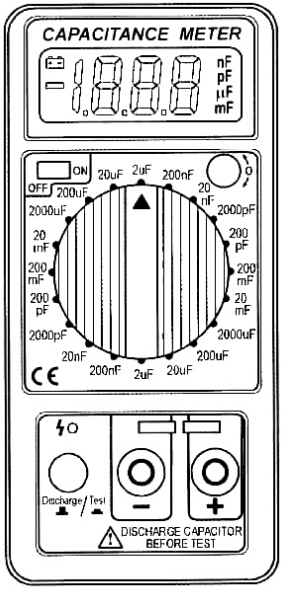
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KUSAM-MECO®

AN ISO 9001:2015 COMPANY

CAPACITANCE METER
MODEL - KM 333



OPERATION MANUAL

TAKE MEASUREMENT CAREFULLY AND YOU'LL SPARE YOUR METER AND YOURSELF, SOME PAIN

Nearly every electrical engineer has a hand held Multimeter. We sometimes take them for granted, until we damage them or "burn them out" if you incorrectly connect your DMM to a circuit or have the DMM on wrong setting, you damage the meter and possibly hurt yourself. You can also get into trouble if you try to measure the voltage across a charged capacitor.

DMM users frequently burn their meters by trying to measure current the same way as they measure voltage, Remember, you measure voltage across a circuit, and current through a circuit. When you use the current input, your DMM becomes a lower impedance circuit element. If you accidentally connect this low impedance path across your circuit, you'll effectively short-circuit it. You can, therefore send high current through your meter and severely damage it. Unless the meter has a fused input, you can even get an explosion or fire.

Even if you correctly insert your DMM into the circuit, you can still damage your meter. Don't try to measure current in excess of your meter's capacity. Handheld DMMs usually have a maximum current rating of 10A or 20A.

If you are measuring current in industrial environment, you can easily exceed those ratings. The best way to avoid damage is to use a clamp meter or to connect a clamp attachment to your DMM.

To prevent excess current from flowing through your meter, always disconnect the test leads from the circuit under test whenever you change DMM functions, Set your meter to the correct function, say current and its highest range for the setting, say 10A. Next, connect the test leads before you apply power to the circuit. To be safe, start by setting your meter to its highest range first.

GENERAL SPECIFICATIONS:

- **Display :** 3½ digits display (LCD) MAX 1999
- **Overrange :** "1" is displayed on LSB
- **Zero :** Manual adjust
- **Low battery indication :** the "" is displayed when the battery voltage drops below the operating level.
- **Measurement Rate :** 2.5 times per second, nominal.
- **Operating Temperature :** 0°C to +50°C at <70% R.H.
- **Storage Temperature :** -20°C to +60°C, 0 to 80% R.H. with battery removed from meter.
- **Power Supply :** 9V battery (6F22)
- **Dimensions :** Approx. 151(H) X 70(W) X 38(D)mm.
- **Weight :** Approx. 200g. including battery.
- **Accessories :** Test Leads pair, 9V Battery, User Manual & Carrying case.

ELECTRICAL SPECIFICATIONS:

Accuracy : Stated accuracy at 23°C ± 5°C, <75% R.H.

CAPACITANCE :

RANGE	RESOLUTION	ACCURACY	TEST FREQUENCY
2000 pF	0.1 pF	±(1%rdg+1dgt)	820Hz
2000 pF	1 pF	±(0.5%rdg+1dgt)	
20 nF	10 pF		
200 nF	100 pF		
2 μF	1 nF		
20 μF	10 nF		82Hz
200 μF	100 nF		8.2Hz
2000 μF	1 μF	±(2.0%rdg+1dgt)	
20 mF	10 μF	±(3.0%rdg+1dgt)	
200 mF	100 μF		

OPERATION

WARNING

To avoid electrical hazards!
Release the bottom on the low-left corner of the panel to short circuit the capacitor before test it.

1. For capacitance measurement less than 200nF, use the "0-ADJ" knob to subtract the stray capacitance.
2. Set the range switch to the desired range.
3. Never apply an external voltage to the input sockets. Or it'll damage to the meter.
4. Insert the capacitor leads into the receptacle socket or directly connects the test clip to the capacitor leads as required.
5. Don't forget to discharge the capacitor before test it.

BATTERY REPLACEMENT

Power is supplied by a 9V battery (6F22).

The symbol of "  " will appears on the LCD display when replacement is needed. To replace the battery. Remove the two screws from the back of the meter and lift off the front case. Remove the battery from battery contacts.

KUSAM-MECO®

MUMBAI

TEST CERTIFICATE

DIGITAL CAPACITANCE METER

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

MODEL NO. **KM 333**

SERIAL NO. _____

DATE: _____

ISO 9001:2015
REGISTERED

QC
KUSAM-MECO
PASS

KUSAM-MECO®

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, 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 transaction are subject to Mumbai Jurisdiction.