KUSAM-MECO®

An ISO 9001:2008 Company

3¾ DIGIT AC LEAKAGE DIGITAL CLAMPMETER WITH HARMONICS LOW PASS FILTER FUNCTION

8 FUNCTIONS 6 RANGES

Model KM 2007

SPECIAL FEATURES :

- LPF (Low Pass Filter) function
- In Continuity Test, reading below 100 approx. will be indicated by buzzer
- Display annunciators for Units & Functions
- MAX Hold Function
- Wide frequency range selection with Low Pass Harmonics filter for accurate measurements.

GENERAL SPECIFICATIONS :

- **Sensing :** Average sensing
- **Jaw Opening Size :** 32 mm
- **Display :** 3¾ digits 4000 counts LCD display
- **Max. Opening Jaw Size :** 36mm
- **Low Battery :** LCD displays "⊟" as replace battery
- **Overload indication :** "OL" display at left side
- **Sampling Time :** 2.5 times per second
- **Pollution degree :** 2
- **Operating Temperature :** -10°C to 50°C below 80% R.H.
- **Operation height under 2000M above sea level.**
- **Storage Temperature:** -20°C to 60°C below 70% R.H.
- **Power Supply :** 9V battery
- **Dimension :** 250(L) X 85(W) X 35(H) mm
- **Weight :** Approx. 342 gm (battery included)

ACCESSORIES :

Test leads, Carrying Case, Battery installed, User's Manual

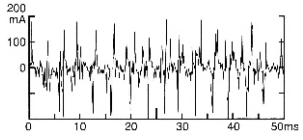
SAFETY :

IEC1010-1 & IEC1010-132 CAT III 600V Installation CAT III. Double & Reinforce Insulation with safety sockets design

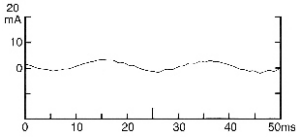
HIGH FREQUENCY SELECTOR SWITCH

This switch is designed to select "WIDE" or "50/60Hz" range. "WIDE" range covers a wide frequency band of 40Hz to 1kHz. AC current having a fundamental waveform and harmonics can be measured over this range. "50/60Hz" is restricted to a frequency response of 40Hz to 100Hz and therefore permits measurement of AC current of fundamental frequency only by filtering harmonic content. When in doubt as to the presence of harmonics you can indentify it by using this frequency selector switch. To give an example, the following shows the results of AC current measurement on an earthing wire within a switchbox where there is an inverter based airconditioner is connected at summertime. Suppose Model KM-2007 reads 60mA AC with the frequency selector switch set at the "WIDE" position as shown, while it displays 5mA at the "50/60Hz" switch position. The difference between the two readings (60mA - 5mA = 55mA) is considered leakage current caused by harmonics. The test also found that this leakage current is flowing into single phase, 3-wire circuits other than those connected with the inverters in the building inspected.

"WIDE" range - 60mA reading



"50/60Hz" range - 5mA reading



Wide Frequency Function:

If the circuit under test is originated from a high frequency generating device such as inverter, switching regulators, etc., Then the switch should be set at wide position to measure the signal which contains the frequency from 40Hz ~ 1KHz. To make sure the presence of high frequency signal, set the switch at 50/60 Hz and wide position to see the difference. If the reading is very different. It is certain that high frequency signals or harmonics are present.

ELECTRICAL SPECIFICATIONS - KM 2007

Accuracy is ± (% reading digits + number of digits) or otherwise specified, at 23°C ± 5°C below 80% R.H.

AC CURRENT

Range	Resolution	Accuracy 50Hz~500Hz	Overload Protection
40 mA	10 A	±(1.5%rdg + 2dgts)	1 A
400 mA	100 A	±(1.5%rdg + 2dgts)	10 A
4 A	1 mA	±(1.5%rdg + 2dgts)	100 A
100 A	100 mA	±(1.5%rdg + 5dgts)	500 A

40 mA range is very sensitive such that the reading may fluctuates on "ZERO" easily.

AC VOLTAGE

Range	Resolution	Accuracy 50Hz~500Hz	Overload Protection
600 V	1 V	±(1.5%rdg + 5dgts)	DC 600V / AC 600V rms

Input Impendence : 10M

RESISTANCE

Range	Resolution	Accuracy	Overload Protection
400	0.1	±(1.2%rdg + 3dgts)	AC/DC 500Vrms

Continuity Test function by buzzer will sound if the measured resistance below 100 .

All Specifications are subject to change without prior notice

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