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
- ✶ 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
- ✶ 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

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AN ISO 9001:2015 COMPANY

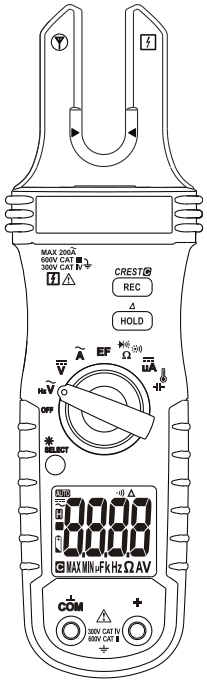
DIGITAL TRMS FORK CLAMPMETER

MODEL - KM 039F

OPERATION MANUAL

KUSAM-MECO®

DIGITAL TRMS FORK CLAMPMETER MODEL - KM 039F



KUSAM-MECO®

TABLE OF CONTENTS

TITLE	PAGE NO.
I. Safety	01
II. Cenelec Directives	03
III. Special Features	04
IV. General Specifications	05
V. Electrical Specifications	07
VI. Product Description	11
VII. Maintenance	23
VIII. Test Certificate	25
IX. Warranty	26

I. SAFETY :

The meter meets IEC/EN/CSA_C22.2_No./UL standards of 61010-1 Ed. 3.0, 61010-2-032 Ed. 3.0, 61010-2-033 Ed. 1.0 to Measurement Categories CAT III 600V and CATIV 300V ac & dc.

The accompanied test probe assembly meets IEC/EN/CSA_C22.2_ No./UL standards of 61010-031 Ed. 2.0 to the same meter ratings or better The 61010-031 requires exposed conductive test probe tips to be ≤ 4mm for CAT III & CAT IV ratings. Refer to the category markings on your probe assemblies as well as on the add - on accessories (like detachable Caps or Alligator Clips), if any, for applicable rating changes.

TERMS IN THIS MANUAL

WARNING identifies conditions and actions that could result in serious injury or even death to the user.

CAUTION identifies conditions and actions that could cause damage or malfunction in the instrument.

WARNING

This manual contains information and warnings that must be followed for operating the meter safely and maintaining the meter in a safe operating condition. If the meter is used in a manner not specified by the manufacturer, the protection provided by the meter may be impaired.

Observe proper safety precautions when working with voltages above 30 Vrms, 42.4 Vpeak or 60 VDC. These voltage levels pose a potential shock hazard to the user Do not expose this product to rain or moisture. The meter is intended only for indoor use.

Keep your hands / fingers behind the hand / finger barriers (of the meter and the test probe assembly, where applicable) that indicate the limits of safe access of the hand held parts during measurements. Inspect lead wires, connectors, and probes for damaged insulation or exposed metal periodically. If any defects are found, replace them immediately. Only use the test probe assembly provided with the meter or a UL Listed test probe assembly to the same meter ratings or better.

Optional offer premium test probe assembly using silicone lead wire insulation, at agent's discretion, is equipped with white inner insulation layers as wear indicators. Replace them immediately if any of the white layers has become visible.

INTERNATIONAL SYMBOLS

- Marking of Electrical and Electronic Equipment (EEE). Do not dispose of this product as unsorted municipal waste. Contact a qualified recycler
- Caution! Refer to the explanation in this Manual
- Caution! Possibility of electric shock
- Earth (Ground)
- Meter protected throughout by Double Insulation or Reinforced insulation
- Fuse
- Direct Current (DC)
- Alternating Current (AC)
- 3~ Three-phase Alternating Current
- Application around and removal from hazardous live conductors is permitted

BRIEF INFORMATION ON MEASUREMENT CATEGORIES

Measurement Category IV is applicable to test and measuring circuits connected at the source of the building's low voltage MAINS installation Examples are measurements on devices installed before the main fuse or circuit breaker in the building installation.

Measurement Category III is applicable to test and measuring circuits connected to the distribution part of the building's lew voltage MAINS installation. Examples are measurements on distribution boards (including secondary meters), circuit-breakers, cables, bus- bars, junction boxes, switches, socket- outlets, stationary motors in the fixed installation, and equipment for industrial use.

Measurement Category II is applicable to test and measuring circuits connected directly to utilization points (socket outlets and similar points) of the low-voltage MAINS installation. Examples are measurements on MAINS CIRCUITS of household appliances, portable tools and similar equipment.

2) CENELEC DIRECTIVES

The instruments conform to CENELEC Low - Voltage Directive 2014/35/EU, Electromagnetic Compatibility Directive 2014/30/EU and RoHS 2 Directive 2011/65/EU plus amendment Directive (EU) 2015/863.

SPECIAL FEATURES :

- Fork-clamp Current measurement
- 12mm Slim-Probe open jaws for easy slide into tight wirings.
- Cx range 200.0mF to 2500mF for start & run motor capacitors.
- MAX/MIN Recording Mode
- 5ms Crest (Peak-Hold) Mode.
- Backlight Display
- Non-Contact EF-Detection (NCV) with Hi/Lo Selectable Sensitivities.
- Probe-contact EF-Detection (Single-pole) for precise indication of live.
- Auto ranging for all ranges.
- Relative Mode.
- Data Hold.
- BeepLit feature for Diode & continuity.
- Intelligent Auto-Power off.

SPECIFICATIONS:

GENERAL SPECIFICATIONS:

- **Basic Accuracy :** 1.0%
- **Sensing :** True RMS
- **Display :** 3-5/6 digits 6000 counts LCD display
- **Fork-Clamp opening & conductor Diameter :** 12.5mm max.
- **Fork-Clamp probe width :** 12mm approx.
- **Update rate :** 5/sec nominal
- **Operating Temperature :** 0°C to 40°C,
- **Relative Humidity :** Maximum relative humidity 80% for temperature upto 31°C decreasing linearly to 50% relative humidity at 40°C.
- **Pollution degree :** 2
- **Storage Temperature :** -20°C to 60°C, < 80%R.H. (with battery removed).
- **Altitude :** Operating below 2000m
- **Temperature Coefficient :** nominal 0.1x (specified accuracy) / °C @ (0°C ~ 18°C or 28°C ~ 40°C), or otherwise specified.

Safety

Certified per IEC/EN/CSA_C22.2_No./ULstandards: 61010-1 Ed. 3.0, 61010-2-032 Ed. 3.0, 61010-2-033 Ed. 1.0, & 61010-031 Ed. 2.0 to Measurement Categories CAT III 600V and CAT IV 300V AC & DC.

- **Transient Protection:** 6.0kV (1.2/50ms surge)

- **Overload Protections:**

Current via Fork-clamp: 200Aac rms at <400Hz

Voltage via terminals: 660Vdc / 920Vac rms

Other functions via terminals: 600Vdc/Vac rms

- **E.M.C. :** Meets EN61326-1:2013

ACA functions, in an RF field of 1V/m:

Total Accuracy = Specified Accuracy + 40 digits at around 87MHz

DCmA and Ohm Functions, in an RF field of 1V/m:

Total Accuracy = Specified Accuracy + 25 digits

Other Functions, in an RF field of 3V/m :

Total Accuracy = Specified Accuracy + 20 digits

- **Low Battery Indication :** Below Approx. 2.85V for Capacitance & Hz; Below Approx. 2.5V for other functions.
- **Auto Power Off :** idle for 32 minutes
- **Power Consumption :** 5mA Typical
- **Power Supply :** 1.5V AAA x 2 battery.
- **Dimension :** Approx.193(L)mm x 57(W)mm x 32(H)mm
- **Weight :** Approx. 158gm (including battery).
- **Accessories :** Test leads set, Battery, User Manual, Bkp60 banana-plug type-k thermocouple & carrying case.
- **optional accessories :** BKB32 banana-plug to type-k socket plug adaptor.

Electrical Specifications:

Accuracy is ± (% reading digits + number of digits) or otherwise specified, at 23°C ± 5°C. Maximum Crest Factor < 2 : 1 at full scale & < 4 : 1 at half scale or otherwise specified, and with frequency spectrum not exceeding the specified frequency bandwidth for non-sinusoidal waveforms.

DC VOLTAGE

Range	Resolution	Accuracy
600.0 V	0.1 V	±(1.0%rdg + 5dgts)

Input Impedance : 10MΩ 100 pF nominal

AC VOLTAGE (LPF added)

Range	Resolution	Accuracy
50Hz ~ 60Hz		
600.0 V	0.1 V	±(1.5%rdg + 5dgts)

Input Impedance : 10MΩ 100 pF nominal

FORK-CLAMP ACA

Range	Resolution	Accuracy[1]
50Hz ~ 60Hz		
60.00 A[2]	0.01 A	±(2.0%rdg + 5dgts)
200.0 A	0.1 A	
45Hz ~ 400Hz		
60.00A[2]	0.01 A	±(3.0%rdg + 5dgts)
200.0A	0.1 A	

[1] **Input ImpedaInduced error from adjacent current carrying conductor :** <0.08A/A

[2] **60.00A range measurement available from 0.10A**

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Hz (LPF added) Line-Level Frequency

Function	Sensitivity[1] (Sine RMS)	Range
600Vac	50V	5.00Hz ~ 999.9Hz

Accuracy : 1% + 5d

[1] DC-bias, if any, not more than 50% of Sine RMS

RESISTANCE

Range	Resolution	Accuracy
600.0 W	0.1 W	±(1.0%rdg + 5dgts)
6.000 kW	0.001 kW	
60.00 kW	0.01 kW	
600.0 kW	0.1 kW	
6000 kW	1 kW	

Open Circuit Voltage : 1.0VDC typical

CAPACITANCE

Range	Resolution	Accuracy[1]
200.0 mF	0.1 mF	±(2.0%rdg + 4dgts)
2500 mF	1 mF	

[1] Accuracies with film capacitor or better.

DCmA

Range	Resolution	Accuracy
200.0 mA	0.1 mA	±(1.0%rdg + 5dgts)
2000 mA	1 mA	

Burden Voltage : 3.5mV/mA

TEMPERATURE

Range	Accuracy
-40.0ºC ~ 99.9ºC	1.0% ~ 1ºC
100.0ºC ~ 400ºC	
-40.0ºF ~ 211.8ºF	1.0% ~ 2ºF
212ºF ~ 752ºF	

[1)] Accuracies assume meter interior has the same temperature (Isothermal stage) of the ambient for a correct junction voltage compensation. Allow the meter & the type-K probe set to reach isothermal stage for a significant change of ambient temperature. It can take up to an hour for changes >5°C.

[2)] Type-K thermocouple range & accuracy not included

Non-Contact EF-Detection (NCV)

Bar-Graph Indication	EF-H (Hi Sensitivity)	EF-L (Lo Sensitivity)
	Typical AC voltage (Tolerance)	
-	10V (2V~20V)	40V (10V~70V)
- -	20V (4V~40V)	80V (20V~140V)
- - -	40V (8V~70V)	160V (40V~280V)
- - - -	80V (16V~140V)	320V (80V~560V)
- - - - -	160V (40V~600V)	500V(160V~600V)

Indication : Bar-graph segments & audible beep tones proportional to the field strength.

Detection Frequency : 50/60Hz

Detection Antenna : Inside the top-left end of the Fork-clamp.

Probe-Contact EF-Detection (Single-pole Measurement) :

For more precise indication of live wires, such as distinguishing between live and ground connections, use one single test probe to test via terminal COM for direct metal contact probing to achieve the most distinctive indications.

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BEEPLIT™ DIODE TESTER

Range	Resolution	Accuracy
3.000 V	0.001 V	±(1.5%rdg + 5dgts)

Test Current : 0.3mA typically

Open Circuit Voltage : < 3.5VDC typical

Beep-Alert Threshold : Drop across 0.850V

BeepLit™ ON Threshold : < 0.100V

Audible Indication : Beep sound

Visible Indication : LCD Backlight

BEEPLIT™ CONTINUITY TESTER :

Continuity Threshold : Between 30W& 480W

Continuity ON Response Time : 15ms approx.

Audible Indication : Beep sound

Visible Indication : LCD Backlight

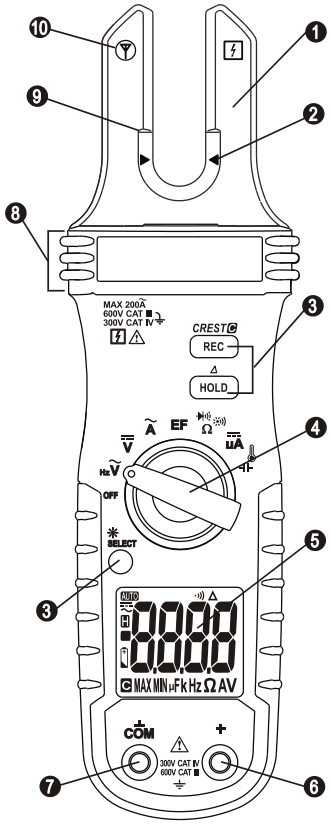
CREST (Peak-Hold) :

Applicability : Voltage & Non-invasion Current functions.

Accuracy : Add ±250 digits to specified accuracy for changes >5ms in duration.

3) PRODUCT DESCRIPTION

This user's manual uses only representative model(s) for illustrations. Please refer detailed specifications for function availability to each model.



1) Fork-clamp for ACA magnetic field pick up

2) ACA Magnetic field pick-up center indicator, at where best current accuracy is specified

3) Push-buttons for special functions & features.

4) Rotary Selector to turn the power ON/OFF and select a function

5) 3-5/6 digits 6000 counts numeric LCD display

6) Input Jack for all functions EXCEPT Fork-clamp ACA and Non-Contact EF-Detection functions

7) Common (Ground reference) Input Jack for all functions EXCEPT Fork-clamp ACA and Non -Contac EF-Detection functions

8) Hand/Finger Barrier to indicate the limits of safe access of the meter during Fork-clamp ACA measurements

9) ACA Magnetic field pick-up upper limit indicator; below where current accuracy is specified

10) Antenna location symbol for Non-Contact EF-Detection

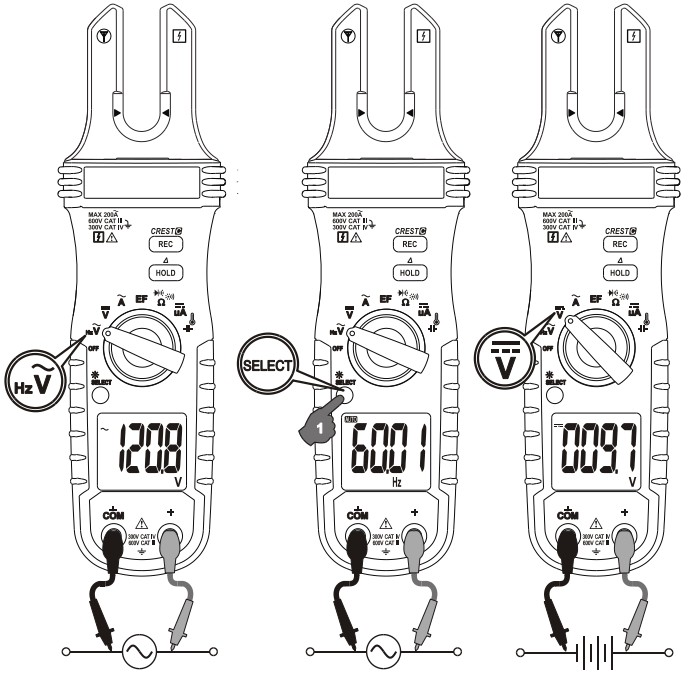
4) OPERATION

WARNING

Before and after hazardous voltage measurements, test the voltage function on a known source such as line voltage to determine proper meter functioning

ACV(LPF added), & Line-level Hz(LPF added)

Inputs are made via the test lead terminals COM/+. Defaults at ACV Function. Press the SELECT button momentarily to select Line-level Hz function.



Note: ACV and **Line-level Hz** functions are bundled with LPF low-pass filter, and are capable of dealing with most **VFD** (Variable Frequency Drives) signals. It also improves reading stability in noisy electrical environments.

DCV

Inputs are made via the test lead terminals COM/+.

Current Measurments: Application & Removal Of The Fork-clamp

Apply the Fork-clamp around conductor(s) of only one single pole of a circuit for load current measurements. Applying around conductors of more than one pole of a circuit may result in differential current (like identifying leakage current) measurements. Align the conductor(s) to the Fork-clamp center indicators as much as possible to get the best measuring accuracy. For removal, remove the Fork-clamp from the conductor(s).

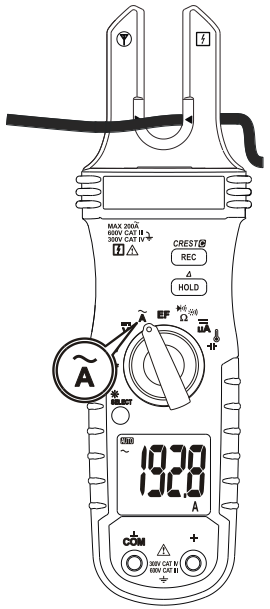
Adjacent current-carrying devices such as transformers, motors and conductor wires may affect measurement accuracy. Keep the Fork-clamp away from them as much as possible to minimize influence during measurements.

WARNING

This Fork-clamp meter series is designed to directly apply around or remove from uninsulated hazardous live conductors. But still, individual protective equipment must be used if hazardous live parts in the installation where measurement is to be carried out could be accessible. Do not use the meter to measure currents above the rated frequency (400Hz). Circulating currents may cause the magnetic circuits of the Fork - clamp reach a hazardous temperature.

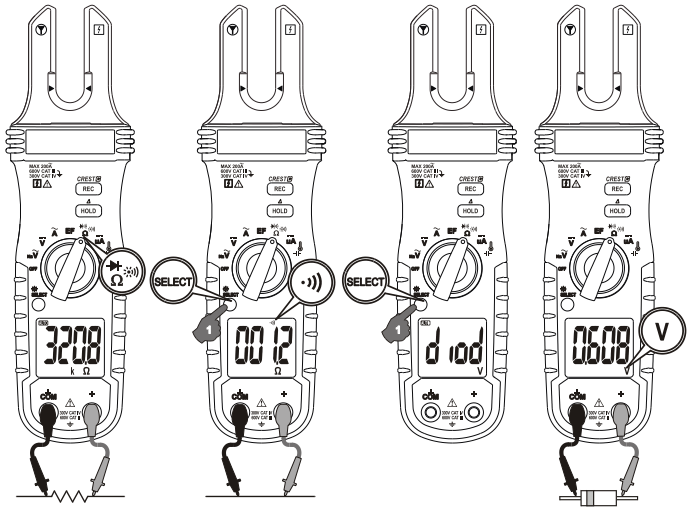
Fork-clamp ACA

Input is made via the Fork-clamp where best accuracy is specified at the center indicator area.



Ω Resistance, BeepLit™ Continuty, & BeepLit ™ Diode

Inputs are made via the test lead terminals **COM/+**. Defaults at **Ω Resistance**. Press the **SELECT** button momentarily to select the subject functions in sequence.



● **BeepLit™ Continuity**

This function is having improved convenience for checking wiring connections and operation of switches. Resistance threshold is being used. A continuous beep sound together with display backlight flashing indicates a complete wire. Such audible and visible indications improve continuity readabilities in noisy working environments.

● **BeepLit™ Diode**

Reading indication:

Forward voltage drop (forward biased) for a good silicon diode is between 0.400V to 0.900V. A higher reading indicates a leaky diode (defective). A zero reading indicates a shorted diode (defective). An over- range display indicates a open diode (defective). Reverse the test leads connections (reverse biased) across the

diode. The digital display shows over - range If the diode is good. Any other readings indicate the diode is resistive or shorted (defective).

●**Beep-Alert & BeepLit™ indication:** When the display reading drops across 0.850V, the meter alerts a short beepsound to signal a reasonable forward voltage drop of common diodes. However, if the reading further drops below 0.100V,the meter gives a continuous beep sound together with the display backlight flashing to indicate a shorted diode or a complete wire. It is similar to that of **BeepLit™ Continuity** function but **BeepLit™ Diode**, instead, is based on voltage threshold to indicate complete wires.

CAUTION Using **Resistance**, **BeepLit™ Continuity** or **BeepLit™ Diode** function in a live circuit will produce false results and may damage the meter. In many cases the component (s) under test must be disconnected from the circuit to obtain an accurate measurement reading.

EF-Detection of Electric Field

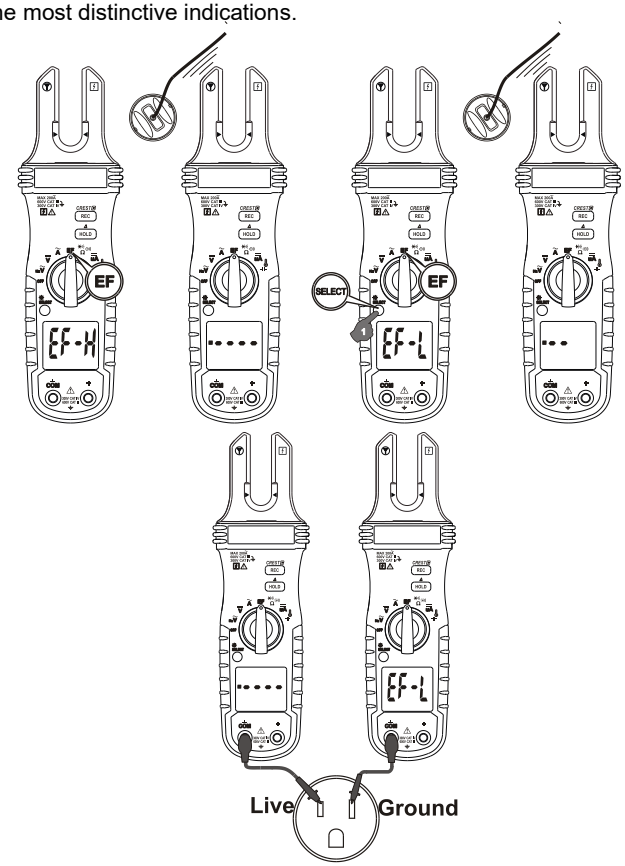
Defaults at **EF-H**, the High sensitivity. The meter displays **"EF-H"** when it is ready. If it is too sensitive for your applications, press the **SELECT** button momentarily to select **EF-L**, the Low sensitivity. The detected Electric Field strength is indicated as a seriesof bar-graph segments on the display plus variable beep sounds.

●**Non-Contact EF-Detection (NCV):**

An antenna is located along the top-left end of the Fork - clamp, which detects the electric field surrounds energized conductors. It is ideal for tracing live wiring connections, locating wiring breakages and to distinguish between live and earth connections.

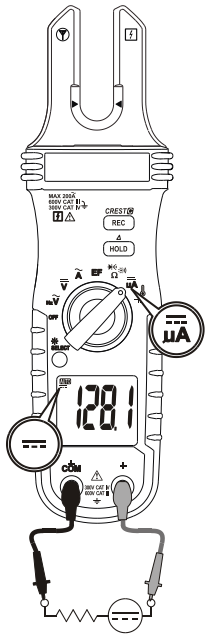
●Probe-Contact EF-Detection (Single-pole):

For more precise indication of live wires, such as distinguishing between Live and Ground connections, useone single test probe to test via terminal **COM** for direct metal contact probing to achieve the most distinctive indications.



DCmA

Inputs are made via the test lead terminals **COM**/**+**.



●Application notes:

The **DCmA** function is designed especially for HVAC/R flame sensor applications. The 0.1mA resolution is useful for identifying the minute current changes in flame detector applications. Flame signal current check should indicate steady flame signal of at least 2mA for a rectification type, or 1.5mA for an ultraviolet type (8 mA for self checking systems). If a flame signal current with inadequate strength or fluctuation beyond 10%, check the following to avoid the risk of unwanted flame relay dropout :

For gas or oil flames (Minipeeper):

- Low supply voltage
- Detector location
- Defective detector wiring
- Dirty viewing window
- Faulty Minipeeper

For oil flames (Photocell):

- Detector location & wiring
- Smoky flame or poorly adjusted air shutter
- Faulty Photocell
- Temperature over 165 oF (74 °C) at photocell

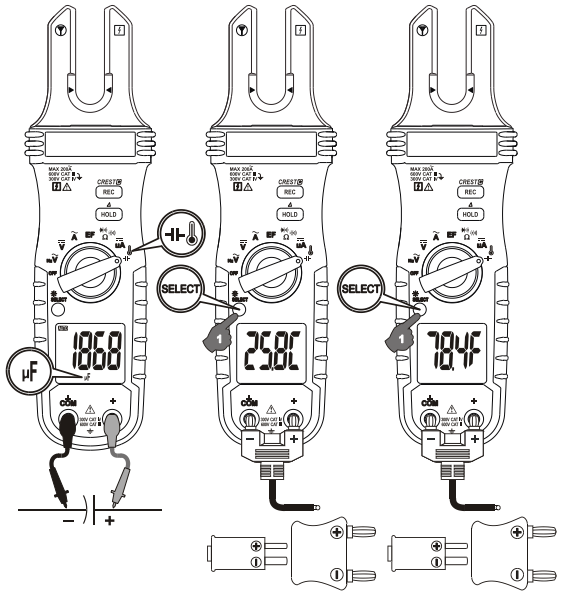
For gas flames (Flame Rod):

- Ignition interference (A flame signal current difference with the ignition both onand off greater than 0.5mA indicates the presence of ignition interference)

- Insufficient ground (must be at least 4 times the detector area)
- Flame lifting off burner head (ground), or not continuously in contact with the flame rod
- Temperature in excess of 600 °F (316 oC) at the flame electrode insulator causing short to ground.

⊣⊢ Capacitance & Temperature

Inputs are made via the test lead terminals **COM**/**+**. Defaults at ⊣⊢ Capacitance. Press the SELECT button momentarily to select °C (Celsius) and **°F** (Fahrenheit) in sequence (**°F** selection can be left out as factory calibration default for countries that only accept metric units).



CAUTION

Discharge capacitor (s) before making capacitance measurements. Large value capacitors should be discharged through an appropriate resistance load. Using Capacitance function in a live circuit will produce false results and may damage the meter. In many cases the suspected component (s) must be disconnected from the circuit to obtain accurate measurement readings.

Note

Be sure to insert the banana plug type -K temperature bead-probe Bkp60 with correct + − polarities. Banana-pins to type -K socket adapter Bkb32 (Optional purchase) can be used to accept other type-K probes using standard miniature plugs.

Temperature accuracies assume meter interior has the same temperature (isothermal stage) of the ambient, particularly the plug of the probe being used, for a correct junction voltage compensation. Allow the meter interior temperature to atch up with that of the plug after a sudden change of measuring environment and hence the ambient temperature. This can take up to an hour for changes > 5°C within a low ventilated sturdy meter housing. The uncompensated temperature differences, if any, will be reflected as off sets on the meter readings.

HOLD

HOLD feature freezes the display for later view. LCD "H" turns on. Press the **HOLD** button momentarily to toggle the feature.

Relative Δ Mode

Relative Δ mode allows the user to offset the meter consecutive measurements with the main - display displaying reading as the reference value. LCD " Δ " turns on. Press **Δ (HOLD)** the button for one second or more to toggle **Relative Δ** mode.

RECORD mode

Press the **REC** button momentarily to activate **MAX/MIN** recording mode. LCD **MAX** & **MIN** turn on. The meter beeps when new **MAX** (maximum) or **MIN** (minimum) reading is updated. Press the button momentarily to read the **MAX**, **MIN** and **MAXMIN** (active measurement) readings in sequence. Press the button for 1 second or more to exit this mode. Auto-Power-Off is disabled automatically in this mode.

5ms CREST mode

Press the **CREST** button for one second or more to activate **CREST** mode (Instantaneous PEAK-HOLD) to capture current or voltage peak values in duration as short as 5ms. LCD C & **MAX** turn on. The meter beeps when new C **MAX**(+Peak) C **MIN** or (-Peak) reading is updated Press the button momentarily to toggle the C **MAX** and C **MIN** readings. Press the button for 1 second or more to exit this mode. Auto-Power-Off is disabled automatically in this mode.

LCD Backlight and Auto-Backlight-Off (ABO)

Press the **SELECT** button for 1 second or more to toggle the LCD backlight. The **ABO** mode turns the LCD backlight off automatically after 10 minutes of backlight activation to extend battery life. See **Power-on Options** section for disabling **ABO** .

Intelligent Auto-Power- Off (APO)

The mode turns the meter off automatically to extend battery life afteridling 32 minutes of no specified activities, where applicable. below:

1) Rotary switch or push button operations
2) Significant measuring readings of above 8.5% of ranges
3) Non-over-range readings for Resistance, Continuity or Diode function
4) Non-zero readings for Hz function

In other words, the meter will intelligently reset the **APO** mode when it is under normal measurements. To wake up the meter from **APO** , press the **SELECT** button momentarily and release, or turn the rotary switch OFF and then back on. Always turn the rotary switch to the OFF position when the meter is not in use.

Power-on Options

●Disabling APO and ABO

Press and hold the SELECT button while powering on the meter can disable both APO and BPO features temporarily during the power on session The LCD will display “dAPO” to confirm selection before the **SELECT** button is released.

●Shortening APO idling time for inspection

Press and hold the **HOLD** button while powering on the meter can shorten the **APO** idling time to 5 seconds temporarily during the power on session It is designed mainly for production inspection.

●Showing all LCD segments for inspection

Press and hold the **REC** button while powering onthe meter can hold and show all LCD segments b efore the button is released It is designed main ly for production inspection.

5) MAINTENANCE

⚠WARNING

To avoid electrical shock, disconnect the meter from any circuit, remove the test leads from the input jacks and turn OFF the meter before opening the case. Do not operate with open case.

Trouble Shooting

If the instrument fails to operate, check batteries and test leads etc., and replace as necessary. Double check operating procedure as described in this user's manual Refer to the LIMITED WARRANTY section for obtaining calibration, repairing or warranty service.

Accuracy and Calibration

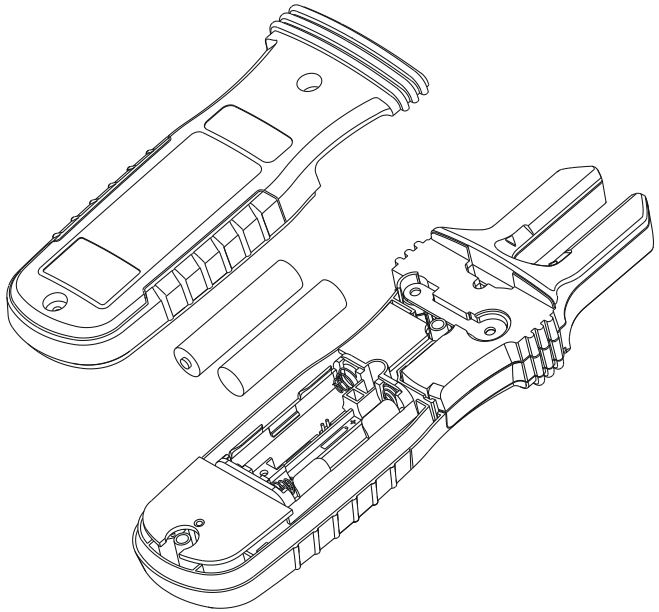
Accuracy is specified for a period of one year after calibration. Periodic calibration at intervals of one year is recommended to maintain meter accuracy.

Cleaning and Storage

Periodically wipe the meter and the test probe assembly with a damp cloth and mild detergent. Do not use abrasives or solvents. Allow to dry completely before operating. If the meter is not to be used for periods of longer than 60 days, remove the batteries and store them separately.

Battery replacement

The meter uses standard 1.5V AAA Size (IEC R03) battery X 2 Loosen the 2 captive screws from the bottom case. Lift the bottom case. Replace the batteries. Put back the bottom case. Re-fasten the screws.



KUSAM-MECO®

MUMBAI

TEST CERTIFICATE

DIGITALTRMS FORK CLAMPMETER

This Test Certificate warrantees 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 039F**

SERIAL NO. _____

DATE: _____

ISO 9001:2015

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, 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 transaction are subject to Mumbai Jurisdiction.