



Reliable in Quality

1Ø2W, 1Ø3W, 3Ø3W, 3Ø4W

TES-3079K Power Clamp Meter

- Very affordable cost
- All every functions you could have:

True Power, Apparent Power &
Phase Angle ($-60^{\circ} \sim 0^{\circ} \sim +60^{\circ}$)

Capacitance: 7000 μ F

Insulation Test: 100M

Temperature: $-50^{\circ}\text{C} \sim 900^{\circ}\text{C}$

US PATENT 6,091,237

CHINA PATENT ZL 99 2 18644.7

TAIWAN PATENT 152143



**Power
HVAC & R
Electrical**



TES 3079M HVAC Trms Clamp Meter (1000A)

HVAC Application :

- ◆ Check current draw in motors and compressors.
- ◆ Use MAX/MIN/Recording in the temperature mode to assess efficiency.
- ◆ Test run/start capacitors.
- ◆ Confirm low voltage control signals.
- ◆ Measure flame safeguard device current draw.
- ◆ Confirm power sources
- ◆ Analyze temperature and power data with the aid of the time stamp.
- ◆ Insulation test up to 100M Ω .

ELECTRICAL SPECIFICATIONS (23 $^{\circ}$ C $\pm$ 5 $^{\circ}$ C)

AC Current (50Hz to 400Hz) : Trms

Range	Resolution	Accuracy	Sensitivity	Overload Protection
99.99A	10mA	$\pm 2\% \pm 30\text{dpts}$ (50, 60Hz)	0.10A	1000A
999.9A	100mA	$\pm 4\% \pm 30\text{dpts}$ (40~400Hz)	1.0A	

ACA Inrush Current :

Range	Resolution	Sensitivity	Measurement Time	Overload Protection
99.99A	0.01A	>5A	100mS	1000AAC
999.9A	0.1A	>50A		

μ A Trms : (AC+DC) (Burden Voltage : 5mV/ μ A)

Range	Resolution	Accuracy	Sensitivity	Overload Protection
99.99 μ A	10nA	$\pm 1\% \pm 30\text{dpts}$	0.20 μ A	600V
999.9 μ A	100nA		2.0 μ A	

AC Voltage (50Hz to 400Hz) : Trms

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.9mV	0.1mV	$\pm 1\% \pm 30\text{dpts}$ (50, 60Hz)	2.0mV	600V
9.999V	1mV		0.020V	
99.99V	10mV	$\pm 2\% \pm 30\text{dpts}$ (40~400Hz)	0.20V	
600.0V	100mV		2V	

DC Voltage

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.9mV	0.1mV	$\pm 1.0\% \pm 30\text{dpts}$	2.0mV	600V
9.999V	1mV		0.020V	
99.99V	10mV		0.20V	
600.0V	100mV		2V	

Resistance (Continuity<40 Ω on the 999.9 Ω range) :

Range	Resolution	Accuracy	Overload Protection
999.9 Ω	100m Ω	$\pm 1\% \pm 10\text{dpts}$	600V
9.999K Ω	1 Ω		
99.99K Ω	10 Ω		
999.9K Ω	100 Ω		

M Ω :

Range	Resolution	Accuracy	Overload Protection
9.999M Ω	1K Ω	$\pm 5\% \pm 10\text{dpts}$	600V
99.99M Ω	10K Ω		

3 ϕ Phase sequence indication :

Range	Frequency Response	Overload Protection
80V to 480V	50Hz / 60Hz	600V

Electrical Application :

- ◆ Check for energized circuits and balance loads.
- ◆ 1 ϕ /3 ϕ (3P3W/3P4W) Power analyzer.
- ◆ Evaluate electrical contacts.
- ◆ Capture inrush current readings of motor.
- ◆ Determine peak power demand periods.
- ◆ Verify line voltage stability.
- ◆ Monitor motors and other loads for excess heat.
- ◆ Check motor run/start capacitor values.
- ◆ Check 3 ϕ phase sequence.

Capacitance :

Range	Resolution	Accuracy	Overload Protection
10.000 μ F	1nF	$\pm 1.5\% \pm 5\text{dpts}$	600V
100.00 μ F	10nF		
1000.0 μ F	100nF	$\pm 2.5\% \pm 15\text{dpts}$	
7000 μ F	1 μ F		

Diode (Continuity<40mV) :

Range	Resolution	Accuracy	Overload Protection
2.000V	1mV	$\pm 2\% \pm 1\text{dgt}$	600V

Temperature (K-Type thermocouple) :

Range	Resolution	Accuracy	Overload Protection
-50 $^{\circ}$ C to 900 $^{\circ}$ C	0.1 $^{\circ}$ C	$\pm 0.2\% \pm 1^{\circ}$ C	30V _{AC} or 60V _{DC}
-58 $^{\circ}$ F to 1000 $^{\circ}$ F	0.1 $^{\circ}$ F	$\pm 0.2\% \pm 2^{\circ}$ F	

1 ϕ /3 ϕ TRUE Power (KW): (PF>0.5 or θ <60 $^{\circ}$)

Range	Resolution	Accuracy	Overload Protection
99.99KW	10W	$\pm 5\%\text{rdg} \pm 30\text{dpts}$ (50, 60Hz)	600V ac / 1000A ac
600.0KW	100W		

1 ϕ /3 ϕ Horse Power (HP): (PF>0.5 or θ <60 $^{\circ}$)

Range	Resolution	Accuracy	Overload Protection
99.99HP	0.01HP	$\pm 5%\text{rdg} \pm 30\text{dpts}$ (50, 60Hz)	600V ac / 1000A ac
800.0HP	0.1HP		

1 ϕ /3 ϕ Apparent Power :

Range	Resolution	Accuracy	Overload Protection
99.99KVA	10VA	$\pm 2.5\%\text{rdg} \pm 30\text{dpts}$	600VAC / 1000AAC
600.0KVA	100VA		

1 ϕ /3 ϕ Phase Angle : (50Hz, 60Hz)

Range	Resolution	Accuracy	Sensitivity
-60 $^{\circ}$ ~ 0 $^{\circ}$ ~ +60 $^{\circ}$	0.1 $^{\circ}$	$\pm 6.0^{\circ}$	ACV>100V, ACA>10A

Frequency :

Range	Resolution	Accuracy	Sensitivity
40Hz/1KHz	0.1Hz	$\pm 0.5\%\text{rdg} \pm 2\text{dpts}$	ACV>1.2V, ACA>6A