

TES-3079K Power Clamp Meter



FEATURES

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 voltage or current data with the aid of the time stamp.
 Insulation test up to 100M Ω .

Electrical Application:

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



SPECIFICATION

AC Voltage (50Hz to 400 Hz): Trms

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.99 mV	0.1mV	$\pm 1\% \pm 0\text{dgt}$ s(50,60Hz)	2.0mV	600V
9.999 V	1mV	$\pm 2\% \pm 20\text{dgt}$ s(40~100Hz)	0.020V	
99.99V	10mV	$\pm 1\% \pm 20\text{dgt}$ s(50,60Hz)	0.20V	
600.0V	100mV	$\pm 2\% \pm 20\text{dgt}$ s(40~400Hz)	2V	

Input impedancel: 3M Ω

DC Voltage

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.99 mV	0.1mV	$\pm 1.0\% \pm 20\text{dgt}$ s	2.0mV	600V
9.999 V	1mV		0.020V	
99.99V	10mV		0.20V	
600.0V	100mV		2V	

Input impedancel: 3M Ω

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

Range	Resolution	Accuracy	Overload Protection
999.99 Ω	100mΩ	1% ± 10dgts	600V
9.999KΩ	1Ω		
99.99KΩ	10Ω		
600.0KΩ	100Ω		

M Ω

Range	Resolution	Accuracy	Overload Protection
9.999 MΩ	1KΩ	5% ± 10dgts	600V
99.99 MΩ	10KΩ		

1 Φ/ 3 Φ Phase Angle:(50Hz,60Hz)

Range	Resolution	Accuracy	Overload Protection
-60 ° ~ 0 ° ~ +60 °	0.1 °	±6.0 °	ACV >100V,ACA>1

1 Φ/ 3 Φ KW/hp TRUE Power : (PF>0.5 or Φ<60 °) (1hp=745.7W)

Range	Resolution	Accuracy	Overload Protection
60.00KW(<100A)	10W	± 5 % rdg ± 20dgts(50,60Hz)	600VAC/1000AAC
600.0KW(>100A)	100W		

Frequency

Range	Resolution	Accuracy	Overload Protection
40Hz/1KHz	0.1 Hz	± 0.5 % rdg ±2dgts	ACV >0.2V,ACA>6A

AC Current (50 Hz to 400Hz): Trms

Range	Resolution	Accuracy	Sensitivity	Overload Protection
99.99A	10mA	±2%±20dgts (50,60Hz)	0.10A	1000A
999.9A	100mA	± 4% ± 20dgts (40~400Hz)	1.0A	

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

Range	Resolution	Accuracy	Sensitivity	Overload Protection
99.99 μ A	10nA	±1% ± 20dgts	0.20 μ A	600V
999.9 μ A	100nA		2.0 μ A	

Capacitance

Range	Resolution	Accuracy	Overload Protection
10.000 μF	1nF	1.5% ± 5dgts	600V
100.00 μF	10nF		
100.0 μF	100nF		
7000 μF	1 μF	2.5%±1 5dgts	

Temperature (K-Type Thermocouple):

Range	Resolution	Accuracy	Overload Protection
-50 °C to 900 °C	0.1 °C	1% ± 1 °C	30VAC or 60VDC
-58 °F to 1000 °F	0.1 °F	1%±2 °F	

Diode (Continuity < 40mV)

Range	Resolution	Accuracy	Overload Protection
2.000V	1mV	±2%±1dgts	600V

1 Φ/ 3 Φ Apparent Power

Range	Resolution	Accuracy	Overload Protection
60.00KVA(<100A)	10VA	± 2.5 %rdg ± 20dgts	600VAC/1000AAC
600.0KVA(>100A)	100VA		

Accessory : 9V battery, Carrying Case & Manual