

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 100MΩ .

ELECTRICAL SPECIFICATIONS (23°C±5°C)

AC Current (50Hz to 400Hz) : Trms

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

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

Range	Resolution	Accuracy	Sensitivity	Overload Protection
99.99µA	10nA	±1% ±20dpts	0.20µA	600V
999.9µA	100nA		2.0µA	

AC Voltage (50Hz to 400Hz) : Trms

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.9mV	0.1mV	±1% ±20dpts (50, 60Hz) ±2% ±20dpts (40~400Hz)	2.0mV	600V
9.999V	1mV		0.020V	
99.99V	10mV		0.20V	
600.0V	100mV		2V	

DC Voltage

Range	Resolution	Accuracy	Sensitivity	Overload Protection
999.9mV	0.1mV	±1.0% ±20dpts	2.0mV	600V
9.999V	1mV		0.020V	
99.99V	10mV		0.20V	
600.0V	100mV		2V	

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

Range	Resolution	Accuracy	Overload Protection
999.9Ω	100mΩ	±1% ±10dpts	600V
9.999KΩ	1Ω		
99.99KΩ	10Ω		
999.9KΩ	100Ω		

MΩ :

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

Electrical Application :

- ◆ Check for energized circuits and balance loads.
- ◆ 1ψ /3ψ (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 3φ phase sequence.

3φ Phase sequence indication :

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

Capacitance :

Range	Resolution	Accuracy	Overload Protection
10.000µF	1nF	±1.5% ±5dpts	600V
100.00µF	10nF		
1000.0µF	100nF		
7000µF	1µF	±2.5% ±15dpts	

Diode (Continuity<40mV) :

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

Temperature (K-Type thermocouple) :

Range	Resolution	Accuracy	Overload Protection
-50°C to 900°C	0.1°C	±0.2% ±1°C	30V _{AC} or 60V _{DC}
-58°F to 1000°F	0.1°F	±0.2% ±2°F	

1φ/3φ TRUE Power (KW): (PF>0.5 or θ <60°)

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

1φ/3φ Horse Power (HP): (PF>0.5 or θ <60°)

Range	Resolution	Accuracy	Overload Protection
80.00HP (<100A)	0.01HP	±5%rdg ±20dpts (50, 60Hz)	600V ac / 1000A ac
800.0HP (>100A)	0.1HP		

1ψ /3ψ Apparent Power :

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

1ψ /3ψ Phase Angle : (50Hz, 60Hz)

Range	Resolution	Accuracy	Sensitivity
-60° ~ 0° ~ +60°	0.1°	±6.0°	ACV>100V, ACA>10A

Frequency :

Range	Resolution	Accuracy	Sensitivity
40Hz/1KHz	0.1Hz	±0.5%rdg ±2dgts	ACV>1.2V, ACA>6A



