275 Product Sheet 02.11

## **275 Clamp-On Tester with True RMS Digital** Multimeter & 11,000 Count Display

# Test the TPI Advantage



#### **APPLICATIONS**

- Measure DC amperage of motor drive units
- Measure flame safety control current
- Test run and start capacitors and motors
- Measure motor run current and capture peak motor start up amperage
- Measure heat
  anticipator current
- Determine thermocouple voltage
- Test line and control voltages
- Measure heating element resistance
- Measure air temperature in ducts
- Test for the presence of voltage in circuits without contacting the circuit
- Measure temperature differential using relative mode



10" x 1.3" x 2.5"

## Why pay more? Perfect for tight, narrow, spaces...

The new TPI 275 with slim jaw and body is ideal for cramped work areas and crowded electrical panels.

#### Features

- True RMS
- 11,000 count display
- Up to 400 amps AC/DC
- Auto & Manual Ranging
- Data Hold
- Low Battery Indicator
- Over Range Indication ("OL")
- Peak Hold
- Min/Max
- Relative Mode
- Hi Voltage Indicator(>30V AC/DC)
- Non-contact voltage detection
- Auto Power Off after 30 minutes
- Separate Battery Compartment
- Low Ohm Range (110 $\Omega$ )
- Amps AC Resolution: 0.01A
- VDC/VAC Resolution: 0.01mV
- DCìA measurement (0.01 µA resolution)
- Temperature measurement

275 Data Sheet 02.11

## **275 Clamp-On Tester General Features** and Specifications

# **Test the TPI Advantage**



#### TPI offers acomplete lineof...

CO, Combustibles & Combustion (CEA)

Refrigerant Leak Detectors

Digital Manometers

Temperature Contact & IR Instruments

IAQ: Air Flow / Humidity

Handheld Oscilloscopes

Digital Multimeters & Clamp-on Meters

Accessories & Kits

Instrument Specifi	cations	
Basic DC Accuracy:		0.5%
DC Voltage (maximum):		600V
Resolution (maximum):		0.01mV
AC Voltage (maximum):		600V
Resolution (maximum):		0.01mV
DC Amps (maximum):		400A
Resolution (maximum):		0.01A
DC Microamps (maximum):		1,100μFA
Resolution (maximum):		0.01μA
AC Amps (maximum):		400A
Resolution (maximum):		0.01A
Resistance (maximum):		110MΩ
Resolution (maximum):		0.01Ω
Frequency (maximum):		110MHz
Resolution (maximum):		0.1Hz
Capacitance (maximum):		110mF
Resolution (maximum):		0.001nF
Temperature (maximim):		1,000°F
Resolution (maximum):		0.1°F
Diode:		t Max 1.5mA
Continuity:		nds at <approx. 35<math="">\Omega</approx.>
	Response t	
Agency Approval:		): CATIII; 600V cULus 3111: pending
Overall Dimensions: 10" x 1.3" x 2.5" (255 x 32.5 x 65mm)		
Weight:	.8 lbs (363	g)
Standard Accessories		
GK11M	Standard K-Kype Thermocouple Probe	
A085	UL Listed Silicone Test Lead Set with	
	Alligator Cli	ips (clip-on)
A270	Soft Carryii	ng Pouch
<b>Optional Accessori</b>		
A202	Line Splitter	
A771	Carbon Monoxide Adapter	
A620	Pressure Adapter	
TLS2000RB	Deluxe Test Lead Kit	

#### Distributed By:



#### 1. What is the benefit of a True RMS meter?

A True RMS responding meter, like the 275, allows accurate measurement of distorted AC voltage and amperage waveforms as found in control and switching power supply circuits.

#### 2. How does the non-contact voltage detection work?

This feature allows you to detect the presence of voltage without contacting the circuit with the test leads. By pressing the NCV button and holding the jaw close to the wire or circuit, the meter will inform you both audibly and visually if the circuit is live.

#### 3. What is hi voltage indication?

High voltage indication is an audible and visual safety alert informing you the test leads are in contact with a voltage greater than 30V AC or DC.

#### 4. What is relative mode?

Relative mode allows you to perform measurements relative to a stored value. For example, when performing a low resistance measurement, first touching the test prods together and pressing the relative button will subtract the lead resistance from subsequent measurements.

### 5. Is it possible to determine the maximum current draw on a line that has loads that vary?

By activating the min/max mode on the 275 it will record the minimum and maximum current measured. This is helpful when trying to see what the maximum load draw is as devices turn on and off.

## 6. Can I measure motor start up current with the TPI 275 clamp-on tester?

Yes, the 275 has a peak hold function that allows motor start up current to be captured.

#### 7. Can I test the run and start capacitors on motors?

The 275 has the ability to measure capacitors up to  $40,000\,$  microfarads in size.

### 8. Do I need an adapter to measure temperature with the 275?

An adapter is not needed to perform temperature tests with the 275. The 275 accepts K-type thermocouple probes with a sub-mini connector.

## 9. Is it possible to measure AC amps on a device that uses a power cord?

Yes, to accomplish this you can use the TPI line splitter (A202). AC amps must be measured by isolating a single wire and the A202 line splitter does this without damaging the power cord.