# 77pi

# 270 Clamp-On Tester with Digital Multimeter

#### **APPLICATIONS**

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

The Value Leader™



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

The new TPI 270 with slim jaw and body is ideal for cramped work areas and crowded electrical panels.

### **Features**

- Measure motor in-rush current and run current
- Measure temperature differential with relative mode
- Non-contact voltage feature can be used to immediately see if power is being supplied to the 24VAC control circuit of thermostats
- Frequency, Min/Max/Record, Data Hold, and Peak Hold
- Up to 40,000 Microfarads to test run and start capacitors
- 4,000 count display with 41 segment analog bargraph

ALL THESE PLUS...

- Auto & Manual Ranging
- Low Battery Indicator
- Over Range Indication ("OL")
- Hi Voltage Indicator(>30V AC/DC)
- Auto Power Off after 30 minutes
- Separate Battery/Fuse
  Compartment
- Low Ohm Range (400V)
- Amps AC Resolution: 0.01A
- VDC/VAC Resolution: 0.1mV
- DCµA measurement (0.01µA resolution)
- Temperature measurement with 0.1 ° resolution



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

0.5%

600V

600V

0.1mV

0.1mV

400µA

0.01µA

400A

0.01A

#### TPI offers a complete line of...

Instrument Specifications Basic DC Accuracy:

DC Voltage (maximum):

Resolution (maximum):

AC Voltage (maximum):

Resolution (maximum):

DC Amps (maximum):

Resolution (maximum):

Resolution (maximum):

AC Amps (maximum):

CO, Combustibles & Combustion (CEA) Refrigerant Leak Detectors

**Digital Manometers** 

Temperature Contac & IR Instruments IAQ: Air Flow /

Handheld Oscilloscopes

Digital Multimeters & Clamp-on Meters

Accessories & Kits

#### Test Products

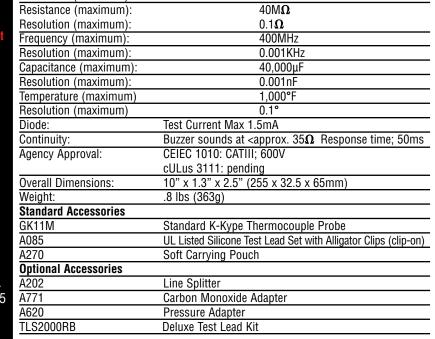
International, Inc. Headquarters: 9615 SW Allen Blvd. Beaverton, OR 97005 USA 503-520-9197 Fax: 503-520-1225 email: info@tpi-thevalueleader.com

#### Test Products International, Ltd.

342 Bronte St. South Unit 9 Milton, Ontario L9T 5B7 Canada 905-693-8558 Fax: 905-693-0888 email: info@tpicanada.com

#### Test Products International UK Ltd.

Longley House, East Park Crawley, West Sussex RH10 6AP England Tel: +44 (0)1293 561212 Fax: +44 (0)1293813465 contactus@tpieurope.com





#### To learn about the entire line of TPI products visit: **WWW.tpi-thevalueleader.com**

Copyright © 2005 Test Products International, Inc. L 270 -1005



#### 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.

#### 2. 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.

#### 3. 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.

# 4. 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 270 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.

#### 5. Can I measure motor start up current

with the TPI 270 clamp-on tester? Yes, the 270 has a peak hold function that allows motor start up current to be captured.

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

The 270 has the ability to measure capacitors up to 40,000 microfarads in size.

# 7. Do I need an adapter to measure temperature with the 270?

An adapter is not needed to perform temperature tests with the 270. The 270 accepts K-type thermocouple probes with a sub-mini connector.

# 8. What is the value of having an analog bargraph display?

The analog bargraph allow you to see rapid signal fluctuations occurring too fast to be seen on the digital display. Meters without this feature are unable to show the presence of rapidly fluctuating inputs.

# 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.