



# Insulation Resistance Testers

## MARKETS

- Electrical Power Generation
- Heavy Industry
- HVACR
- Mining
- Motor Repair Shops
- Natural Gas Transmission\*
- Oil Production
- Oil Pipelines
- Railroads
- Refining
- Steel Manufacturing
  - \* Gathering facilities, compressor stations, and pipelines

## APPLICATIONS

- Cables
- Compressors
- Controls
- Distribution Transformers\*
- Generators
- Instruments
- Motors
- Motor Windings
- Switchgear
  - \* Medium and high-voltage power transformers would normally not be tested with these instruments

Turn over for technical information and accessory part numbers.

**The Value Leader™**

Check compressor, transformer, and motor windings for insulation breakdown. TPI Insulation Resistance Testers are ideal for preventative maintenance and performing resistance tests. All TPI Insulation Resistance Testers include A085 UL listed silicone test lead set with screw on alligator clips and A073 test lead set with large alligator clips. All TPI Insulation Resistance Testers are:

- Easy to use
- Push button or locking operation
- Automatic discharge
- Built-in battery test

## ANALOG TESTERS

### SAIT 25



L: 8.5" x W: 3.5" x H: 6.25"  
2.3lbs

### SAIT 200



L: 8.5" x W: 3.5" x H: 6.25"  
2.3lbs

## DIGITAL TESTERS

### SDIT 30



L: 8.5" x W: 3.5" x H: 6.25"  
2.45lbs

### SDIT 300



L: 8.5" x W: 3.5" x H: 6.25"  
2.55lbs

#### Test Voltages

250V/500V/1,000V

#### Insulation Resistance

100MΩ / 200MΩ / 400MΩ

#### AC Voltage

No

#### Continuity

2Ω / 20Ω

#### Test Voltages

250V/500V/1,000V

#### Insulation Resistance

100MΩ / 200MΩ / 400MΩ

#### AC Voltage

No

#### Continuity

2Ω / 20Ω

#### Test Voltages

250V/500V/1,000V

#### Insulation Resistance

2,000MΩ / 2,000MΩ / 2,000MΩ

#### AC Voltage

No

#### Continuity

200Ω

#### Test Voltages

250V/500V/1,000V

#### Insulation Resistance

20MΩ / 200MΩ / 2,000MΩ

#### AC Voltage

200V/600V

#### Continuity

20Ω / 200Ω

## FEATURES

	SAIT 25	SAIT 200	SDIT 30	SDIT 300
Display	Analog scale	Analog scale	Digital	Digital
Backlight	No	Yes	No	No
Battery Check	Battery check mode	Battery check mode	Low battery indication	Low battery indication
Warning Signal	Lamp & beep	Lamp & beep	Lamp & beep	Live display on the LCD & beep
Ohm Zero Adjust	Yes	Yes	Yes	Yes
Power Supply	Battery (1.5V x 6)	Battery (1.5V x 6)	Battery (1.5V x 8)	Battery (1.5V x 8)
Fuse Protected	Yes	Yes	No	Yes
	(continuity range only)	(continuity range only)		(continuity, insulation)
Category	CAT III 600V	CAT III 300V	CAT II 1,000V	CAT III 600V



# Insulation Resistance Testers

**TECHNICAL SPECIFICATIONS AND ACCESSORIES**

	SAIT 25	SAIT 200	SDIT 30	SDIT 300
Insulation				
Test Voltage	250V/500V/1,000V	200V/500V/1,000V	250V/500V/1,000V	250V/500V/1,000V
Open Circuit Voltage	250V ±10% 500V ±10% 1,000V ±10%	250V ±10% 500V ±10% 1,000V ±10%	250V, 480V, 950V (approximately)	250V ±10% 500V ±10% 1,000V ±10%
Measuring Ranges	100MΩ /200MΩ/400MΩ	100MΩ /200MΩ/400MΩ	2,000MΩ /2,000MΩ/2,000MΩ	20MΩ /200MΩ/2,000MΩ
Accuracy	0.05MΩ ~ 10MΩ : ±5%  0.1MΩ ~ 20MΩ : ±5%  0.2MΩ ~ 40MΩ : ±5%  ±7% of scale length at ranges other than the above range	0.05MΩ ~ 10MΩ : ±5%  0.1MΩ ~ 20MΩ : ±5%  0.2MΩ ~ 40MΩ : ±5%  ±7% of scale length at ranges other than the above range	0 ~ 100MΩ (250V) : ±1.5% of reading ±3 digits 100 ~ 200MΩ (250V) : ±2% of reading ±5digits 200 ~ 1,700MΩ (250V) : ±3% of reading ±7 digits 1,700 ~ 2,000MΩ (250V) : ±3% of reading ±8 digits 0 ~ 200MΩ (500V) : ±1.5% of reading ±2 digits 200 ~ 1,700MΩ (500V) : ±3% of reading ±4 digits 1,700 ~ 2,000MΩ (500V) : ±4% of reading ±6 digits 0 ~ 200MΩ (1,000V) : ±1.5% of reading ±2 digits 200 ~ 1,700MΩ (1,000V) : ±3% of reading ±3 digits 1,700 ~ 2,000MΩ (1,000V) : ±4% of reading ±5 digits	20MΩ : ±3% of reading ±5 digits 200MΩ : ±3% of reading reading ±10 digits 1,000MΩ : ±3% of reading reading ±20 digits 2,000MΩ : ±5% of reading reading ±40 digits
Continuity				
Measuring Ranges	2Ω /20Ω	2Ω /20Ω	200Ω	20Ω /200Ω
Open Circuit Voltage	DC 4V ~ 9V	DC 4V ~ 9V	DC 170mV (approximately)	DC 4V
Short Circuit Current	200mA min	200mA min	24mA (approximately)	200mA DC min in 20Ω Range
Accuracy	±3% of scale length	±3% of scale length	±1.5% of reading ±2 digits	±3% of reading: ±3 digits ±1Ω
ACV				
Measuring Ranges				200V/600V
Input Frequency				45Hz ~ 450Hz
Accuracy				±3% of reading ±5 digits

**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

## STANDARD ACCESSORIES

Part Number	Test Leads	Neck Strap
SAIT 25	A085 & A073	A122
SAIT200	A085 & A073	A122
SDIT30	A085 & A073	A122
SDIT300	A085 & A073	A122

A085 consists of the A080 UL listed silicone test lead set with A150 screw on alligator clips.

A073 consists of a six foot lead set with large alligator clips.

## OPTIONAL ACCESSORIES

Description	Part#
4' red and black leads with large alligator clips . . . . .	A072

## INSULATION RESISTANCE TESTERS

**1. Selecting an insulation tester is like selecting a DMM. You need to know what value (resistance) you are going to measure and the required applied voltage.**

**2. Do you want analog or digital? Digital is easier to read, but analog typically works over a larger operating temperature range.**



To learn about the entireline of TPI products visit:  
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