

Insulation Resistance Testers

Delivering test and measurement advantages for HVAC/R professionals worldwide

Test the TPI Advantage



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

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



Test Voltages

250V/500V/1,000V

Insulation Resistance

100MΩ/200MΩ/400MΩ

AC Voltage

No

Continuity

2Ω /20Ω

SAIT 200



Test Voltages

250V/500V/1,000V

Insulation Resistance

100MΩ/200MΩ/400MΩ

AC Voltage

No

Continuity

2Ω /20Ω

DIGITAL TESTERS

SDIT 30



Test Voltages

250V/500V/1,000V

Insulation Resistance

2,000MΩ/2,000MΩ/2,000MΩ

AC Voltage

No

Continuity

200Ω

SDIT 300



Test Voltages

250V/500V/1,000V

Insulation Resistance

20MΩ/200MΩ/2,000MΩ

AC Voltage

No

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 range only)
Category	CAT III 600V	CAT III 300V	CAT II 1,000V	CAT III 600V

**The
Value
Leader™**

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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 $\pm 10\%$ 500V $\pm 10\%$ 1,000V $\pm 10\%$	250V $\pm 10\%$ 2 500V $\pm 10\%$ 1,000V $\pm 10\%$	50V, 480V, 950V (approximately)	250V $\pm 10\%$ 500V $\pm 10\%$ 1,000V $\pm 10\%$
Measuring Ranges	100M Ω /200M Ω /400M Ω	100M Ω /200M Ω /400M Ω	2,000M Ω /2,000M Ω /2,000M Ω	20M Ω /200M Ω /2,000M Ω
Accuracy	0.05M Ω ~10M Ω : $\pm 5\%$ 0.1M Ω ~20M Ω : $\pm 5\%$ 0.2M Ω ~40M Ω : $\pm 5\%$ $\pm 7\%$ of scale length at ranges other than the above range	0.05M Ω ~10M Ω : $\pm 5\%$ 0.1M Ω ~20M Ω : $\pm 5\%$ 0.2M Ω ~40M Ω : $\pm 5\%$ $\pm 7\%$ of scale length at ranges other than the above	0~100M Ω (250V): $\pm 1.5\%$ of reading ± 3 digits 100~200M Ω (250V): $\pm 2\%$ of reading ± 5 digits 200~1,700M Ω (250V): $\pm 3\%$ of reading ± 7 digits 1,700~2,000M Ω (250V): $\pm 3\%$ range reading ± 8 digits 0~200M Ω (500V): $\pm 1.5\%$ of reading ± 2 digits 200~1,700M Ω (500V): $\pm 3\%$ of reading ± 4 digits 1,700~2,000M Ω (500V): $\pm 4\%$ of reading ± 6 digits 0~200M Ω (1,000V): $\pm 1.5\%$ of reading ± 2 digits 200~1,700M Ω (1,000V): $\pm 3\%$ of reading ± 3 digits 1,700~2,000M Ω (1,000V): $\pm 4\%$ of reading ± 5 digits	20M Ω : $\pm 3\%$ of reading ± 5 digits 200M Ω : $\pm 3\%$ of reading reading ± 10 digits 1,000M Ω : $\pm 3\%$ of reading reading ± 20 digits of 2,000M Ω : $\pm 5\%$ of reading reading ± 40 digits
Continuity				
Measuring Ranges	2 Ω /20 Ω	2 Ω /20 Ω	200 Ω	20 Ω /200 Ω
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 20 Ω Range
Accuracy	$\pm 3\%$ of scale length	$\pm 3\%$ of scale length	$\pm 1.5\%$ of reading ± 2 digits	$\pm 3\%$ of reading: ± 3 digits $\pm 1\Omega$
ACV				
Measuring Ranges				200V/600V
Input Frequency				45Hz ~ 450Hz
Accuracy				$\pm 3\%$ of reading ± 5 digits

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

FAQ

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. 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.