Insulation
Resistance Testers
Product Sheet
02.11

Insulation Resistance Testers

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

Easy to use

Automatic discharge

Built-in battery test

clips and A073 test lead set with large alligator clips. All TPI Insulation Resistance Testers are:

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 trans formers would normally not be tested with these instruments

ANALOG TESTERS

SAIT 25



<u>Test Voltages</u> 250V/500V/1,000V

Insulation Resistance 100M Ω /200M Ω /400M Ω

AC Voltage

No

Continuity $2\Omega/20\Omega$

SAIT 200



<u>Test Voltages</u> 250V/500V/1,000V

Insulation Resistance 100M Ω /200M Ω /400M Ω

AC Voltage

No

 $\frac{\text{Continuity}}{2\Omega/20\Omega}$

DIGITAL TESTERS

SDIT 30

Push button or locking operation



<u>Test Voltages</u> 250V/500V/1,000V

Insulation Resistance $2,000M\Omega/2,000M\Omega/2,000M\Omega/2$

AC Voltage

l NC

 $\frac{\text{Continuity}}{200\Omega}$

SDIT 300



<u>Test Voltages</u> 250V/500V/1,000V

Insulation Resistance $20M\Omega/200M\Omega/2,000M\Omega$

AC Voltage

No

 $\begin{array}{c} \underline{\textbf{Continuity}} \\ 20\Omega/200\Omega \end{array}$

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



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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 ±10% 250V ±10% 2 50V, 480V, 950V 250V ±10% 500V ±10% 500V ±10% (approximately) 500V ±10% 1,000V ±10% 1,000V ±10% 1,000V ±10% Measuring Ranges 100M Ω /200M Ω /400M Ω 100M Ω /200M Ω /400M Ω $2,000M\Omega/2,000M\Omega/2,000M\Omega$ $20M\Omega/200M\Omega/2,000M\Omega$ Accuracy $0.05M\Omega \sim 10M\Omega:\pm 5\%$ $0.05M\Omega\sim10M\Omega:\pm5\%$ $0~100M\Omega$ (250V):±1.5% of $20M\Omega:\pm3\%$ of reading reading ±3 digits ±5 digits $0.1M\Omega \sim 20M\Omega:\pm 5\%$ $0.1M\Omega \sim 20M\Omega:\pm 5\%$ 100~200MΩ (250V):±2% of 200M Ω :±3% of reading reading ±5digits reading ±10 digits 0.2MΩ~40MΩ:±5% $0.2M\Omega \sim 40M\Omega:\pm 5\%$ $200~1,700M\Omega(250V):\pm3\%$ of $1,000M\Omega:\pm3\%$ of reading reading ±7 digits reading ±20 digits ±7% of scale length at ranges ±7% of scale length at ranges $1,700~2,000M\Omega$ (250V):±3% of 2,000M Ω : ±5% of reading other than the above range other than the above range reading ±8 digits reading ±40 digits $0~200M\Omega$ (500V):±1.5% of reading ±2 digits $200~1,700M\Omega$ (500V):±3% of reading ±4 digits 1,700~2,000MΩ (500V):±4% of reading ±6 digits 0~200M Ω (1,000V):±1.5% of reading ±2 digits $200~1,700M\Omega$ (1,000V):±3% of reading ±3 digits $1,700~2,000M\Omega$ (1,000V):±4% of reading ±5 digits Continuity Measuring Ranges $2\Omega/20\Omega$ $2\Omega/20\Omega$ 200Ω $20\Omega/200\Omega$ Open Circuit Voltage DC 4V ~ 9V DC 4V ~ 9V DC 170mV (appoximately) DC 4V 200mA DC min in 20Ù Range Short Circuit Current 200mA min 200mA min 24mA (appoximately) Accuracy ±3% of scale length ±1.5% of reading ±2 digits ±3% of scale length $\pm 3\%$ of reading: ± 3 digits $\pm 1\Omega$ ACV 200V/600V Measuring Ranges 45Hz ~ 450Hz Input Frequency ±3% of reading ±5 digits Accuracy

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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

Description4' red and black leads with large alligator clips
A072

INSULATION RESISTANCE TESTERS

- 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.
- 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.