# STB8882A Series Impulse Winding Tester

## Features

### Features

- Low inductance impulse test: down to 10μH
- Low energy test without damaging the coil
- Fast detection of winding insulation at a speed of 5.5 meas/sec
- 4 kinds of waveform comparison methods
- Up to 40 MSPS sampling rate
- 320×240 dot-matrix graphic LCD display
- Chinese and English operation languages
- Fridndly user's interface and easy operation
- Multi-trigger mode programmable
- Voltage, Time and Frequency measuring function
- Direct display of comparison result
- Keyboard lock and password protection function
- Handler, RS-232C, and GPIB(optional) interfaces
- 500 groups of waveforms can be stored in USB disk (optional)
- Multi-channel scan control interface: SCANNER (optional)

| RS232 | USB HOST | HANDLER | GPIB |
|---|---|---|---|
| standard | standard | standard | option |

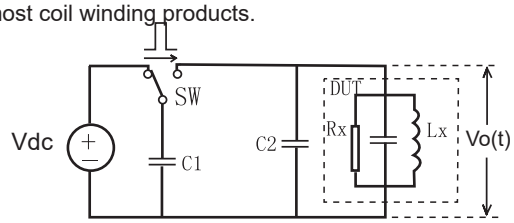
**STB8882 Series**

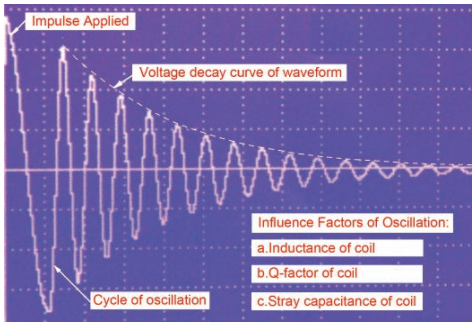
Dimension(mm):400mm(W)x132mm(H)x420mm(D)
Weight: 7.6kg(TH2882A) ,8.4kg(TH2882AS)

### Brief Introduction

- Due to the influence of coil wire material,magnetic material,framework and manufacture technics etc ., coil products (such as transformers, motors, etc.) may have defects of low insulation between coil layers,circles and leads. STB8882A series impulse winding tester,adopting high-speed sampling technique, is a new generation analysis test instrument for insulation performace of coil products.

When testing, STB8882A compares the standard waveform stored in the instrument with current measuring waveform. STB8882A gives the PASS or FAIL comparison result according to Area,Differential Area, Corona Discharge, Differential Phase etc. With strong function, precision test method, flexible operation and various interfaces, STB8882A can provide test solution for most coil winding products.




The Decay curve of winding voltage

### Theory of Impulse Test of Coil-winding

- The impulse winding tester tests the electrical characteristics of coil winding without damaging the DUT. The prerequisite conditions for quality of a coil can be detected at just a glance. The detection is carried out when the same electric impulse by capacitor discharge is applied to the standard and the DUT. The voltage decay waveform is generated in response to the impulse, related to the Q-factor and inductance of the coil. In this sense, the tester can detect turn & layer short, the differences in the number of turns and the material of the core. If high impulse voltage is applied, the poor insulation will appear as a corona or layer discharge.

Tel: 886. 909 602 109 Email: sales@salukitec.com
www.salukitec.com

## Specifications

| | | |
|---|---|---|
| Output Impulse Voltage | STB8882A-3 | 300V-3000V, 50V Steps, ±5% of set value±15V |
| | STB8882A-5/STB8882AS-5 | 500V-5000V, 100V Steps, ±5% of set value± 25V |
| Voltage Control Mode | Normal | Voltage programmable at the measurement terminals when terminals opened |
| | Constant | Maintaining selected voltage across the winding independent of changes of the winding impedance |
| Impulse Energy (1K Ω Resistive Load) | STB8882A-3 | ≤ Max. 90 milli-Joules |
| | STB8882A-5/STB8882AS-5 | ≤ Max. 250 milli-Joules |
| Inductance Range | STB8882A-3 | ≥ 10 More than 10μH |
| | STB8882A-5 | ≥ 20 More than 20μH |
| | STB8882AS-5 | ≥ 200 More than 200μH |
| Display | Screen Mode | 320x240 dots LCD |
| | Waveform Display Dots | 240x200 dots |
| | Display Information | Setting parameter , Standard & measuring waveform, Measurement & comparison result |
| Waveform Sampling | Sampling rate | 40MSPS/25ns,<br>20MSPS/50ns, 10MSPS/100ns, 5MSPS/200ns,2.5MSPS/400ns,<br>1.25MSPS/800ns,<br>625kSPS/1.6μs, 312kSPS/3.2μs, |
| | Resolution | 8 digits |
| | Sampling length | 960 Bytes |
| Input impedance | | 10MΩ (Resistive voltage divider) |
| Measuring speed | 5.5 times/sec ( Waveform display OFF, PASS/FAIL ON) | |
| | 3.3 times/sec ( Waveform display ON, PASS/FAIL ON) | |
| Average Rate | | 1 to 99 ,Programmable |
| Waveform Measurement | | Voltage, Time, Frequency |
| Trigger Mode | | Internal/Manual (Foot)/External/ BUS |
| Comparison Mode | | Area size comparison<br>Differential area comparison<br>Corona discharge<br>Differential phase comparison |
| Area Size Repetition accuracy | | ±1% |
| Differential Area Repetition Accuracy | | ±1% |
| Detection Output | | PASS/FAIL display , Alarm |
| Alarm Volume | | Long high, Long low, Single low, Double low, Off |
| Memory | | 60 groups of standard waveform data can be stored in internal non-volatile memory 500 groups in USB flash memory (optional) |

## General Specifications

| | | |
|---|---|---|
| Operating Temperature and Humidity | | 0°C~40°C, ≤90%RH |
| Power Requirements | Voltage | 99V - 121V AC,198V - 242V AC |
| | Frequency | 47.5Hz~63Hz |
| Power Consumption | | ≤ 40VA |

## Standard Accessories

SAH881-001 Foot Switch
SAH883-01 High-Voltage Test Cable(only STB8882A-3/-5)
SAH882AS-01 Test Cable(only STB8882AS-5)

## Options

SAX0001 GPIB Interface Board
SBF0026 USB Disk
SAB0021 TH2882 RS232C Control Software