

# Transformer, Motor and Winding Test Instruments

## B. TH2883S8-5/TH2883S4-5 Impulse Winding Tester



TH2883S8-5/th2883S4-5

### Features

- The first provider of impulse winding tester from low voltage of 30V to high voltage of 10kV, single channel to multichannel in this industry (Max.:8 channels)
- First winding tester compatible with LXI standard
- Impulse voltage of 100V~5000V
- Two models of 4-channel and 8-channel for selection
- Each channel can be programmed and controlled as high-terminal, low-terminal and OFF
- 20 test procedures can be added at most
- 65k color 7" TFT wide display screen
- Up to 200Msps waveform sampling rate
- Maximum measuring speed: 6meas/sec
- Storage depth of 6k Bytes
- High bandwidth analog acquisition circuit
- High-fidelity corona extraction algorithm (patent technology)
- Four waveform comparison methods
- Automatic storage of instrument parameters
- Measurements on voltage, time and frequency
- Amplification, stretch and movement of the waveform for accurate display
- Multi-sample average, average processing of 32 standard waveforms
- Destructive testing for your correct choose of voltage
- Use demagnetized impulse to ensure the conformity of tested waveforms
- Login of different user right for easy management
- 20 groups of instrument files can be stored and automatically loaded
- Screen information can be stored in USB disk (COPY key)
- System firmware can be automatically upgraded through USB-disk
- Selectable Chinese and English operation interfaces
- Four selectable display interface effects
- Foot control interface for easy measurements
- Handler interface to realize on-line operation
- RS232C, USB Device and LAN interface to realize remote control

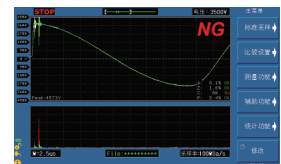
### Brief Introduction

■ TH2883 series products are newly developed impulse winding testers by Tonghui. This product line makes Tonghui as the first provider of impulse winding tester from low voltage of 30V to high voltage of 10kV, single channel to multichannel (Max.:8 channels) in this industry. The instrument adopts popular 32 bit CPU and high density SMD technology, 65k color 7-inch TFT wide display screen, bringing ease for your eyes and convenience to your operation. The impulse voltage of 100V~5000V, maximum 8 channel sweep test, maximum 20 test procedures, sampling rate of 200Msps, memory depth of 6k bytes makes your test accurately. The usage of standard sample average, application of demagnetized impulse, high bandwidth analog acquisition circuit, technology of high-fidelity corona extraction as well as the opening of non-destructive test reflect the design philosophy "customer-oriented, share the future technology with you" of Tonghui.

According to the output number of channels, TH2883 series is consist of 2 models: TH2883S8-5 and TH2883S4-5. TH2883S8-5 is the ideal product for measurements of multiphase coils. The 8 channel of TH2883S8-5 can be programmed and configured as voltage high-terminal, voltage low-terminal and OFF. Any combination of the configuration condition of the 8 channels and maximum 20 test procedures can be achieved. Also, it can test the coils successively in 8 channels. TH2883S4-5 is provided with 4 channels. It is especially developed on the basis of the 8 channels of TH2883S8-5 for customers who need less sweep channels. USB Host, RS232C, USB Device and LAN interface are provided in TH2883 series products for your quick save of the waveforms and remote control of the instrument.

#### Corona extraction function

With high-fidelity corona extraction algorithm (patent technology) and high bandwidth analog acquisition circuit, TH2883 series products can fully recover the corona waveform of high-frequency and makes you know more about the insulating property of products.



TH2883S8-5 is provided with 8 channels from CH1-CH8, TH2883S4-5 is provided with 4 channels from CH1-CH4. These channels are installed on the rear panel for convenient use, as shown in the figure:



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### Specifications

|                                          |             |                                                                                                                                                                                                                                |            |
|------------------------------------------|-------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Model                                    |             | TH2883S8-5                                                                                                                                                                                                                     | TH2883S4-5 |
| Impulse voltage                          |             | 100V-5000V<br>10V steps                                                                                                                                                                                                        |            |
| Voltage accuracy                         |             | ±(5% set value +15V)                                                                                                                                                                                                           |            |
| Readback accuracy                        |             | ±(5% actual value +15V)                                                                                                                                                                                                        |            |
| Channels                                 |             | 8                                                                                                                                                                                                                              | 4          |
| Inductance test range                    |             | ≥10uH                                                                                                                                                                                                                          |            |
| Impulse energy                           |             | Max.: 0.25 Joule                                                                                                                                                                                                               |            |
| Test speed                               |             | 6 times/second (single channel, single step)                                                                                                                                                                                   |            |
| Pulses applied                           |             | Max.: 32                                                                                                                                                                                                                       |            |
| Input Impedance                          |             | 5MΩ                                                                                                                                                                                                                            |            |
| Display                                  |             | 800x480 dots, 65k color TFT; Waveform Display Range: 600x256                                                                                                                                                                   |            |
| Waveform Acquisition                     |             | Sampling rate: Max. 200Msps, 8 levels adjustable<br>Resolution: 8 Bits<br>Memory Depth: 6k Bytes<br>Average: 1 to 32                                                                                                           |            |
| Comparison Methods                       |             | Comparison with Standard Waveform: <ul style="list-style-type: none"><li>● Area Size Comparison</li><li>● Differential Area Comparison</li><li>● Corona Discharge Comparison</li><li>● Differential Phase Comparison</li></ul> |            |
| Waveform Measurement                     |             | Voltage/Frequency/Time                                                                                                                                                                                                         |            |
| Trigger Mode                             |             | Manual/External/Bus/Internal                                                                                                                                                                                                   |            |
| Detection Output                         |             | Pass/Fail display/LED/ Alarm                                                                                                                                                                                                   |            |
| Measurement Statistics                   |             | Statistics for measurement results                                                                                                                                                                                             |            |
| Memory                                   |             | 20 groups of standard waveform data and instrument setup can be stored in internal non-volatile memory.<br>USB flash memory can be used as external memory.                                                                    |            |
| Interface                                |             | Handler, RS232C, USB Device, USB Host, LAN                                                                                                                                                                                     |            |
| Power supply                             |             |                                                                                                                                                                                                                                |            |
| Power supply                             |             | 220V ±10% 50Hz/60Hz ±5%                                                                                                                                                                                                        |            |
| Power consumption                        |             | ≤200VA                                                                                                                                                                                                                         |            |
| General conditions                       |             |                                                                                                                                                                                                                                |            |
| Working environment                      | Temperature | 0℃ - 40℃                                                                                                                                                                                                                       |            |
|                                          | Humidity    | ≤75% R.H.                                                                                                                                                                                                                      |            |
| Safety and electromagnetic compatibility |             | IEC61010-1:2001,IEC61326-2-1:2005                                                                                                                                                                                              |            |