Impulse Winding Tester (VE2882A4-5RLU)

(Impulse Winding Tester, Inductances & DC Resistance Meter)





4 - Channel Impulse Winding Tester (with L & Rdc Meter)

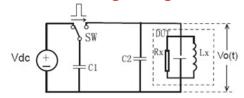
Brief Introduction:

Because of the influence of coil wire material, magnetic material, framework and process craft etc., coil can generate debasement of the insulation performance of the coil layer. Impulse winding tester adopts high-speed sampling technique. It is a new analysis test instrument for insulation performance and measures Inductance (L) & DC Resistance (Rdc) of a Coil or Winding. While testing, it compares the waveform with the sample wave form according to criterion of settings (Area, Differential Area, Corona Discharge, Differential Phase etc.) that is stored in the instrument. It is has user user-friendly options and high testing speed.

Theory of Impulse Tester:

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.

Decay Carve of winding Voltage:







Main Functions:

- Low inductance impulse test: down to 10µH
- Low energy test without damaging the coil
- Fast detection of winding insulation at a speed of 15 meas/sec
- 4 kinds of waveform comparison methods
- Up to 100 MSPS sampling rate
- Inductance Measurements (L)
- DC Resistance Measurements (Rdc)
- 65K Color 7" TFT Display
- Friendly user's interface and easy operation
- Direct display of comparison result
- Keyboard lock and password protection function
- Optional Handler Interface, RS-232C
- Waveforms can be stored in USB disk (optional)
- Multi-channel scan control interface: SCANNER (optional)
- Max. Test Voltage Range is 500V ~ 5KV



Impulse Winding Tester (Impulse, Inductances & DC Resistance Winding Tester)



Specification:

Model		VE2882A4-5RLU
Channels		4
Impulse Voltage		100V ~ 5000V, 10V Step Accuracy : <u>+</u> 5% <u>+</u> 10V
Inductance Range		20uH
Impulse Energy		0.25 Joule
Measurement Speed		Single Channel : 15 Mes/Sec Multi Channel : 12 Mes/Sec (Single Winding Test) 2 Mes/Sec (Four Winding Test)
Pulse Applied		Measuring Pulse up to 32, Demagnetization pulse up to 8
Input Impedance		10M Ohm
Inductance	Signal Frequency	100Hz , 1KHz, 10KHz
	Range	0.1 μH ~ 99.999 H
	Accura cy	<u>+</u> 0.3%
DC Resistance	Range	0.1 mOhm ~ 20 KOhm (Kelvin Measurement)
	Accura cy	0.1 mOhm $^{\sim}$ 200 mOhm (\pm 0.5% \pm 0.5mOhm) ; 200 mOhm $^{\sim}$ 20 KOhm (\pm 0.2%)
Display Type		800x480 dots, 65K Color TFT Waveform display 650x256 dots
Comparison Methods		Comparisons with standard waveform Area Size Differential Area Corona Discharge Differential Phase
Impulse Accuracy of repetition		<u>+</u> 1%
Waveform Measurement		Voltage, Frequency, Time
Trigger Mode		Manual / External / Internal
Detection Output		OK / NG Display, LED Indications, Sound Alarm
Measurement Status		Statistics of measurement results and time, Max.20000
Memory	Internal	100
	USB Disk	300 gruous (standard waveform and measurement settings)
Optional Interface		Handler (Start, Stop, Pass, Fail, Busy, EOC) RS232 USB Host (Supports FAT16 and FAT32, BMP, GIF, PNG, CSV Files)
Power		
Power Supply		220V <u>+</u> 10% ; 50Hz <u>+</u> 5%