


## ENGLISH


### User Manual Contactless Voltage Tester TIS 934


#### Content


1. Introduction / Product Package
2. Safety Measures
3. Danger of electric shock and other dangers
4. Intended Use
5. Tester Information
6. Preparation for tests
7. Conducting Tests
  - 7.1 Voltage Test
  - 7.2 Self Test
8. Battery Replacement
9. Technical Data
10. Cleaning and storage


#### References marked on tester or in instruction manual:


 Warning of a potential danger, comply with instruction manual.


 Reference. Please pay utmost attention.

 Caution! Dangerous voltage. Danger of electrical shock.


 Continuous double or reinforced insulation complies with category II DIN EN 61140.

 Conformity symbol, the instrument complies with the valid directives. It complies with the EMV -Directive (89/336/EEC), Standard EN 61326-1 is fulfilled. It also complies with the Low Voltage Directive (73/23/EEC), Standard EN61243-3:2010 is fulfilled.

 Tester complies with the standard (2002/96/EG) WEEE

 The instruction manual contains information and references, necessary for safe operation and maintenance of the tester.

Prior to using the tester (commissioning/ assembly) the user is kindly requested to thoroughly read the instruction manual and comply with it in all sections.

 Failure to read the tester manual or to comply with the warnings and references contained herein can result in serious bodily injury or tester damage. The respective accident prevention regulations established by the professional associations are to be strictly enforced at all times

#### 1. Introduction / Product Package

The contactless voltage tester TIS 934 is developed for voltage testing at insulated wires and cables. No direct contact to the device under test (DUT) is required.


#### The contactless tester TIS 934 is characterized by the following features:


- Designed to meet international safety standards EN61010-1
- Measurement Category (CAT) IV 1000V
- Contactless voltage testing between 50V and 1000V
- Check for cable breaks
- Phase detection on sockets
- Voltage test through red LED and buzzer
- Self test
- On-indication
- IP65 (IEC60529)

#### After unpacking, check that the instrument is undamaged. The product package comprises:


- 1 pc TIS 934
- 2 pcs batteries 1.5V, IEC LR03
- 1 pc operating instructions


#### 2. Safety Measures


 The testers have been constructed and tested in accordance with the safety regulations for voltage testers and have left the factory in a safe and perfect condition.


 The operating instructions contain information and References required for safe operation and use of the tester. Before using the tester, read the operating instructions carefully and follow them in all respects.


#### 3. Danger of electric shock and other dangers


 Verification of live-circuit shouldn't be dependent on testing with a contactless tester but only on the voltage test with a 2 pole voltage tester according to EN61243-3.


 The signal during voltage test has no information on type and strength of voltage


 To avoid an electric shock, observe the precautions when working with voltages exceeding 120 V (60 V) DC or 50 V (25 V) eff AC. In accordance with DIN VDE these values represent the threshold contact voltages (values in brackets refer to limited ranges, e.g. in agricultural areas).


 The tester must not be used with the battery compartment open


 Before using the tester, ensure that the device is in perfect working order. Look out e.g. for broken housing or leaking batteries.


 Hold the tester and accessories by the designated grip areas only.


 The tester may be used only within the specified measurement ranges and in low-voltage installations up to 1000 V.


 The tester may be used only in the measuring circuit category it has been designed for.


 Before and after use, always check that the tester is in perfect working order (e.g. on a known voltage source).

 The tester must no longer be used if one or more functions fail or if no functionality is indicated.


 It is not permitted to use the tester during rain or precipitation.


 A perfect display is guaranteed only within a temperature range of -15°C to +55°C at relative air humidity less than 85%.


 If the safety of the user cannot be guaranteed, the tester must be switched off and secured against unintentional use.


 Safety is no longer guaranteed e.g. in the following cases:


- obvious damage
- broken housing, cracks in housing
- if the tester can no longer perform the required measurements/ tests
- stored for too long in unfavorable conditions
- damaged during transport
- leaking batteries

 The tester complies with all EMC regulations. Nevertheless it can happen in rare cases that electric devices are disturbed by the electrical field of the tester or the tester is disturbed by electrical devices.

 Never use the tester in explosive environment

 Tester must be operated by trained users only

 Operational safety is no longer guaranteed if the tester is modified or altered.

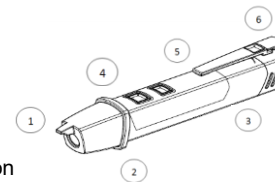
 The tester may be opened by an authorized service technician only.

#### 4. Intended Use

The tester may be used only under the conditions and for the purposes for which it was designed. Therefore, observe in particular the safety instructions, the technical data including environmental conditions.

#### 5. Tester Information

1. Test tip for voltage test
2. Display area
3. Grip area
4. On/ off button
5. Self test button
6. Battery door



#### 6. Preparation of testing

- Switch on the tester by pressing long the ON/ OFF button.
- A yellow LED is on to show readiness
- The tester is switched off by pressing ON/ OFF long time

#### 7. Conducting Tests

##### 7.1 Voltage testing

Move the device slowly along the DUT, e.g. a cable.

If the tester detects an alternating voltage the LED flashes and the buzzer sounds.



The position of the earth conductor in DUT can influence the testing.

#### 7.2 Self Test

By pressing the self test button, the LED indication and buzzer can be tested.

#### 8. Exchange of batteries

If the self test does not work anymore, the batteries need to be exchanged.

- Open the battery door by pressing on the square recess
- Pull out the Battery door and replace the batteries. Insert new batteries according to the symbol.
- Re-assemble battery door.
-  Confirm that the Battery door case is properly locked prior to measurements.
-  Attention ! Do not throw used batteries into the household refuse but dispose of them at special refuse collecting points. The applicable provisions regarding return, recycling and disposal of used batteries and accumulators must be observed.

#### 9. Technical data

(valid for use at 23°C +/- 5°C, <80% relative humidity)

Display: bright LED red and yellow

Buzzer: yes

Voltage ranges: 50V – 1000V AC

Frequency range: 50...60 Hz

Duty cycle: continuous

Safety as per: EN 61010-1

Battery: 2x1.5V LR03 (AAA)

Temperature range: 0°...40°C, <80% relative humidity

Current consumption: approx. 80 mA

Dimensions: approx. 155x25x23 mm

Weight: approx. 55 g

#### 10. Cleaning and storage

- Tester does not need any special maintenance if used according to user manual.
- Remove tester away from all test points before cleaning.
- Use a lightly damp cloth with neutral detergent for cleaning the tester. Do not use abrasives or solvents.
- Do not expose the tester to direct sun light, high temperature and humidity or dewfall.
- Remove batteries when the instrument will not be in use for a long period.