MARTINDALE ELECTRIC

Specification
VT7
Single pole voltage indicator



Electrical
Audible and visual indication
Voltage range: 50V - 600V AC rms
Frequency range: 50 - 60Hz
Test current: <5µA

Environmental
Temperature (Operating & Storage): -10°C to 55°C
Humidity (Operating & Storage): ² 85% R.H.
Altitude: up to 2000m

General
Power: 9V, PP3 alkaline battery (IEC 6LR61, NEDA 1604A)
Current consumption: 34mA max

Dimensions: 236(L) x 44(W) x 33(D) mm
Weight: 120g (battery included) approx
Includes: 9V PP3 battery, instructions

Safety
Conforms to BS EN61010-1 CAT IV 300V, CAT III 600V
Class II, Double Insulation
Pollution Degree: 2
IP rating: IP54
Water resistant

EMC
Conforms to BS EN61326-1

GENERAL SAFETY INFORMATION:
Always read before proceeding.

WARNING
These instructions contain both information and warnings that are necessary for the safe operation and maintenance of this product. It is recommended that you read the instructions carefully and ensure that the contents are fully understood. Failure to understand and to comply with the warnings and instructions can result in serious injury, damage or even death.

In order to avoid the danger of electrical shock, it is important that proper safety measures are taken when working with voltages exceeding 30V AC rms, 42V AC peak or 60V DC.

This product must only be used by a competent person capable of interpreting the results under the conditions and for the purposes for which it has been constructed. Particular attention should be paid to the Warnings, Precautions and Technical Specifications. Always check the unit is in good working order before use and that there are no signs of damage to it. Do not use if damaged.

Where applicable other safety measures such as use of protective gloves, goggles etc. should be employed.

Please keep these instructions for future reference. Updated instructions and product information are available at: www.martindale-electric.co.uk

REMEMBER: SAFETY IS NO ACCIDENT.
MEANING OF SYMBOLS:

CE **Equipment complies with relevant EU Directives.**

End of life disposal of this equipment should be in accordance with relevant EU Directives.

Caution - risk of electric shock.

Caution - risk of danger & refer to instructions.

Equipment protected by double or reinforced insulation (Class II).

Alternating current (AC).

1. INTRODUCTION
1.1 Inspection
Examine the shipping carton for any sign of damage. Inspect the unit and any accessories for damage. If there is any damage then consult your distributor immediately.

2. Product Specific Safety Information
Measurement Category III (CAT III) is applicable to test and measuring equipment connected to the distribution part of the building's low-voltage MAINS installation.
Measurement Category IV (CAT IV) is applicable to test and measuring equipment connected at the source of the building's low-voltage MAINS installation.

2.1 Precautions
This product has been designed with your safety in mind, but please pay attention to the following warnings and cautions before use.

Warning
The voltage indicator must only be used by a skilled and competent person who is familiar with the relevant regulations, the safety risks involved and the consequent normal safe working practices.

Before each use the voltage indicator should be examined for damage, cracks, cuts or scratches. If there is any doubt the voltage indicator should **not be used.**

Make sure the voltage indicator is dry, clean and free from dust, grease and moisture while in use to avoid the danger from electric shock due to surface leakage.

Before and after each use, the voltage indicator must be proven using a suitable proving device or a known good voltage source. **Do not use** the voltage indicator if any expected indication LED's fail to illuminate correctly during proving.

The voltage indicator will not detect DC voltage.

Testing for a voltage that exceeds the specified limits of the voltage indicator may damage the voltage indicator and expose the operator to a shock hazard. Always check the voltage indicators specified limits before use. The voltage indicator must only be used on CAT IV installations up to 300V to earth, on CAT III installations up to 600V to earth, and within the operating temperature and humidity range specified.

Do not use the voltage indicator if the battery cover is not fitted.

Always keep your fingers behind the finger guards. Never touch the exposed metal probe tip.

Do not use the voltage indicator during rain or precipitation.

The voltage indicator must not be dismantled or modified in any way by unauthorized persons. The safety of the voltage indicator cannot be guaranteed under such circumstances and it **must not be used**.

⚠ Cautions

Avoid severe mechanical shock or vibration and extreme temperature.

To avoid corrosion from a leaking battery, remove the battery when the unit is not in use for an extended period.

3. OPERATION

3.1 Self Test

The self test checks the functionality and battery, a proving check should always be performed prior to use.

Press the test button on the voltage indicator.

Two LED's, one in the front cone and one above the test switch, should illuminate and the buzzer should sound.

Do not use the voltage indicator if either of the LED's fails to illuminate or the buzzer fails to sound.

If both LED's and the buzzer do not function, replace the battery (see section 4.1 Battery Replacement) and retest the unit.

3.2 Proving Check

Before and after use, verify the voltage indicator is functioning correctly on a known good voltage source.

Do not use the voltage indicator if either of the LED's fails to illuminate or the buzzer fails to sound during proving.

⚠ Warning

If the voltage source exceeds the specified limits of the voltage indicator the voltage indicator may be damaged and the operator exposed to a shock hazard. Always check the voltage magnitude of the voltage source before proceeding with a proving check.

3.3 Testing for the Presence of Voltage

⚠ Warning

Single pole phase testing is not suitable to determine if a circuit is **not** hazardous live. A double pole voltage test should always be used for that purpose.

If testing at locations with high background noise levels, always determine whether the buzzer is perceptible before relying solely on the buzzer indication.

The voltage indicator must be gipped fully and firmly around the hand grip to obtain optimum and consistent sensitivity. A loose grip during testing may reduce the voltage indicator's sensitivity.

While taking all required safety precautions connect the probe tip firmly to the UUT (Unit or location under test).

If a voltage is detected, both LED's will illuminate and the buzzer will sound.

4. MAINTENANCE

4.1 Battery Replacement

⚠ To avoid shock or injury, disconnect the voltage indicator from any external circuits before proceeding.

To gain access to the battery compartment, undo the screw securing the battery compartment cover and lift off the cover.

Fit a new 9V, PP3 alkaline battery (IEC 6LR61, NEDA 1604A).

Replace the battery cover and the screw.

4.3 Cleaning

Wipe the voltage detector with a cloth soaked with alcohol or mild non-conductive detergent. Do not use abrasives, abrasive solvents, or detergents which can cause damage to the voltage detector. Allow the voltage detector to thoroughly dry before use.

4.4 Repair & Service

There are no user serviceable parts in this unit other than those that may be described in section 4. Return to Martindale Electric if faulty. Our service department will quote promptly to repair any fault that occurs outside the guarantee period.

4.5 Storage Conditions

The instrument should be kept in warm dry conditions away from direct sources of heat or sunlight, and in such a manner as to preserve the working life of the unit. It is strongly advised that the unit is not kept in a tool box where other tools may damage it.

5. WARRANTY AND LIMITATION OF LIABILITY

This Martindale product is warranted to be free from defects in material and workmanship under normal use and service. The warranty period is 2 years and begins on the date of receipt by the end user. This warranty extends only to the original buyer or end-user customer, and does not apply to fuses, disposable batteries, test leads or to any product which, in Martindale's opinion, has been misused, altered, neglected, contaminated, or damaged by accident or abnormal conditions of operation, handling or storage.

Martindale authorised resellers shall extend this warranty on new and unused products to end-user customers only but have no authority to extend a greater or different warranty on behalf of Martindale.

Martindale's warranty obligation is limited, at Martindale's option, to refund of the purchase price, free of charge repair, or replacement of a defective product which is returned to Martindale within the warranty period.

This warranty is the buyer's sole and exclusive remedy and is in lieu of all other warranties, expressed or implied, including but not limited to any implied warranty of merchantability or fitness for a particular purpose. Martindale shall not be liable for any special, indirect, incidental or consequential damages or losses, including loss of data, arising from any cause or theory.

Since some jurisdictions do not allow limitation of the term of an implied warranty, or exclusion or limitation of incidental or consequential damages, the limitations and exclusions of this warranty may not apply to every buyer. If any part of any provision of this warranty is held invalid or unenforceable by a court or other decision-maker of competent jurisdiction, such holding will not affect the validity or enforceability of any other provision or other part of that provision.

Nothing in this statement reduces your statutory rights.

Thank you for buying one of our products. Technical support is available from 01923 441717 and support@martindale-electric.co.uk.