**VTM 15000**

Impulse Transformer for Insulation Testing

- **The VTM 15000** is used for insulation testing with 1.2/50us voltage impulses.

- **The VTM 15000** runs together with a combination wave generator such as PIM 100 or PSURGE 4010. The output voltage of the generator is doubled, the voltage wave shape remains the same. The current wave shape is not defined any more.

- **For insulation testing a VTM 15000** and a combination wave generator can be used. The lightning impulse is the most common impulse shape for testing insulations. No flash over should occur during testing.

- **It is important** to keep the load capacitance below the given maximum for having a proper impulse shape at the output of the VTM 15000. When the maximum load capacitance is exceeded one or more impulse parameters may be out of tolerance.

- The PSURGE 8000 Surge Platform and the PSURGE 4010 combination wave generator provide all the programming functions required to perform IEC, ANSI and UL testing also without the need of a control computer.

- The generators are integrated in the WinFEAT&R control and reporting software package. This enhances an efficient set-up and operation of this test system.

- **Features**
  - 1.2/50us voltage impulse
  - output amplitude up to 15kV
  - Source impedances 12 Ohm, 40 Ohm and 500 Ohm
  - Separate Output for each source impedance
  - floating output

- **Benefits**
  - **International application** – Specifically designed to meet and exceed the requirements of:
    - IEC 60060-1
    - IEC 60335-1
    - IEC 61010-1
    - IEC 61180-1
    - IEC 61008-1 and 61009-1
  - **Safe and Easy** - The HV output provides the HV impulse with a large insulation distance to the front panel. The pig tail cable for the HIGH is double insulated. This allows operators to handle the EUTs and test them safely and easily.
  - **Sturdy and Reliable** – Careful component selection ensures that the VTM 15000 will continue to operate under the most strenuous testing regimen.
  - **Supervision** - The peak voltage and peak current into the VTM 15000 can be monitored. If the user set limits are exceeded, an alarm is given.
  - **Report Generation** - The unit controller can automatically generate test reports without a computer. Add the WinFEAT&R control and reporting software on a host PC in order to collect and collate data in any format you like.

- **Applications**
  - Insulations
  - Creepage distances
  - Clearances
  - Many IEC, ANSI, UL & EN Product standards
  - Other international requirements for voltage impulses
Technical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specifications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turns Ratio</td>
<td>1:2</td>
</tr>
<tr>
<td>Impulse shape</td>
<td>1.2µs / 50µs voltage impulse (lightning impulse)</td>
</tr>
<tr>
<td>Output impedances</td>
<td>12 Ohm Load capacitance ≤200pF, Load resistance ≥5kOhm</td>
</tr>
<tr>
<td></td>
<td>40 Ohm Load capacitance ≤300pF, Load resistance ≥5kOhm</td>
</tr>
<tr>
<td></td>
<td>500 Ohm Load capacitance ≤600pF, Load resistance ≥50kOhm</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>up to 15kV with a 7.5kV source, e.g. PIM 100</td>
</tr>
<tr>
<td></td>
<td>up to 8.4kV with a 4.2kV source, e.g. PSURGE 4010 or ECOMPACT 4</td>
</tr>
<tr>
<td>Impulse Output</td>
<td>HIGH Haefely HV sockets</td>
</tr>
<tr>
<td></td>
<td>COMMON safety banana socket</td>
</tr>
<tr>
<td></td>
<td>Protection earth terminal with 4mm banana socket</td>
</tr>
</tbody>
</table>

Weights and Dimensions (W x H x D, net weight)

<table>
<thead>
<tr>
<th>Model</th>
<th>Dimensions</th>
<th>Weight (approx.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VTM 15000</td>
<td>45 x 15 x 57 cm</td>
<td>15 kg (23 lbs)</td>
</tr>
</tbody>
</table>

VTM 15000 Art.No. 2499960 Scope of supply

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty. 1</td>
<td>VTM 15000 Impulse Transformer</td>
</tr>
<tr>
<td>Qty. 1</td>
<td>HV Input cable</td>
</tr>
<tr>
<td>Qty. 1</td>
<td>HV cable for the HIGH output</td>
</tr>
<tr>
<td>Qty. 1</td>
<td>HV cable for the COMMON output</td>
</tr>
<tr>
<td>Qty. 1</td>
<td>Cable for protection earth</td>
</tr>
<tr>
<td>Qty. 1</td>
<td>Users Manual</td>
</tr>
</tbody>
</table>

Options and Accessories

<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PIM 100</td>
<td>Impulse module Combination wave 1.2/50us - 8/20us</td>
</tr>
<tr>
<td>PSURGE 4010</td>
<td>Impulse generator Combination wave 1.2/50us - 8/20us</td>
</tr>
<tr>
<td>WinFEAT&amp;R</td>
<td>Control and reporting software. Runs under Windows 98, NT, ME, 2000, XP</td>
</tr>
<tr>
<td>ECOMPACT 4</td>
<td>Compact tester up to 4.2kV</td>
</tr>
</tbody>
</table>

WinFEAT&R Control Window

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Voltage</td>
<td>3.5 kV</td>
</tr>
<tr>
<td>Low Voltage</td>
<td>0.3 kV</td>
</tr>
<tr>
<td>Short Circuit</td>
<td>0.3 kV</td>
</tr>
<tr>
<td>Protection Earth Ground</td>
<td>0.3 kV</td>
</tr>
</tbody>
</table>

Haefely has a policy of continuous product improvement. Therefore we reserve the right to change design and specification without notice.