Product Information

Motor Variac type MV26xx and MV3P26xx for tests according to IEC/EN 61000-4-11

The motor variac can be used to simulate power supply failures such as undervoltage, overvoltage, voltage interruptions and voltage variations.

The basic standard IEC/EN 61000-4-11.

1. Voltage interruptions (DIPS)

Voltage interruptions will cause a reduction of the power supply voltage for a certain period of time. See fig. 1:

Three different test levels are required:

- Reduction by 100% to 0% of the nominal voltage
- Reduction by 60% to 40% of the nominal voltage
- Reduction by 30% to 70% of the nominal voltage

![Diagram showing voltage interruptions](image)
2. Voltage variation
Additionally it is possible to drive certain functions of variation, which also are required in IEC 61000-4-11. These functions can easily be programmed within the simulators itself or within the related windows software.

The motor variac can be used as an accessory for the following generators:
- PFS 500
- PFS 503
- UCS 500

Power connection between transformer and simulator:

The standard types of transformers can be listed as follows:

<table>
<thead>
<tr>
<th>Model</th>
<th>Type</th>
<th>Specifications</th>
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</thead>
<tbody>
<tr>
<td>MV2616</td>
<td>Single phase</td>
<td>Maximum 250V / 16A</td>
</tr>
<tr>
<td>MV2632</td>
<td>Single phase</td>
<td>Maximum 250V / 32A</td>
</tr>
<tr>
<td>MV3P2616</td>
<td>Three phase</td>
<td>Maximum 3x450V / 16A</td>
</tr>
<tr>
<td>MV3P2625</td>
<td>Three phase</td>
<td>Maximum 3x450V / 25A</td>
</tr>
<tr>
<td>MV3P2632</td>
<td>Three phase</td>
<td>Maximum 3x450V / 32A</td>
</tr>
<tr>
<td>MV3P2663</td>
<td>Three phase</td>
<td>Maximum 3x450V / 63A</td>
</tr>
</tbody>
</table>
3. Technical data

Input:
- **Voltage**: Vin: max. 250V or 3 x 440V
- **Frequency**: 50/60Hz

Output:
- **Voltage**: $V_{out}$: 0 - 270V or 3 x 0 - 465V for channel PF2
  additionally $V_{out} = V_{in}$ for channel PF1
- **Current**: max: 16A, 32A or 63A
- **Power**: 0 - 8.64 kVA (single phase) or 0 - 50.74 kVA (three phase)

Control
- **Main switch**: On/Off for the output voltages
- **Control voltage**: analogue 0 - 10V DC for 0-270V output voltage
- **Time 0..100%**: < 2s

Dimensions and weight
- **Dimensions**: 19" 6HE 266x485x400mm (h x b x d) for the MV2616
- **Weight**: app 27 kg (for MV2616)
- **Power supply**: 115/230V
- **Fuse**: 20A (PF1), 20A (PF2)
- **Environment $T_{max}$**: 40°C

- **MV2632**, **MV3P2616**, **MV3P2632** are designed for rack mounting.
- **MV3P2663** is mounted in a separate housing 120cm x 80cm x 40cm (L x H x W).