**Product data sheet**

**Characteristics**

**TRI160013682529803**

Trihal Cast Resin dry type transformer 1600 kVA
13.8 kV IEC Dyn11 IP31

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**Main**

- **Product range**: Trihal
- **Product or component type**: Dry type transformer
- **Network type**: AC
- **Type of installation**: Indoor
- **Maximum altitude**: < 1000 m
- **Cooling mode**: AF (air forced)
- **Winding material**: Aluminium
- **Insulation material**: Cast resin (HV), Pre-impregnated (LV)
- **Degree of protection**: IP31
- **Mounting mode**: Withdrawable, Fixed

**Complementary**

- **Phase**: 3 phases
- **Rated power**: 1600 kVA
- **Rated frequency**: 60 Hz
- **Rated primary voltage**: 13.8 kV
- **Secondary voltage (at no-load)**: No load: 419 V
- **Rated insulation level**: Primary circuit: 38 kV AC, Secondary circuit: 10 kV AC
- **Insulation voltage to industrial frequency (50 Hz 1 mn)**: 17.5 kV primary, 1.1 kV secondary
- **Lightning impulse withstand voltage (BIL), 1.2/50 μs**: 95 kV for primary circuit
- **Vector group**: Dyn11
- **HV tapings (off circuit)**: +/- 2 x 2.5 %
- **Short circuit impedance**: 6 %
- **No-load losses**: 4100 W
- **Load losses at 75°C/120 °C**: 14500 W at 120 °C
- **Temperature rise of windings**: 90 K (winding)
- **Thermal class**: F
- **Sound power level**: 65 dB at 1 m

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Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications.

Jun 1, 2020
<table>
<thead>
<tr>
<th>Specifications</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protective relay</td>
<td>PTC relay</td>
</tr>
<tr>
<td>Height</td>
<td>2160 mm</td>
</tr>
<tr>
<td>Width</td>
<td>1145 mm</td>
</tr>
<tr>
<td>Length</td>
<td>2181 mm</td>
</tr>
<tr>
<td>Total weight</td>
<td>3675 kg</td>
</tr>
</tbody>
</table>

**Environment**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient air temperature for operation</td>
<td>-50…50 °C for C3</td>
</tr>
<tr>
<td>Ambient air temperature for storage</td>
<td>-50…50 °C C3</td>
</tr>
<tr>
<td>Environmental certification</td>
<td>0…95 % (E3)</td>
</tr>
<tr>
<td>Fire certificate</td>
<td>F1</td>
</tr>
<tr>
<td>Corrosion category</td>
<td>C3M</td>
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</tbody>
</table>