

Data Sheet no. 8.23/3

## Exciter Transformers for HV Cable Testing with Variable Frequency, Type PEOK <sup>1)</sup>

### Description

These types of exciter transformers have been developed for use in resonant test systems with variable frequency for the on-site testing of cables by using high-power tank-type reactors (Data Sheet 8.12).

The transformers are realized in conventional hermetic tank-type design with oil-paper insulation and natural oil cooling. They are especially designed

for on-site testing including frequent transportation and outdoor operation.

Each transformer has three or more different output voltages for better adaptation of the output voltage to the requirements of the test.

The primary and secondary windings are led out through oil-air bushings. All transformers have a grounded shield between the primary and secondary winding to reduce the capacitive coupling.

Duty cycles are related to the high-power tank-type reactors.

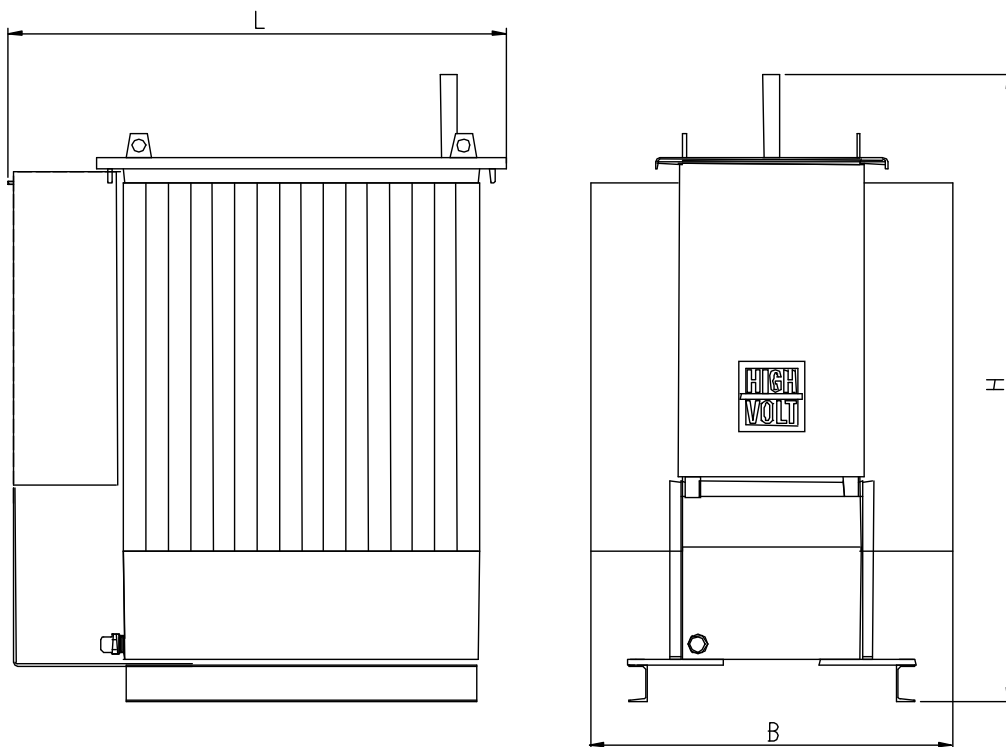


Fig. 1: Schematic sketch of exciter transformer

Table 1: Technical Parameters

| Type<br>former type      |    | PEOK 440/2.5<br>ETO 89/2.5-25 | PEOK 440/3.8<br>ETO 58/3.9-25 | PEOK 360/4.4<br>ETO 50/4.4-30 | PEOK 360/4.6<br>ETO 48/4.6-30 |
|--------------------------|----|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| <b>Input Voltage</b>     | V  | 550                           |                               | 550                           |                               |
| <b>Output Voltage</b>    | kV | 0.95 / 1.71 / 2.47            | 1.71 / 2.47 / 3.83            | 1.47 / 2.21 / 4.41            | 1.47 / 3.1 / 4.57             |
| <b>Output Current</b>    | A  | 89 / 89 / 89                  | 80 / 80 / 57.5                | 100 / 100 / 50                | 100 / 71 / 48.2               |
| <b>Frequency Range</b>   | Hz | 25 ... 300 Hz                 |                               | 30 ... 300 Hz                 |                               |
| <b>Dimension (LxBxH)</b> | mm | 1370 x 990 x 1700             |                               | 1370 x 990 x 1700             |                               |
| <b>Weight</b>            | kg | 1800                          |                               | 1800                          |                               |

| Type<br>former type      |    | PEOK 550/2.2<br>ETO 100/2.2-20 | PEOK 550/4.6<br>ETO 48/4.6-20 | PEOK 550/3<br>ETO 72/3-20 |
|--------------------------|----|--------------------------------|-------------------------------|---------------------------|
| <b>Input Voltage</b>     | V  | 550                            |                               |                           |
| <b>Output Voltage</b>    | kV | 0.94 / 1.1 / 1.35 / 2.21       | 1.47 / 3.1 / 3.95 / 4.57      | 0.95 / 1.8 / 2.56 / 3.05  |
| <b>Output Current</b>    | A  | 200 / 200 / 164 / 100          | 100 / 71 / 55.6 / 48.2        | 83 / 83 / 83 / 72.1       |
| <b>Frequency Range</b>   | Hz | 20 ... 300                     |                               |                           |
| <b>Dimension (LxBxH)</b> | mm | 1370 x 990 x 1870              |                               |                           |
| <b>Weight</b>            | kg | 2000                           |                               |                           |

Modification of the technical data on request

Type designation: PEOK      **a/b**  
a – type power in kVA  
b – rated output voltage in kV

<sup>1)</sup> The type designation was changed with Data Sheet version no. 8.23/3 from ETO to PEOK.

For further information please contact:

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