HIGHVOLT Prüftechnik Dresden GmbH
Marie-Curie-Straße 10
01139 Dresden, Germany
Phone +49 351 8425 700
Fax +49 351 8425 679
E-mail sales@highvolt.de
Website http://www.highvolt.de

Data Sheet 1.12-2/1

Metal Tank Test Transformer with Oil to SF_6 Bushing, Type PEO … G

Description

Metal tank transformers have an earthed tank and a bushing oil to SF_6 to form completely metal-enclosed HV test systems. They are provided for indoor operation.
Metal tank transformers are designed for higher power and continuous operation. For short-time operation higher currents than specified in this Data Sheet can be supplied. The exciter winding is divided into two parts which can be connected in series or in parallel for an improved voltage adjustment and power adaptation. The low internal partial discharge (PD) recommends the application of metal tank transformers for PD testing.

Table 1: Operating conditions

Frequency	Hz	50 / 60
Temperature range for indoor installation	°C	5 … 40
Average temperature per day	°C	≤ 30
Duty cycle		Continuous operation

The transformers are designed with low core induction to guarantee a sine-wave form of the output voltage with low harmonic distortion in the test system. To prevent increasing of harmonics due to resonant phenomena the systems may be provided with harmonic filters.
The high-voltage windings are of layer type and they are completely shielded to achieve a high-electric strength against transient overvoltages. The windings are short-circuit proof. For more details ask HIGHVOLT directly.

Special design and accessories on request:

- design for short-time operation with higher currents
- position of the bushing different from standard
- base frame as a oil collecting trough if demanded for emergency cases

© HIGHVOLT Prüftechnik Dresden GmbH – 2012/08 – sheet_PEO_G – Subject to change without prior notice

Table 2: Main parameters

Type	Rated output voltage	Rated output current[1)]	Rated output power	Input voltage[2)]	Impedance voltage		Length x Width x Height (approx.)	Total weight (approx.)	Weight of oil (approx.)
					50 Hz	60 Hz			
	kV	A	kVA	V	%	%	mm	kg	kg
PEO 400/400 G	400	1	400	400	4.5	5.4	3750 x 2120 x 1900	9800	3400
PEO 500/500 G	500	1	500	500	5.5	6.6	3950 x 2110 x 1640	10000	3400
PEO 600/600 G	600	1	600	500	7.4	8.88	4570 x 2370 x 1885	13000	4600
PEO 1000/800 G	800	1.25	1000	6000	4.8	5.76	5700 x 2830 x 2850	22300	8400

[1)] The transformers are designed for continuous operation (24h per day), higher currents for short-time operation can be generated. Related details on request.
[2)] The adaptation to different voltages on request.

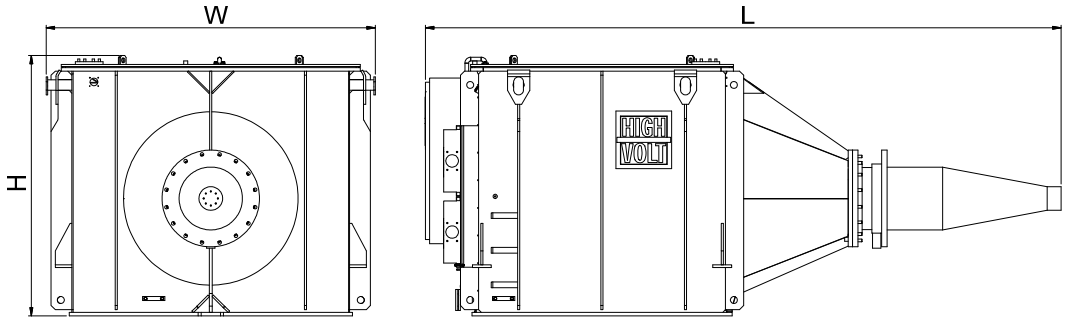

Figure 1: Schematic sketch of transformer

Type designation

PEO a/b G
a = rated output power in kVA
b = rated output voltage in kV
G = equipped with oil to SF_6 bushing