

Data Sheet no. 1.11/4

Insulating Case Test Transformers and Transformer Cascades, Type PEOI

Brief Description

The design with an insulating case characterizes this series of high-voltage (HV) test transformers. The oil-filled case is a fiberglass reinforced plastic (FRP) tube with steel covers. The lower cover is connected to the grounded base frame, the upper cover carries the HV potential and is connected to the top electrode.

Insulating case transformers are mainly provided for indoor operation. Temporary outdoor operation under fair weather conditions, e.g. for HV on-site testing, can be guaranteed. Usually, they are provided for lower currents (up to 1 A) and short-time operation (see the table on the next page). Continuous operation requires reduced parameters or external cooling for the rated parameters, both can be provided on special request.

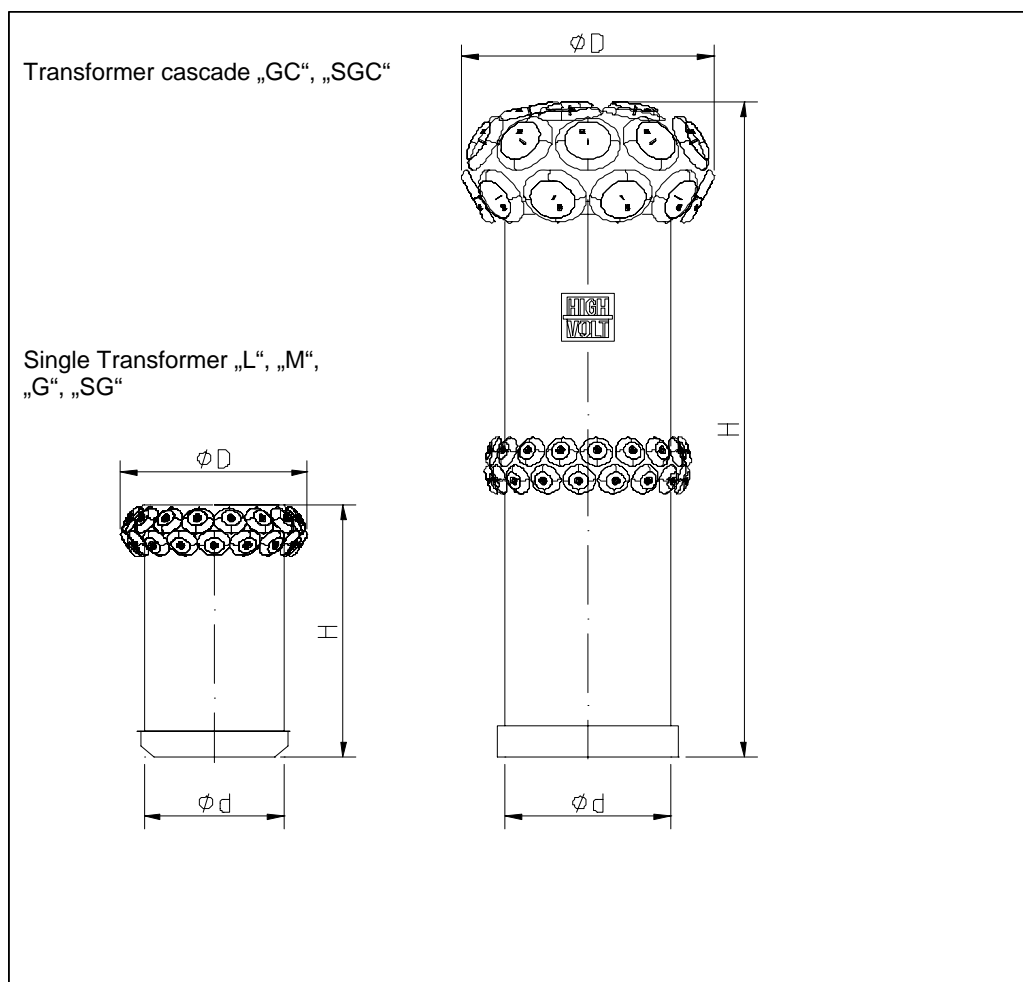
Insulating case transformers are usually designed with two high-voltage coils and an iron core connected to the midpoint potential, which corresponds to the output of the lower and the input of the upper coil. The exciting winding is divided into two parts. For the rated voltage the two parts are switched in parallel, for voltages up to 50 % they might be switched in series to improve the voltage adjustment.

The internal partial discharge (PD) level of insulating case transformers is very low. Therefore, they are well suited for PD measuring circuits. The PD level is specified for the complete HV test system and therefore not mentioned in this Data Sheet.

Insulating case transformers with a transfer winding are very well suited for HV transformer cascades for higher voltages. Two or three transformers, one above the other, form the cascade column. Such columns enable also the parallel connection of two or three transformers for higher currents.

This Data Sheet supplies the main data of insulating case transformers and related cascades, for more details, please, ask HIGHVOLT directly.

Dimensional drawing



Accessories on special request:

- rollers for the transformer to move it on floor or on rail (especially for smaller types),
- air cushions for the transformer to move it on smooth horizontal floor (especially for larger types),
- external oil cooler for improvement of the duty cycle up to continuous operation,
- base frame as a trough receptive for the oil if demanded for environmental protection

For further information please contact:

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