

Data Sheet no. 4.5/7

Test Transformers

Description:

The test-transformer T 100 is an insulating case design with oil insulation. 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. 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 T 100 is equipped with a transfer winding which allows to form HV transformer cascades for higher voltages. Two T 100 transformers, one

above the other, form the cascade column type T 200. The cascade is used for voltages up to 200 kV.

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 Module System and therefore not mentioned in this Data Sheet.

The test-transformer T 100 is mobile.

Note that, contrary to other HV modules, the transformers do not need to be complemented by junction- or base-elements.

Technical Data:

Environmental conditions: temperature 5 to 40° C
 relative humidity ≤ 90 %
 altitude ≤ 1000 m
 indoor operation
 (outdoor application and
 different parameters on request)

type code	primary voltage V	rated voltage kV	frequency Hz	rated power kVA	duty cycle per day ¹⁾	dimensions (w x h x d) mm	total weight kg
T 100	230	100	50/60	6,6	24 h	500 x 980 x 500	270
T 100	230	100	50/60	11	1h ON / 23 h OFF	500 x 980 x 500	270
T 200	230	200	50/60	6,6	24 h	500 x 1880 x 500	530
T 200	230	200	50/60	11	1h ON / 23 h OFF	500 x 1880 x 500	530

Explanations:

¹⁾The duty cycle depends on the load. The given duty cycles are related to the rated power.

For reduced duty cycle higher power can be used. Information is supplied on special request.

Dimensional drawing:

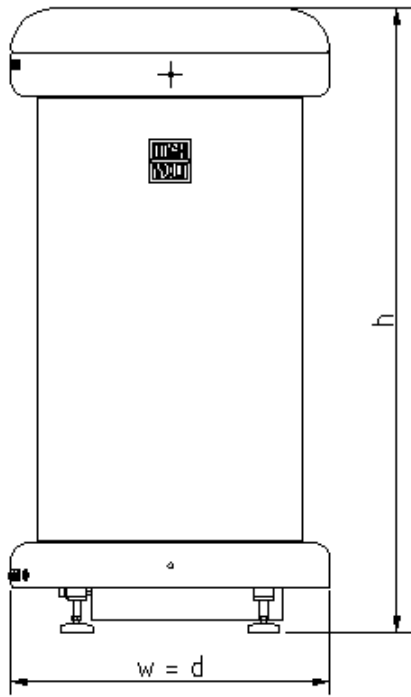


Fig. 1: T 100

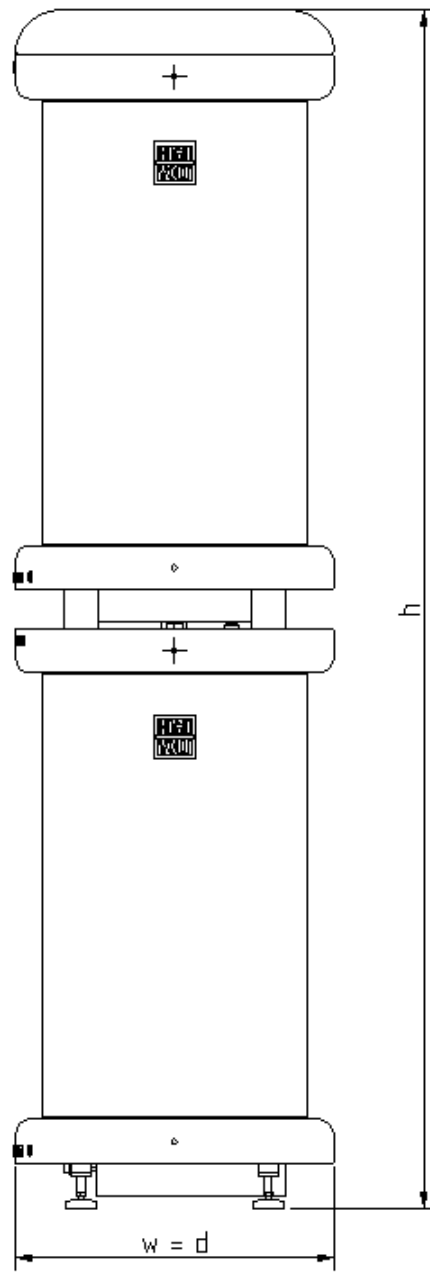


Fig. 2: T 200 (cascade of two T 100)