

# TAWF series

## Coupling Capacitors



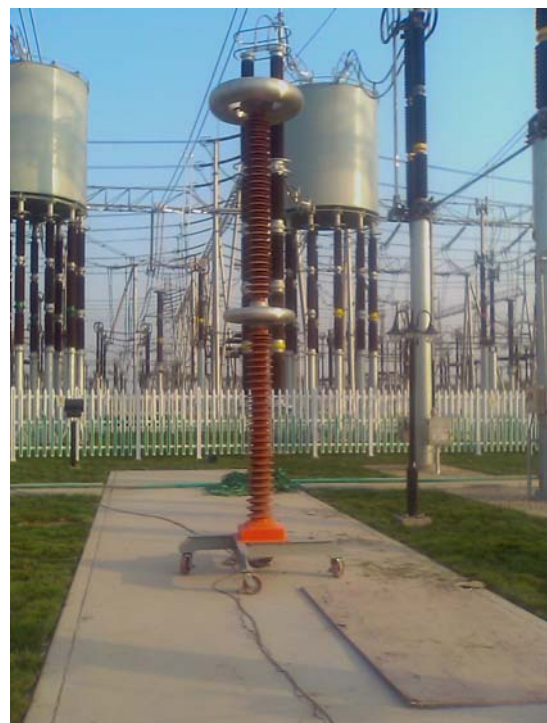
**LBH-100 (Indoor)**

The coupling capacitors of the **TAWF series** consist of 1 or more modular units, built into glass fiber reinforced epoxy tubes. Their applications are:

- Special design provides a base load for high voltage AC resonant test systems.
- The separation of the partial discharge signal from the high voltage.
- Measuring AC voltages in the industrial frequency range.
- Attenuating interferences coming from the HV side

The standard base frame is fitted with castors for mobility (above 100 kV).

**We can both produce the coupling capacitors indoor and outdoor use.**



**TAWF500KV-1000pF (Outdoor)**

### Ambient Conditions for the AC test equipment

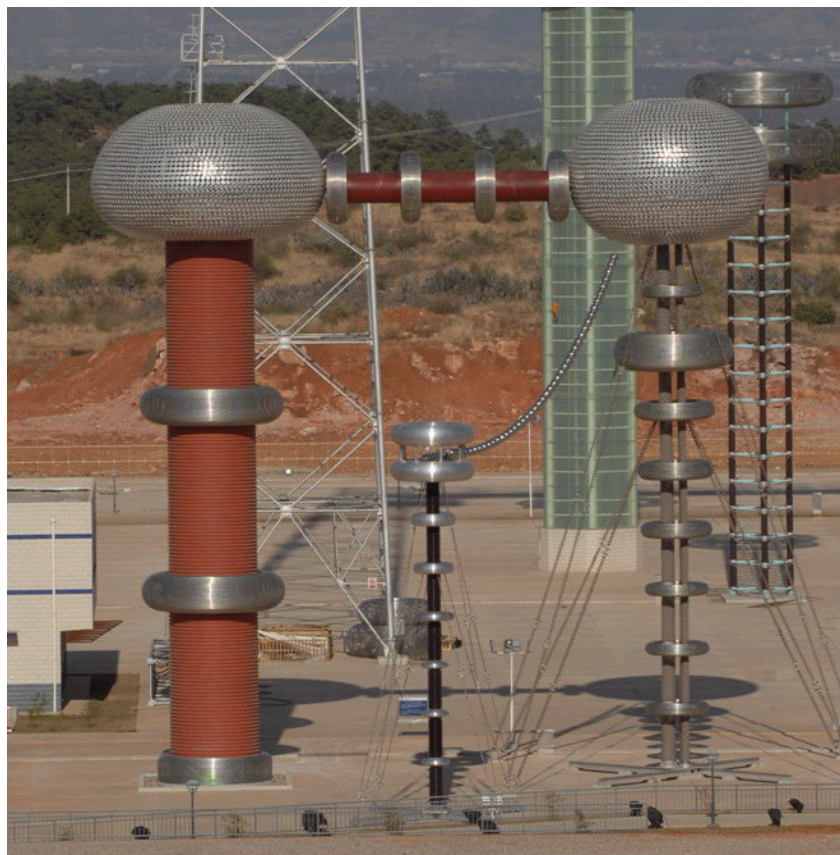
- Height above sea level	≤2000 m
for each add. 100 m, the HV rating must be decreased by	1 %
- Relative humidity in main hall under non condensing conditions	90 %
- Temperature averaged over 24 h for H.V. components	min. 0 °C, max. + 30 °C
- Extreme temperatures for H.V. components	min. - 5 °C, max. + 40 °C
- Temperature for electronic controls (Equipment to operate with the specified measuring errors)	min. + 15 °C, max. + 25 °C

## TAWF Series Technical Data

These systems are usually customized designs. The table below only gives some typical examples. Rated Voltages between 10KV to 2000KV

TYPE	Voltage kV	Capacity pF	PD Level at Un pC	Height H mm	Diameter top electrode D mm	Base frame dimension B mm	Weight Net, approx. kg
TAWF2500-75	75	2500	≤2	1900	660	1200	110
TAWF1000-150	150	1000	≤2	1900	660	1200	100
TAWF1000-250	250	1000	≤2	2600	660	1500	160
TAWF1000-300	300	1000	≤2	2600	660	1500	180
TAWF1000-400	400	1000	≤2	4200	1600	1500	300
TAWF500-500	500	500	≤3	4600	1900	2100	490
TAWF1000-600	600	1000	≤3	5800	1900	2100	560
TAWF500-800	800	500	≤5	6000	1900	3100	600
TAWF1000-1000	1000	1000	≤5	6500	1900	4200	700
TAWF1000-1200	1200	1000	≤5	7200	1900	4200	900
TAWF1000-1600	1600	1000	≤5	9000	1900	5500	1100

**We also can make to order the products according to the customer's need.**



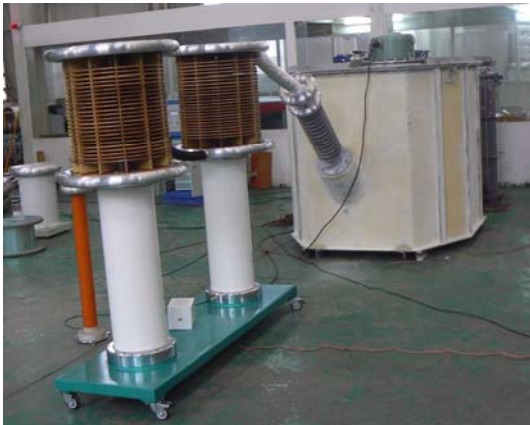
**1600kV Coupling Capacitor (Outdoor)**

## LBH High Voltage Filter (Option)

By adding an inductance to the coupling capacitor, they form the high voltage filter LBH, which attenuates interferences coming from the high voltage reactor / transformer side.

The high voltage filter inductance is connected between the reactor / transformer and the coupling capacitor or between two coupling capacitors.

Typical insertion loss ( $50 \Omega / 50 \Omega$ ) at 10 kHz - 500 kHz > 30 dB

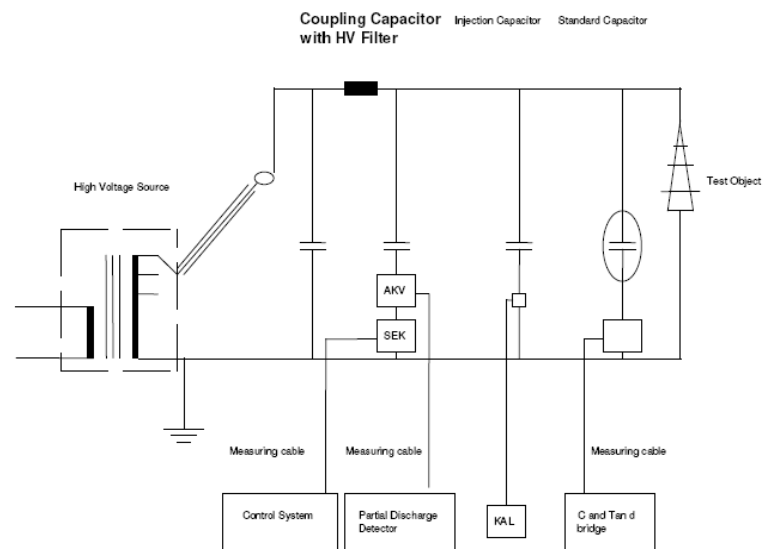


## Measuring of Partial Discharges

By adding a coupling quadripole (option), the coupling capacitor can be used for measuring partial discharges.



## Typical electrical diagram of coupling capacitor



If the coupling capacitor is used simultaneously for voltage and PD measurements, the coupling quadripole & secondary part are to be connected as shown above.

For further information please contact:

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