

# High Voltage Capacitor

## TAL type Alternating Filter Capacitor Installation



### 1. General Description

TAL type alternating filter capacitor installations are used in 6–35kV electric system, mainly installed in electric power, steel, metallurgy, chemical industry, coal mine, light industry, building materials and places where harmonic current comes out. The equipments work to absorb the harmonic current from harmonic sources, restrain harmonic, eliminate the pollution of electric harmonic. The TAL equipments operate in parallel with harmonic source, besides filtering, they can also compensate reactive power in the way of offering reactive power for system and increasing power factor.

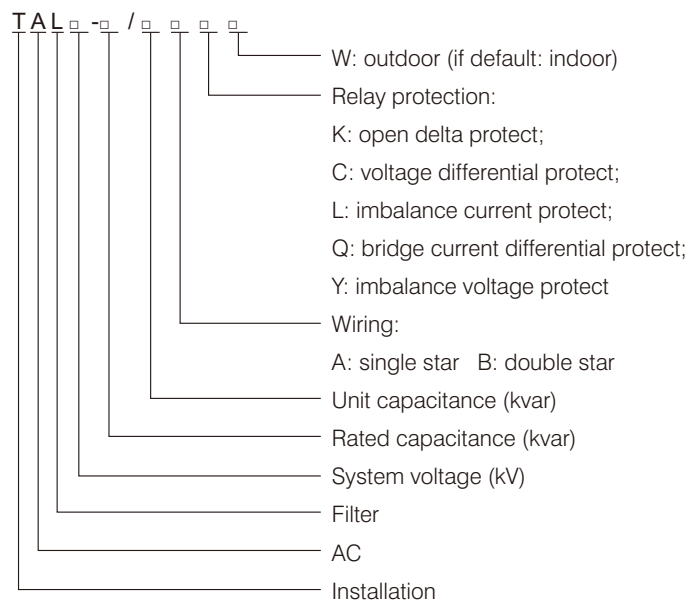
### 2. Executing Standards

- GB50227-2008
- JB/T7111-1993
- DL/T604-2009

### 3. Application Ambient Conditions

- 3.1 Installation: indoor/outdoor.
- 3.2 Altitude:  $\leq 1000\text{m}$ .
- 3.3 Temperature range:  $-40^{\circ}\text{C} \sim +45^{\circ}\text{C}$ .
- 3.4 Relative humidity: monthly mean  $\leq 85\%$ .
- 3.5 Antipollution ability: creepage distance ratio of outward insulation  $\geq 25\text{mm/kV}$  (relative to highest system running voltage). Increase the ratio in heavy pollution area.
- 3.6 No causticity gas, vapor, no inflammable gas, no blaze, no explosion risk, no frequent violent shake.
- 3.7 Biggest wind velocity:  $\leq 35\text{m/s}$   
(consult us if the environment condition is special)

### 4. Type Meaning and Specification



# High Voltage Capacitor

## 5. Main technology parameter

### 5.1 Insulate level

Unit: kV Table 1

Rated voltage of the installation	The patience voltage in frequency for 1min in primary circuit (RMS value)	The impact patience voltage [(1.2~5)/50 μ s peak value] in primary circuit.	The patience voltage in frequency for 1min in secondary circuit (RMS value).
6	32	60	2
10	42	75	2
35	95	200	2

### 5.2 steady state over-voltage

Table 2

Over-voltage in power frequency	Most persist time	Explain
1.10	Long time	The most value of over-voltage isn't exceed 1.1 Un for long time.
1.15	30 min each 24 h	Adjust and fluctuate of system voltage.
1.20	5min	When light load, the voltage raise.
1.30	1min	When light load, the voltage raise.

Drawing 1 The electric connect line drawing of every type

