

#### **Brief introduction:**

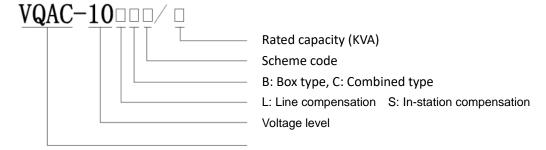
The basic principle of reactive power compensation is to parallel capacitive power load device with inductive power load in the same circuit, so that the energy can interchange between the two loads. Thus the reactive power required by inductive load could be compensated by the reactive power output by capacitive load. Using the parallel capacitors as reactive power compensation device enables it to have the characteristics of low cost, easy installation, short construction period, simple operation & maintenance, low self loss, and quick effect, the current market applications of which are most comprehensive.

The VQAC-10 type medium voltage automatic reactive power compensation unit, which is also known as medium voltage capacitors automatic device, is a new generation of reactive power compensation unit developed by Beijing Hyliton Power Technology Co., Ltd. independently on the basis of its years of experience in on-site service and summarizing of customer demands. It is suitable for the reactive power compensation of 10kv distribution lines in power system, substation busbars and power distribution room busbars of large and medium enterprises. It is widely used in the industries of power, oil field, metallurgy, casting, welding, mining, etc.

#### **Functions:**

- Improve voltage quality
- Lower energy consumption
- Increase operating efficiency of power equipment
- Reduce electric costs for users

#### Type designation:

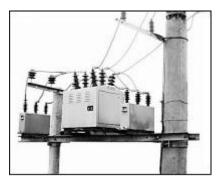


Application environment (outdoor)

#### **Technical data:**

Rated voltage		12 KV
1 min power frequency withstand voltage		42 KV
Rated lightning impulse withstand voltage		75 KV
Rated frequency		50 Hz
Rated capacity		50-4000 KVar, differential 50
Protection grade		IP4X
Lifetime of vacuum contactor		300,000 times
	Max:	<b>+45</b> ℃
Environmental temperature	Average for 24h:	<b>+40</b> ℃
	Min:	-30℃
Installation altitude		≤3000 m

# **Product type**



**VQAC-10LC** Line combined type

## Components:

Capacitor fling-cut switches

Power voltage transformers

Protection current transformers

Reactors

Parallel capacitors External

Sampling instrument transformers Clip installation at overhead lines

**Structural characteristics:** Capacitors with good thermal dissipation, convenient for capacity expansion

Internal



### **VQAC-10LB** Line box type

## Components:

Capacitor fling-cut switches

Power voltage transformers

Protection current transformers

Reactors

Parallel capacitors

Sampling instrument transformers Clip installation at overhead lines

Internal

Structural characteristics: Easy installation, filth proof



# **VQAC-10SC In-station combined type**

# Components:

Capacitor fling-cut switches

Power voltage transformers

Protection current transformers

Reactors

Parallel capacitors

Sampling instrument transformers

Internal

**Structural characteristics:** Capacitors with good thermal dissipation, convenient for capacity expansion



## VQAC-10SB In-station box type

## Components:

Capacitor fling-cut switches

Power voltage transformers

Protection current transformers

Reactors

Parallel capacitors

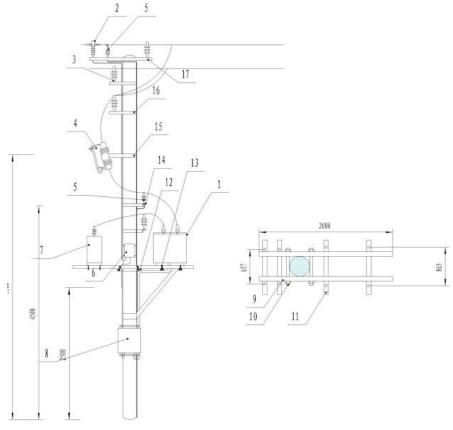
Internal

Sampling instrument transformers

Structural characteristics: Easy installation, filth proof

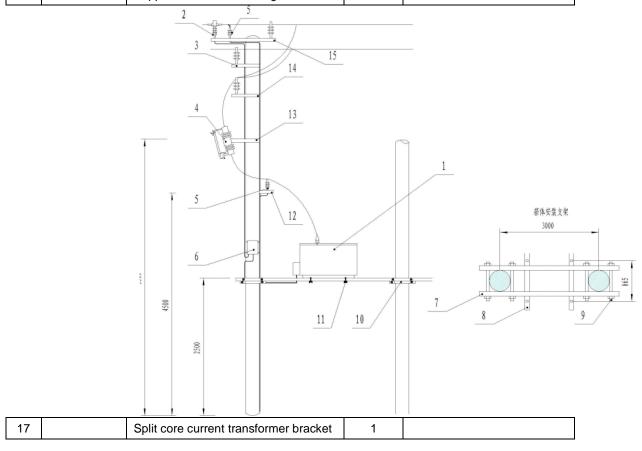
Installation reference of line type

Single pole installation



No.	Туре	Items	Quantity	Remarks
1	VQAC-10LC	Automatic reactive power	1	
		compensation unit		
2	LZKW-10	Split core current transformer for line	1	
3		Support insulators	3	
4		let fuses	2	Fuse size depends on the
4		Jet fuses 3	3	capacity of the capacitor
5		Line arresters	4	
6		Current transformer protection case	1	
7	BFMR11-3W	Capacitor		
8		Reactive compensation control box	1	
9		2.5m U steels	2	Suggest to use above 75 U
3		2.011 O steels		steel
10		Studs	4	Length depends on pole
11		1m steels	4	No less than 50 angle steel
12		Hoons	2	Inner diameter depends on
12		Hoops	2	pole
13		Bolt M14×150	8	
14		Arrester mounting bracket	1	

15	Dropout fuse mounting bracket	1	
16	Support insulator mounting bracket	1	



Dual pole installation

No. Type Items Quantity Remarks
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1	VQAC-10LB	Automatic reactive power compensation unit	1	
2	LZKW-10	Split core current transformer for line	1	
3		Support insulators	3	
4		Jet fuses	3	Fuse size depends on the capacity of the capacitor
5		Line arresters	4	
6		Current transformer protection case	1	
7		4m U steels	2	Suggest to use above 75 U steel
8		1m steels	2	No less than 50 angle steel
9		Studs	4	Length depends on pole
10		Hoops	4	Inner diameter depends on pole
11		Bolt M14×150	4	
12		Arrester mounting bracket	1	
13		Dropout fuse mounting bracket	1	
14		Support insulator mounting bracket	1	
15		Split core current transformer bracket	1	