# **Innovative SVCB**

# Static var Compensation Bank





Efficient and valuable alternative to traditional capacitor bank

Suitable for various small loads, such as: office, computer center, data center, live area, UPS etc. as well as some places with complex load, rapid change and serious harmonic waves.







We make reactive power compensation and filtering device are economic, more reliable and have long service life

STANDRD POWER An UK Power Brand Http://standard-power.com



### Specification, data sheet and rate

Specification		SVCB10	SVCB15	SVCB20	SVCB25	SVCB
		10Kvar	15Kvar	20Kvar	25Kvar	35Kv
Electrical						
Input line voltage	U	380V ±15%				
Phase number		3-phase 4-wire;				
Capacity	Kvar			Up to 35		
Frequency	Hz	50 / 60 ± 5Hz (settable)				
Response time	Sec.	<10 ms				
Power factor correction	PF	-1 to 1 adjustable				
Parallel		Up to 8 modules				
Power losses	KW			<2.5%		
Efficiency				Up to 97.5		
Filter range				Up to 15th		
CT rate		50:5 to 10000:5,three pahse				
Transformation		RS485/RS232/Ethernet				
Contact type				EPO/DI/DO		
Display/controller				1.8 inch LCD		
Environment Mounting		Indoor, free			re and combustib	le gases,c
			mist, water	r vapor, dripping	or salt, etc.	
Working altitude	M			<1500m		
Storage temperature				40 ° C to + 70 ° C		7552
Working temperature		-25 ° C to + 55 ° C (> 40 ° C derating, more than 40 ° C, derating at the rat				
Humidity				2% derating at 1		
Vibration		Less than 95% RH,no water droplet condensation				
		Less than 5.9 M / S2 (0.6g)				
		IP20 Intelligent air cooling				
Degree of protectio					11.1	
			In	nelligent all cooli	19	
Degree of protectio Cooling			ın	neingent air cooin	19	
Degree of protectio Cooling  Machineary						
Degree of protectio Cooling  Machineary Colour			Gray	/ Black (customiz	zable)	
Degree of protectio Cooling  Machineary						5x110

#### Quick selection SVCB

The reactive power compensation capacity is usually selected according to: 50% to 70% of the system capacity power transformer( or load of motor)

for example

50KVA power transformer ( or motor)

The capacity SVCB is 50%-70% x 50 = 25Kvar to 35Kvar

Field test: the capacity s of SVG is jointly determined by the fundamental reactive power capacity Q1 and the wave capacity Qh required by the system

Q1: fundamental reactive capacity

Qh: harmonic capacity

S:Apparent Power transformer

$$S = \sqrt{Q_1^2 + Q_h^2} (\quad S \ge 2Q_h)_{\text{\tiny f}}$$

# Comparsion of SVCB and traditional capacitor bank

	Traditional capacitor bank	Static Var compensation ban
Specification		
Solution		
Technology	Traditional	Hi-Tech technologies
Efficiency	Lower	The highest efficiency
Electrical	Not the best	Up to 1
Power factor	Need Need	Step less
Step control	Not easy	Very easy
Capacity extend	Slow	Static, fast, real time
Response		Easy
Parallel	Not easy	Easy
Transformation	No easy	Lasy
Function	<b>V</b>	Vee
Reactive power	Yes	Yes
Harmonic filter	No	Yes
Unbalrace agijustment	No	Yes
Single and three pahse compensation	No	Yes
Safety	No	Yes
Resonance free.	No	Yes
Over-load free	No	Yes
Over-compensation free	No	Yes
Multi-data monitor		
Mounting	No	Yes
On site measuring free (		
suitable for all kinds loads)	No	Yes
Small volume and movable	No	Yes
Fool-in-check operation		
Management	No	Yes
Maintain free	No	Yes
Hand APP option for remote control		
Environment	Traditional	Excellent
Energy save	Traditional .	
Liloigy davo		





