# Automatic compensation device for parallel capacitors

How a capacitor compensation circuit is controlled?
Through the logic drive circuit, pulse width modulation circuit, zero point detection circuit and power factor detection circuit, the on-off of the self-turning off device in the switch circuit was controlled to control the charging and discharging voltage of the compensation capacitor, and then the capacitor compensation current was controlled.

What is a combined reactive power compensation device?
In this paper,a combined reactive power compensation device was installed,which is composed of a static var generator (SVG) and a parallel capacitor bank. The SVG has the characteristics of fast and smooth adjustment,and the application of the capacitor bank reduces the overall investment cost and has a great economy.

What are the types of compensation capacitors?
Compensation capacitors are divided into two type families (A and B)in accordance with IEC 61048 A2. o Type A capacitors are defined as: "Self-healing parallel capacitors; without an (overpressure) break-action mechanism in the event of failure". They are referred to as unsecured capacitors.

What is a power factor automatic compensation control device?
The power factor automatic compensation control device of the self-turning off devicemanufactured by this method has the characteristics of simple structure,small volume and high efficiency,and can automatically carry out random power factor compensation for the electric load on site.

What are the advantages and disadvantages of reactive power compensation devices?
The cost advantage of the device itself, compared with the SVC type, is that the SVG type reactive power compensation device adopts digital control technology, which has high system reliability, basically does not need maintenance, and can save a lot of maintenance costs.

How to optimize the performance of reactive power compensation devices?
The modal analysis method was used to find the optimal installation position for the reactive power compensation device. The improved particle swarm algorithmwas used to optimize the capacity of the optimal reactive power compensation device to ensure the best performance of the compensation device.

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The parallel compensation capacitors C p are 60 F each. III. PARALLEL VERSUS SERIES COMPENSATION Capacitors are often used to compensate for reactive power consumption in an inductive

load. Normally, the capacitors are connected in parallel to the load. One example is the capacitor used in a fluorescent tube armature, where it compensates for the inductance in the ...

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This paper proposes an oscillator circuit based on a phase-locked loop which automatically compensates for the parasitic capacitance of Thin-film Piezoelectric-on-Silicon ...

The utility model relates to an automatic compensation device for full-automatic high-voltage parallel capacitors, wherein a main body is a compensation cabinet; a cabinet body is composed of...

Abstract: An automatic compensation method was presented bases on adaptive capacitance regulation technology and the principle of controlling capacitor charging and discharging voltage. Based on the turn off ability of the self-turn off device, a switch circuit composed of two self-turning off devices connected in reverse parallel with diodes ...

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compensation device is mainly used for 10kV parallel outdoor capacitors, and is set in the overhead line tower to effectively improve the power factor of the transmission network and ...

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