

## Introduction

# Current-Limiting Reactor

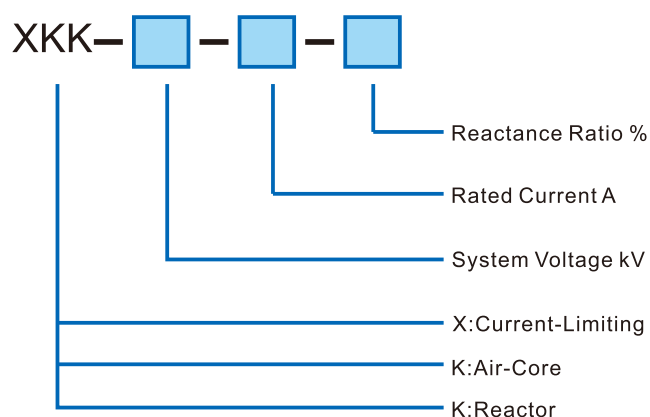
Along with the increase in voltage level of power transmission lines, adding current-limiting reactors to limit the short-circuit current has become the most convenient, economical, and reliable method to maintain the power grid stabilization.

Beijing Power Equipment Group Co., Ltd. (BPEG) always emphasizes independent innovation and advanced technology to promote the development. We've been leading in developing air-core reactors with the highest voltage level and capacity domestically. BPEG produced the 500kV current-limiting reactor independently in 2012, which achieved the maximum reactor capacity in the world.

BPEG owns two current-limiting reactor patents, and is one of the electrical professional standard drafting organizations of this product.



## Model Definition



## Characteristics

### High tolerance to short circuit electrodynamic force

New structure ensures stable performance when the product is under short circuit current.

### Low loss and noise

The innovative design to lower loss and noise, combined with advanced manufacturing craft, realizes both loss and noise being superior to the standards.

### Unique anti-seismic structure

The structure has our unique patent, and ensures no local overheating on the reactors.

### Sand-proof, low-temperature resistant

High-strength rain hat and epoxy protective layer effectively protect reactors from sand invasion. Additionally, we use PRTV as new weather-proof layer to prolong the product service life.

### Complete pressure equalizing measures

BPEG has rich experiences in electric field shielding and voltage sharing device arrangement.

# Current-Limiting Reactor

## Projects



### 500kV Zongjiang-Baoan Series Reactor Project

Model:XKK-500-4000-15  
 Rated Voltage:500kV  
 Rated Current:4000A  
 Rated Reactance:10.5 Ω  
 Power Frequency Rated Capacity:2x168Mvar



### 500kV Shenzhen-Pengcheng Series Reactor Project

Model:XKK-500-3150-15  
 Rated Voltage:500kV  
 Rated Current:3150A  
 Rated Reactance:14 Ω  
 Power Frequency Rated Capacity:2x139Mvar  
 Auxiliary Equipment: 500kV Coupling Capacitor  
 Rated Capacitance:60nF



### Zhongtai Chemical Fukang Industrial Park Power House 220kV Series Reactor Project

Model:XKK-220-2500-30  
 Rated Voltage:220kV  
 Rated Current:2500A  
 Rated Reactance:15 Ω  
 Power Frequency Rated Capacity:93.75Mvar  
 Auxiliary Equipment: 220kV Coupling Capacitor  
 Rated Capacitance:36nF

## Achievements

Project	Customer	Model	Quantity	Year
Shandong Weiqiao Zhanhua 220kV Project	Shandong Weiqiao Pioneering	XKK-220-2400-26	6	2014
Jingzhou-Jiangling ±500kV Converter Station Installing Series Reactors Project	State Grid	XKK-500-2400-12	6	2015
Shandong Weiqiao Zouping 220kV Project	Shandong Weiqiao Pioneering	XKK-220-2400-26	6	2015
Midway SUB 230kV Air Core Reactor	USA PG&E	XKK-230-4000-27	10	2015
KEPCO 154kV Current-Limiting Reactor	Tianjin Sanhe	XKK-154-1695-5	6	2015
Xinjiang East Hope Power Station Current-Limiting Reactor Project	Xinjiang East Hope Co., Ltd.	XKK-220-2500-39	12	2016
Shaerqin-Gucheng Transformation 220kV Adding Current-Limiting Reactors Project	Baotou Power Supply Bureau	XKK-220-1700-16	6	2016
Xinjiang Guotai Xinhua Huaidong I Power Station Project	SINOSTEEL MECC	XKK-220-1500-12	6	2017
Zouping Power I Plant III 2 × 660MW Unit Project	Shandong Weiqiao Pioneering	XKK-220-2400-26	6	2017