

ZGS American-style Substation



Model meaning

S Three-phase	Performance level code	Z Combined transformer
G Common box type	Rated capacity/voltage level	

Product description

The ZGS series combined transformer, also known as the American-style prefabricated substation, is a product developed to meet the needs of urban power grid construction and renovation. It integrates the transformer body, switchgear, fuses, tap changers, load distribution devices, and other auxiliary equipment into a single unit. The design can accommodate various configurations such as power metering, reactive power compensation, and low-voltage feeder distribution.

As a complete AC power distribution unit operating at 50 Hz, 6–10 kV, with a rated capacity of 30–1600 kVA, the ZGS type combined transformer can be installed both outdoors and indoors. It is widely applied in industrial parks, urban residential communities, commercial centers, road lighting, high-rise buildings, and temporary construction sites. Its main advantages include being environmentally friendly, space-saving, and easy to install.

Applicable Scenarios

Urban public distribution, high-rise buildings, residential communities, ports, oil fields, parks, railway stations, airports, subways, expressways, and other power supply sites.

Features

- ◎ Compact in size with a small footprint and easy installation
- ◎ Features low losses, low noise, and low temperature rise. The ChaoNeng series offers strong load capacity and high short-circuit withstand capability.
- ◎ Flexible wiring allows use in both terminal and ring network systems, with easy switching to enhance power supply reliability



Main Technical Parameters

Name		Unit	Data
Rated voltage	original side	KV	10/20/35
	secondary side	KV	0.4
aximum working voltage		KV	12/24/40.5
Rated frequency		HZ	50
Rated Capacity		KVA	30~1600KVA
1 minute power frequency withstand voltage		KV	42/65/95 42/65/95 42/65/95(Transformer not included) 42/65/95(Transformer)
BIL impact withstand voltage		KV	75/125/185 Oil immersed self-cooling
cooling method			ONAN
o load voltage regulation		kV	10/20/35 ± 2x2.5%
Environment temperature		°C	-45~+40
Allow top oil layer temp rise		K	≤ 55
Transformer low voltage winding temp rise		K	≤ 65
Transformer high voltage winding temp rise		K	≤ 65
oise level		dB	≤ 55
Protection level			IP33D

