



Box Substation

ZGS13-H American-Type Combined Substation

The ZGS13-H combined American-type substation (pad-mounted box substation) was developed by absorbing advanced foreign technology to suit Chinese conditions. Used in 12kV ring-network, dual-source or terminal supply systems for transformation, distribution, metering, compensation, control and protection, it is compact, easy to install and maintain, low-noise, low-loss, theft-resistant, with strong overload capacity and full protection — installable indoors or outdoors in new communities, green belts, parks, stations, ports, hotels, worksites and airports. Besides the transformer, the HV side carries a four-position and a two-position load switch, back-up and plug-in fuses; the LV side is configurable with control, distribution, compensation and metering. Transformer oil serves as the insulating and arc-quenching medium; the enclosure is fully assembled.

MODEL DESIGNATION

ZG □ □ / □ - □

ZG combined (American) substation
□ HV rated voltage (kV)
□ transformer capacity (kVA)

□ design series
□ LV rated voltage (kV)

TECHNICAL SPECIFICATIONS

Voltage class	10 – 35 kV
LV voltage	0.4 kV
Transformer	oil-immersed, sealed (S11 / S13)
Transformer capacity	up to 2500 kVA
Type	pad-mounted, sealed; fully-assembled enclosure
Cooling	air, self-cooled (AN)
Standards	GB/T 17467 / DL/T 549

NORMAL OPERATING ENVIRONMENT

- ▶ Altitude 1000 m and below
- ▶ Relative humidity: daily average ≤ 95%, monthly average ≤ 90%
- ▶ Seismic intensity ≤ 8; installation tilt ≤ 3° on a firm concrete platform
- ▶ Ambient air temperature –30 °C to +40 °C
- ▶ Wind speed ≤ 35 m/s; pollution level ≤ III; ice thickness ≤ 12 mm
- ▶ Free of explosion hazard, chemical corrosion and violent vibration