

Pad-mounted transformer

Prefabricated transformer

Logo & Packaging Customization

Parameter & Drawing Design Customization



OPTIMIZED
PERFORMANCE



HIGH
EFFICIENCY



SUPERIOR
SAFETY



ECO
FRIENDLY



MAINTENANCE
FREE



Overview

Compact & Integrated Design: The transformer body, high-voltage load switch, and protective fuse are integrated into the same oil tank. The volume is only about 1/3 of the European-style substation. It is extremely compact and easy to install.

Fully Insulated & Sealed Structure (Dead Front): It adopts a "dead front" design with no exposed live parts. High-voltage connections use fully insulated elbow connectors (T-heads). The fully sealed oil tank prevents oil from contacting the air, extending service life and ensuring safety for pedestrians.

Cost-Effective & Flexible: With a small footprint and minimal civil engineering requirements, the overall installation cost is lower. It can be used in ring main systems or terminal power supply systems, making conversion convenient.

Application



Hospitals & Data Centers
Uninterrupted Reliability & Fire Safety

Public Parks & Schools & Malls
Space Saving & Low Noise Operation



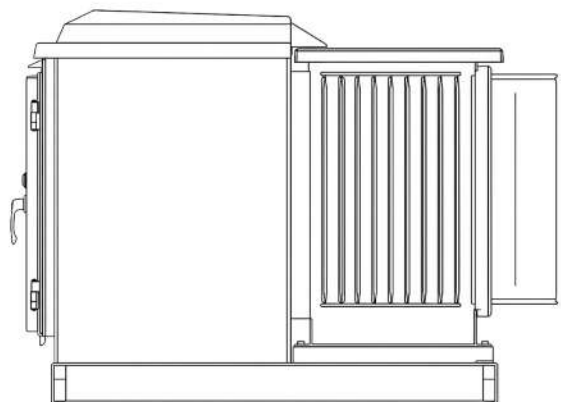
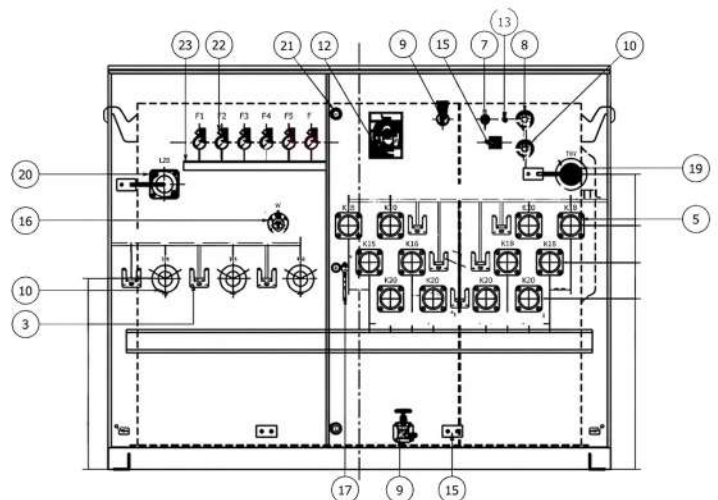
Suburban & Residential Areas
Underground grid, safe & unobtrusive.

Renewable Energy

Pad-mount design for step-up.



Outline Drawing



Accessories / Components



Fully insulated
cable accessories



Oil-immersed
Load Break Switch



ELSP Fuse



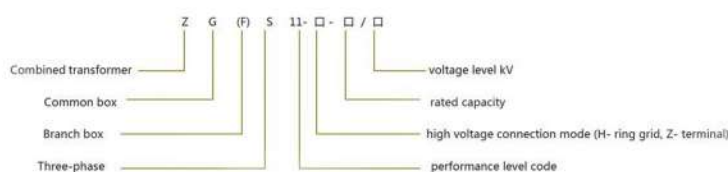
Bay-O-Net
Fuse Assembly

Technical Parameters

Basic performance parameter of ZG(F)S11-H(Z) combination transformer

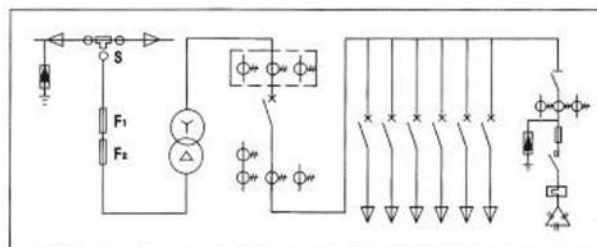
Model	Rated capacity(KVA)	Vector group	Voltage group		No-load loss(W)	With-load loss(W)	No-load current(%)	Short circuit impedance(%)	L*W*H(mm)
			H.V.	L.V.					
ZGS11-H(Z)-100/10	100				200	1500	0.65	4.0	1600×1355×1735
ZGS11-H(Z)-125/10	125				240	1800	0.65		1700×1365×1735
ZGS11-H(Z)-160/10	160		6		280	2200	0.60		1700×1365×1735
ZGS11-H(Z)-200/10	200		6.3		340	2600	0.60		1700×1365×1735
ZGS11-H(Z)-250/10	250	Yyn0	10		400	3050	0.50		1800×1405×1735
ZGS11-H(Z)-315/10	315		10.5	0.4	480	3650	0.45		1850×1425×1735
ZGS11-H(Z)-400/10	400	Dyn11	11		570	4300	0.40	4.5	1850×1435×1850
ZGS11-H(Z)-500/10	500		±5%		680	5100	0.40		1850×1445×1850
ZGS11-H(Z)-630/10	630		or		810	6200	0.40		2000×1455×1860
ZGS11-H(Z)-800/10	800		±2×2.5%		980	7500	0.40		2000×1490×1860
ZGS11-H(Z)-1000/10	1000				1150	10300	0.30		2000×1675×2000
ZGS11-H(Z)-1250/10	1250				1360	12000	0.30		2100×1845×2050
ZGS11-H(Z)-1600/10	1600				1640	14500	0.30		2100×1885×2135

Products model introduction



Electric main wiring

S-overload switch F1-backup protection fuse F2-plug-in fuse



Products structure

Layout

The layout of ZG(F)S series USA type substation can be divided into "目(MU)" glyph and "品(PIN)" glyph. High voltage interval and low voltage interval are on the same side of oil tank, that's "品" glyph. On the contrary, that's "目" glyph.

High voltage interval

There are high voltage inlet wire, overload switch, plug-in fuse, pressure relief valve, pressure watch, oil temperature watch, oil level gauge, filling hole, oil drain valve etc. in high voltage interval of USA type transformer substation

Low voltage interval

Low voltage interval has low voltage inlet wire, low voltage total circuit breaker and branch circuit breaker, etc. The number of low-voltage outgoing circuits and reactive compensation automatically can be designed according to customers' requests; also can add undervoltage protection devices according to customers' requests, when one-phase or two-phase fuse is blown or low-side voltage is not normal, the circuit breaker will trip to avoid power supply with lacking phase. Equip exit and entrance ducts on the bottom and top of low voltage interval; in addition there are two exhaust fans which by the "temperature controller" control the start and stop automatically on the top, increasing heat dissipation.

Body of transformer

The body of transformer is three-phase and three-column, designed based on S11,S13 standards, its winding adopts Dyn11/Yyno, and the structure design is used with new insulation structure and structure of improving the short-circuit impedance. The winding is manufactured with oxygen-free copper wires; core is used with high quality cold-rolled silicon steel sheet; take a special fasten method against rotation; body of transformer, high voltage overload switch and double fuse for protection are all immersed in the oil tank, there is some room on the top of oil tank and corrugated sheets are used to release heat for oil tank.

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