

Amorphous Alloy Oil-Immersed Transformer

This transformer is suitable for areas with large load fluctuation and difficult maintenance, especially those with insufficient electric energy. It achieves good energy saving and reduces air pollution.



ADDITIONAL IMAGES



Product Overview

Production introduction

Transformers can transform the voltage of a network into the voltage matching the system or load and fulfill power transferring and distributing. Taking the place of transformers with silicon steel core, AMDT can be widely applied in outdoor power distribution network systems, which is significantly energy saving and can lessen air pollution. It is especially applicable for areas with insufficient power supply or fluctuating load and where daily maintain is hard.

The hermetically sealed construction of AMDT prevents the oil and insulation material from being polluted, so the unit can serve in a humid environment. AMDTs are the ideal equipment supplying power for distribution network in urban and rural areas.

Features

The core is wound with amorphous alloy ribbons, which possesses a no-load loss as low as about 20% that of a S9 type transformer (with silicon steel core). The LV coils are wound with copper foil, which reinforces the ability to withstand short circuit for the transformer. AMDT with connection Dyn11 can lighten harmonic impact on the network and improve the quality of the power supplied. The tank and cover are welded together, forming a hermetically sealed construction which lengthens the service life of AMDT and makes it repair free. The vacuum oil filling eliminates all bubbles in the coils to ensure stable characteristics of insulation. Each transformer passes a full-wave lightning impulse test before delivery to ensure its safety operation & peak voltage 25% higher than the value required by state standard is applied during the test.

Product type and meaning



High-Efficiency Amorphous Alloy Transformer

This amorphous alloy oil-immersed transformer is designed for reliable voltage transformation in power distribution networks. By utilizing an advanced amorphous alloy core, it achieves significantly lower no-load losses compared to traditional silicon steel models, promoting energy conservation and reduced environmental impact. Its hermetically sealed, oil-filled construction ensures excellent insulation, long service life, and suitability for humid or challenging outdoor environments.

Technical Specifications

Performance Parameters

Capacity (kVA)	No-Load Loss (kW)	Load Loss (kW)	Connection
30	0.033	0.600	Dyn11
100	0.075	1.500	Dyn11
630	0.320	6.200	Dyn11
2500	0.900	20.20	Dyn11

Key Performance Metrics

50 Hz

Frequency

20 %

No-load loss reduction vs silicon steel

11 kV

Max HV Rating

0.4 kV

LV Rating

Design & Construction



Construction Details

- Hermetically sealed tank and cover to prevent oil pollution
- Copper foil low-voltage coils for high short-circuit resistance
- Vacuum oil filling to eliminate insulation bubbles
- Dyn11 connection to mitigate harmonic impacts

Quality Standards

Full-wave lightning impulse test, Hermetically sealed, Outdoor installation rated