

# Epoxy Resin Cast Dry-type Power Transformer

## Product Description

Dry-type transformers, specifically the three-phase dry-type transformers cast with epoxy resin, are reliable, flame-retardant, and pollution-free, allowing for direct installation among loads. They require no maintenance and are easy to install. With excellent moisture resistance, they can be operated without pre-drying after shutdown. Featuring low losses, low partial discharge, and low noise, they can operate at 120% of rated load under forced air cooling conditions. Equipped with a comprehensive temperature protection control system, they provide reliable operation guarantees for the transformer. The reliability indicators of this product have reached the advanced domestic level.

## Product Features

- a. No oil, no pollution, flame retardant, self-extinguishing and fire prevention;
- b. Low loss, high efficiency and low noise;
- c. Small local discharge (under 10 PC) and high reliability, can ensure long-term safe operation, life up to 30years;
- d. Resistance to crack and temperature change, high mechanical strength, strong ability to resist sudden short-circuit;
- e. Good moisture-proof property, it can run normally under 100% humidity and can be put into operation without drying treatment after shutdown;
- f. There is no need for a separate transformer room, core maintenance or load-bearing beam saving civil land and occupation No oil. so it will not produce toxic gas to pollute the environment. No need of oil collecting pits or other ancillary buildings which reduces the cost of construction;
- g. Easy installation, no debugging, almost no maintenance. No need to replace or check the oi, low operation and maintenance cost.

## Technical parameters

Table 1 Performance Parameters for Energy Efficiency Class 1

Rated Capacity (kVA)	Voltage Combination			Vector Group Symbol	Losses		No-load Current (%)	Short-circuit Impedance (%)
	Primary Voltage (kV)	Primary Voltage Tapping Range (%)	Secondary Voltage (kV)		No-load (W)	Load (W)		
100	6 10	$\pm 5$ $\pm 2 \times 2.5$	0.4	Dyn11 Yyn0	230	1415	4	1.8
125					270	1665		1.6
160					310	1915		1.6
200					360	2275		1.4
250					415	2485		1.4
315					510	3125		1.2
400					570	3590		1.2
500					670	4390		1.2
630					775	5290		1.2
800					875	6265	6	1
1000					1020	7315		1
1250					1205	8720		1
1600					1415	10555		1
2000					1760	13005		0.8
2500					2080	15445		0.8



Table 2 Performance Parameters for Energy Efficiency Class 2

Rated Capacity (kVA)	Voltage Combination			Vector Group Symbol	Losses		No-load Current (%)	Short-circuit Impedance (%)
	Primary Voltage (kV)	Primary Voltage Tapping Range (%)	Secondary Voltage (kV)		No-load (W)	Load (W)		
100	6 10	$\pm 5$ $\pm 2 \times 2.5$	0.4	Dyn11 Yyn0	270	1415	4	1.8
125					320	1665		1.6
160					365	1915		1.6
200					420	2275		1.4
250					490	2485		1.4
315					600	3125		1.2
400					665	3590		1.2
500					790	4390		1.2
630					910	5290	6	1.2
800					1035	6265		1
1000					1205	7315		1
1250					1420	8720		1
1600					1665	10555		1
2000					2075	13005		0.8
2500					2450	15445		0.8

Table 3 Insulation Level

Rated Voltage (kV)	Rated Short-time Power Frequency Withstand Voltage (kV)
$\leq 1$	3
3	10
6	25
10	35
15	38
20	50
35	70

## Product Dimensions

Capacity	Length × Width × Height (mm)	Total Weight (kg)
100	1090×760×990	650
200	1100×780×1180	1050
315	1280×900×1270	1360
400	1300×920×1320	1730
500	1340×960×1340	1920
630	1380×990×1380	2000
800	1420×1000×1400	2500
1000	1620×1090×1490	2960
1250	1740×1180×1620	3450
1600	1880×1240×1780	3860
2000	1970×1310×1860	4460
2500	2120×1530×1940	4980

## Application Areas

The epoxy resin cast dry-type power transformer boasts energy-saving, shock resistance, flame retardancy, low partial discharge, and strong overload capacity. It can be equipped with a temperature display controller to display and control the operating temperature of the transformer windings, ensuring the normal service life of the transformer. It can be widely applied in power transmission and transformation systems, hotels, high-rise buildings, commercial centers, stadiums, petrochemical plants, subways, railway stations, airports, offshore drilling platforms, and other locations. Especially in situations with limited installation space, where it needs to be close to load centers or has special fire protection requirements, its superiority can be fully leveraged.