

Medium-Voltage Oil-Immersed Transformers

Introduction

CIC's medium-voltage oil-immersed transformers, characterized by high efficiency and safety, are made with high-permeability silicon steel cores, and insulating oil of a high ignition point.

Insulating oil of a high ignition point remains stable at high temperatures and has excellent electrical insulating properties. In addition, such type of transformer oil has low viscosity and excellent oxidation resistance — characteristics that help to reduce the formation of sludge and to ensure free flowing circulation and heat transfer. The properties of such insulating oil make it effective in insulating and cooling the transformer.

According to differences in their capacities, these transformers come in one of two cooling methods available: Oil Natural Air Natural (ONAN) method or Oil Natural Air Forced (ONAF) method.

CIC's MV oil-immersed transformers are widely used in public constructions, hospitals, schools, factories, and commercial buildings. To ensure product quality, safety, and durability, all units undergo pre-delivery testing by an electricity laboratory accredited by TAF (a member of the ILAC) according to ISO/IEC 17025.



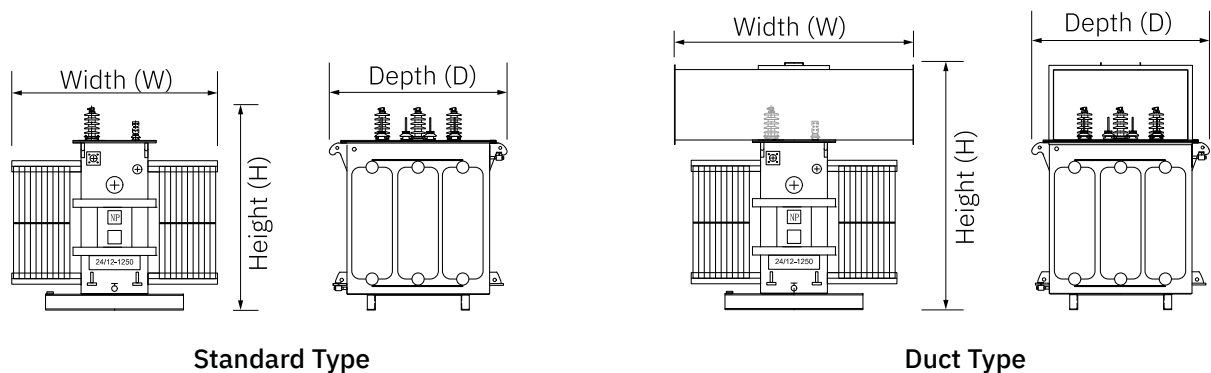
Features

- Cores made with high-permeability cold-rolled grain-oriented silicon steel sheets (CRGO), together with high-conductivity windings, make for low-loss, low-noise, and high-efficiency performance.
- Insulating oil with high dielectric strength, chemical stability, and thermal conductivity.
- Coils are made of copper wires (aluminum available upon request).
- Stringent pre-delivery testing to ensure quality.
- Custom requests and specifications available.

Specifications

- Standards: IEC (or specific national standards by request)
- Number of Phases: 3
- Frequency: 50 or 60Hz
- Primary Voltage: 2 x 12 kV (12 or 24kV)
- Secondary Voltage: 220V, 380V or 440V (one secondary voltage);
190 - 110V or 380 - 220V (two secondary voltages)
- Capacity: ≤ 2500 kVA
- Connection Type: Dyn1, Dyn11, etc.
- Cooling Method: Oil Natural Air Natural (ONAN) or Oil Natural Air Forced (ONAF), depending on transformer capacity.
- Choice of a thermometer or a thermometer with alarm.

Drawings and Selection Tables



Explanation: “C” denotes models with copper windings; “A” refers to those with aluminum windings.

Standard Type								
Cap. (kVA)	Width (W) (mm)		Depth (D) (mm)		Height (H) (mm)		Approx. Weight (kg)	
	C	A	C	A	C	A	C	A
300	1050	1060	1050	1090	1425	1535	1150	1150
500	1280	1320	1170	1230	1565	1595	1550	1650
600	1490	1260	1220	1300	1595	1625	1900	1950
750	1340	1380	1260	1340	1595	1645	2150	2200
1000	1560	1590	1310	1400	1605	1685	2500	2650
1250	1900	1760	1380	1510	1655	1755	3150	3350
1500	2060	1690	1510	1650	1705	1785	3650	3950
2000	2050	1790	1590	1760	1785	1895	4750	4950
2500	2100	2190	1610	1790	1935	1995	5300	5800

Duct Type								
Cap. (kVA)	Width (W) (mm)		Depth (D) (mm)		Height (H) (mm)		Approx. Weight (kg)	
	C	A	C	A	C	A	C	A
300	1150	1150	1050	1090	1720	1830	1250	1250
500	1400	1400	1170	1230	1860	1890	1670	1750
600	1600	1400	1220	1300	1890	1920	2050	2050
750	1450	1450	1260	1340	1890	1940	2250	2300
1000	1650	1700	1310	1400	1900	1980	2650	2750
1250	2000	1850	1380	1510	1930	2030	3300	3500
1500	2150	1800	1510	1650	1980	2060	3850	4100
2000	2150	1900	1590	1760	2060	2170	4950	5100
2500	2200	2300	1610	1790	2210	2270	5500	6000

Note: The data above are given as examples only. Please contact us with your special requests and for final specifications.