# **POWER**



# STANDARD FITTINGS

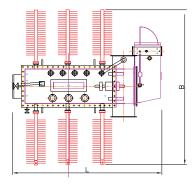
- H. V. Bushing / L. V. Bushing
- Conservator oil filling hole
- Bi-directional rollers
- Earthing terminals pads
- Drain cum bottom filter valve
- Top filter valve with sampling plug
- Plain Oil Level gauge
- Rating diagram plate
- Air release device
- Thermometer Pocket
- Lifting lugs
- Pressed steel Radiators (Detachable)
- Double Diaphragm Explosion Vent
- Silica gel breather
- Additional Neutral bushing
- First filling of oil
- Isolating valves for radiator
- **Jacking Pads**
- Dial type OTI with A/T contacts
- Buchholz relay with A/T contacts
- · Marshalling box with control wiring

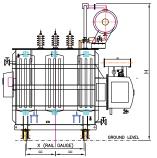
## **TECHNICAL SPECIFICATIONS**

Duty, Type	Outdoor / Indoor			
Voltage Class	11, 22, 33, 66 kV or any specific			
No of Phases	3 Phase			
Frequency	50/60 Hz			
Vector Group	Dyn5 or Dyn11 or YNyn0 any specific			
Insulating Fluid	PCB FREE Mineral Oil, both inhibited & uninhibited, as per IS/IEC, ASTM D3487			
Class of Insulation	Class A			
Tap Changer	Off circuit or on load tap changer			
Tapping Range	±2.5% X 2 for OCTC or + 1.25% X 4 & - 1.25% X 8 for OLTC or as per customer requirement			
Winding Material	Copper with multi paper covering			
Applicable Standards	IS 2026, IEC 60076, ANSI, IEEE			
Painting	Enamel, Epoxy, Polyurethane or customer specific			



#### PRODUCT DIAGRAM





#### OPTIONAL FITTINGS

- Dial type WTI with A/Tcontact
- Magnetic Oil Gauge with A/T contacts
- On Load Tap Changer
- RTCC Panel with automatic voltage Regulator (AVR)
- · Pressure Release valve
- · DGPT Relay
- Air cell bag
- Scada Compatible OTI & WTI
- Equaliser pipe between conservato
  & explosion vent
- · Annunciators in RTCC panel
- Force cooling arrangement with fan cubical

#### **OUTPOS** GENERAL DETAILS

We manufacture both on load & off circuit tap switch type power transformer. These Transformers are generally used in receiving substation for feeding residential, commercial & bulk consumers. Following are the dimension, oil quantity & weight details along with standard & low losses for 33kV Power transformer with On Load Tap Changer.

STANDARD TRANSFORMER WITH OLTC										
SR.	RATING	OVERALL DIMENSIONS (MM)			LOSSES (W)			OIL QTY.	TOTAL WT.	
NO.	(kVA)	LENGTH (L)	BREADTH (B)	HEIGHT (H)	NO LOAD	LOAD	%	(LTRS)	(KGS)	
1	3150	3300	3000	3500	4000	24000	7.15	2450	9250	
2	5000	3500	3200	3600	5500	33000	7.15	3300	11550	
3	6300	3600	3000	3800	6500	40000	7.15	3800	13250	
4	8000	3800	3100	3900	8000	48000	8.35	4200	15000	
5	10000	4000	3600	4000	9000	57000	8.35	4800	17500	
6	12500	4200	3800	4200	10000	67000	8.35	5200	19500	
7	16000	4400	4000	4400	12000	80000	10.00	6300	22250	
LOW LOSS TRANSFORMER WITH OLTC										
1	3150	3500	3000	3300	3000	14000	7.15	2700	10850	
2	5000	3700	3200	3400	3900	19000	7.15	3600	14150	

	1	3150	3500	3000	3300	3000	14000	7.15	2700	10850
	2	5000	3700	3200	3400	3900	19000	7.15	3600	14150
	3	6300	3800	3000	3600	4500	25000	7.15	4200	15000
	4	8000	4000	3100	3700	5000	32000	8.35	4600	17850
	5	10000	4200	3600	3800	5400	37000	8.35	5200	21500
	6	12500	4400	3800	4000	6000	43000	8.35	5700	24500
	7	16000	4600	4000	4200	7000	52000	10.00	6800	28250
*Disconsistant and unicht a larger requirement										

<sup>\*</sup>Dimensions and weight & Losses may vary for any specific or special requirement.

### **SOURCE PRODUCTION**

- Highest dielectric insulation property to withstand lightening impulse.
- · Mechanical design to withstand short circuit forces arising during faults.
- Optimum oven heating under vacuum as to achieve desired compression height and maximum insulation resistance (IR) to windings.
- Adequate ducts between layers, coils, discs for maximum oil flow and reduced hot spot temperature.
- Step-lap designed CRGO laminations for lower losses and excitation current.
- Pre compressed Insulation material for minimal moisture absorption.
- · Permawood rings for uniform clamping.