

## Immersed



### Presentation

Distribution and medium power Transformers, immersed in mineral, biodegradable or vegetable oil, with rated power up to 5MVA, in the voltage classes up to 36.2kV, meeting the most varied specifications, including special assemblies or dimensions.

The manufacturing materials and processes comply with the ABNT-NBR and ISO 9001:2008 standards; together with a highly skilled employee team, we ensure our equipment for two years against manufacturing defects.

### Construction

The magnetical cores are manufactured with grain-oriented silicon steel sheets with step-laped cutting type, increasing the performance. The HV and LV coils are manufactured in electrolytic copper or aluminum conductors and insulated with completely dehumidified papers, impregnated in varnish. The tank is built in carbon steel, with surface treatment by abrasive blast, anti-corrosive protection with primer application and final painting, using spillage system. Active parts drying in the oven, tank closing performed under high vacuum, ensuring the humidity exemption inside the equipment and increasing their durability. All Transformers are subject to the routine testing required by ABNTNBR 5356-1/5 standards.

#### Useful Types

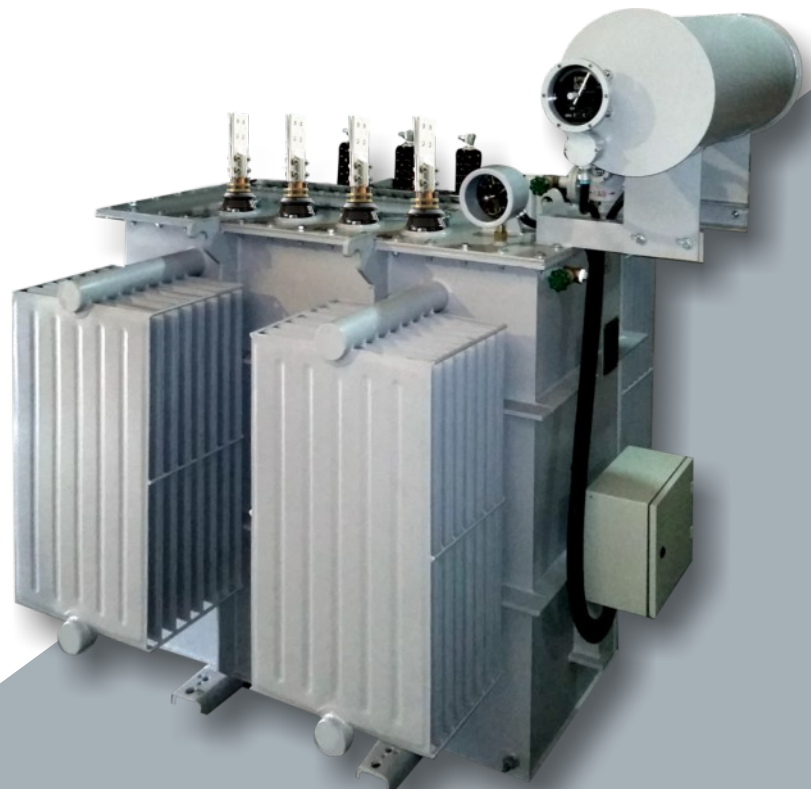
Provided with expansion tanks	Orientable Wheels
Sealing	Internal or external use
Pole support up to 300KVA	HV / LV Flanges

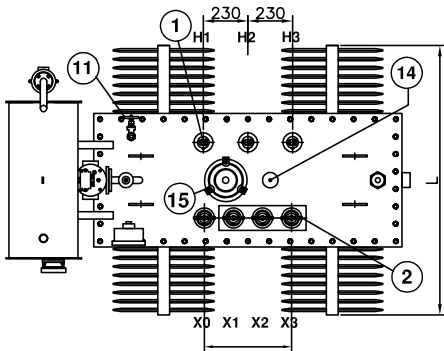
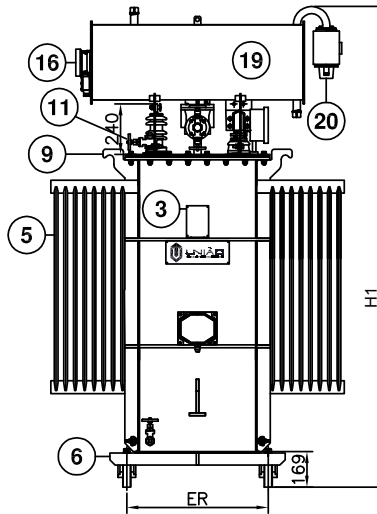
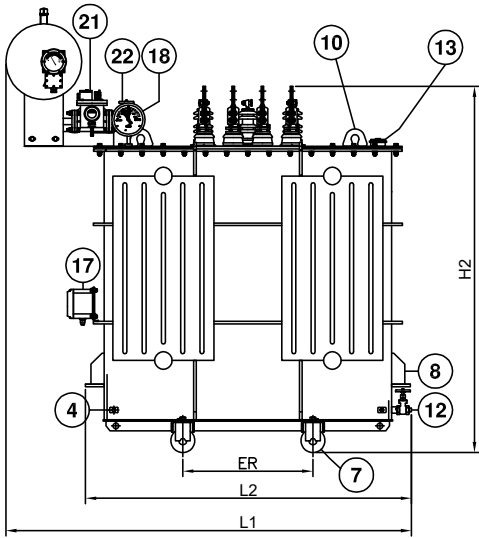
#### Accessories

Oil Level Indicator	Relay Sudden Pressure Contacts
Thermometer with Contacts	Gas relay type Buchholz
Air dryer with Silica Gel	Pressure gauge with Contacts
Pressure Relief Valve with Contacts	Connection Box (accessories)

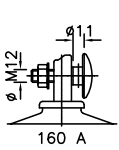
#### Standard Transformer Characteristics

HV Voltage Class	7,2 / 15,0 / 24,2 / 36,2 kV
HV Withstand Applied Voltage	20 / 34 / 50 / 70 kV
Basic Impulse Level	40 / 95 / 125 / 150 kV
LV Maximum Voltage Level	1,2 kV
LV Withstand Applied Voltage	10 kV
Vector Group	Dyn1
Frequency	60Hz
Class of Mat. and Temperat. Rise	A-105°C / 55°C
Standards	ABNT NBR 5356-1/5

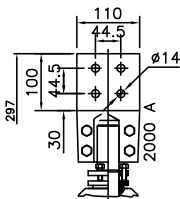
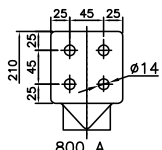




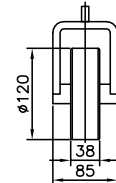
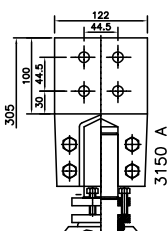
DETAIL 1



DETAIL 2



DETAIL 3



**Included Accessories**

- 1) High Voltage Bushing - Detail 1
- 2) Low Voltage Bushing - Detail 2
- 3) Rating Plate
- 4) Earthing Terminal to Cable # 70mm2
- 5) Radiator Fin Type
- 6) Skid Base
- 7) Orientable Flat Wheels - Detail 3
- 8) Jacking pads
- 9) Lifting Eyebolts of Complete Transformer
- 10) Lifting Eyebolts of Cover and Part Active
- 11) Valve for Filter  $\phi 1"$  BSP
- 12) Drain Valve  $\phi 1"$  BSP
- 13) Pressure Relief Valve
- 14) External Tap Changer
- 15) Inspection Cover

**Optional Accessories**

- 16) Type Magnetic Level Indicator
- 17) Junction Box
- 18) Thermometer
- 19) Conservative
- 20) Air Dryer
- 21) Relay Buchholz
- 22) Valve  $\phi 1"$  BSP

Voltage Class : 15kV	POWER (KVA)	HEIGHT - H1	HEIGHT - H2	LENGTH - L1	LENGTH - L2	WIDTH - W	CUOTA - ER	W. WITHOUT CONS. (KG)	WEIGHT WITH CONS. (KG)
	500	1950	1550	1950	1350	1060	670	1690	1962
	750	2050	1650	2050	1450	1160	670	2130	2562
	1000	2150	1750	2150	1550	1210	820	2570	3180
	1500	2200	1800	2400	1800	1620	820	3010	3780
	2000	2250	1850	2500	1900	1620	1070	3450	4380
	2500	2300	1900	2600	2000	1620	1070	4075	5116
	3000	2550	2150	2700	2100	1670	1070	4955	6353