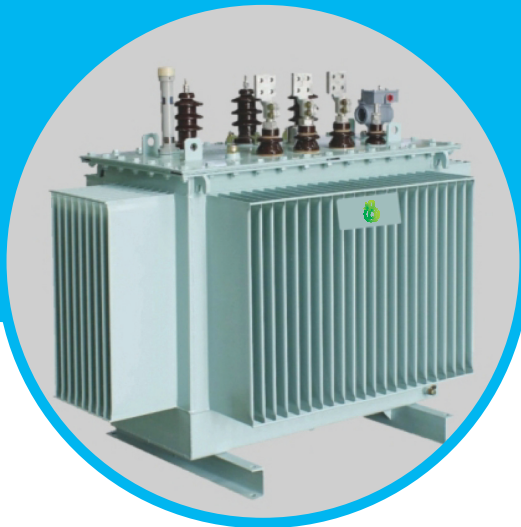


Aiming Excellence
Through Innovation



Transformers



P. Balaji Trafo Limited

www.pbalajitrafo.com



THE COMPANY :

P Balaji Trafo is a joint groups. Both group have combined experience in electrical manufacturing & project execution of 8 years.

We are an ISO 9001: 2008 company having manufacturing set up for various transformers up to 30 MVA capacity and 132 KV class.

Plant is well equipped with latest production equipments for manufacturing & ultra modern testing facilities with software supports are employed to ensure proper finished goods quality.

The products are designed, Manufactured & tested to company with national and International standards including BIS 1180/IS/2026/IEC-60076/ANSI C57/BS-171. The plant has a dust free environment and employs state of the art technology.

VISION

P. Balaji Trafo become a leading transformer manufacturing company both at a national and international with quality, Service satisfaction and maintain an average growth rate 20% we give best return to our stake holder, financier and finance institutional.



MISSION

We believe in accepting latest technology to make products more sturdy & reliable as our motto is "Aiming Excellence Through Innovation".

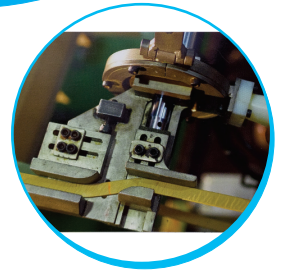
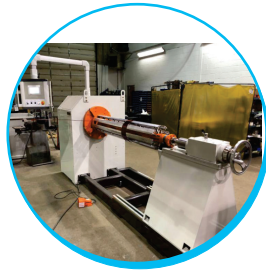
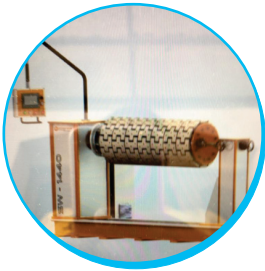
As our slogan "Aiming Excellence Through Innovation" suggests to ensure best quality products, we follow best designing of the transformer by our design engineers & some times designing consultants from the industry. We commit best quality transformer for customer again on again.

MANUFACTURING :

We have factory setup as per best prevailing industry practices to support our quality commitment. Proper size (small to big) winding machines, insulation processing machinery, winding pressing machines, assembly tools, stage inspection measuring, testing tools and practices help us in maintaining specifications as per design.

Proper production equipments and practices enable us in maintaining the design standards, as under.

- Adequate size winding machines best winding results
- Proper handling tools gives perfect finish and dimensions
- Process dimension measurement observed
- 20 T, 10 T & 3 T over head cranes gives flexibility of operations
- Preheating of windings in two air drying ovens
- Final heating and moisture removal in vacuum oven
- Big vacuum oven to handle assemblies up to 40 MVA, 132 KV class transformers

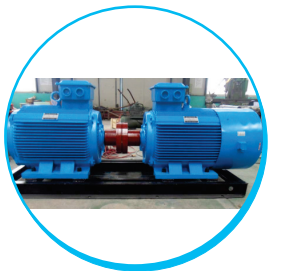


TESTING & QUALITY :



World class testing set up gives us the confidence of the products manufactured by us are in line with the design or not.

- Use of 0.2 class power analyzer for loss measurement
- Co ordination between power analyzer with PLC and Industrial PC
- Software to select proper ranges of CTs, PTs and electrical parameters for best results
- Data logging in system to ensure any operator mistake and future records
- Different sizes DVDF set for various capacity of transformers
- 50 KV and 150 KV H.V. Testers for separate source insulation test
- Ratio meter, Resistance meter and Insulation tester of reputed brands with best accuracy



DISTRIBUTION TRANSFORMERS : 200 KVA, 11/33 KV CLASS



We manufacture distribution transformers up to 200 kva, 11/33 kv class. Our transformers have following features.

- Highest purity of aluminum / copper winding material
- Entire range 10, 16, 25, 63, 100 and 200 KVA
- ERDA tested for all ratings
- Vendor approval from SEB's & Discoms
- Conformity with BIS 1180 specifications level 1 to level 6
- Single phase and three phase use

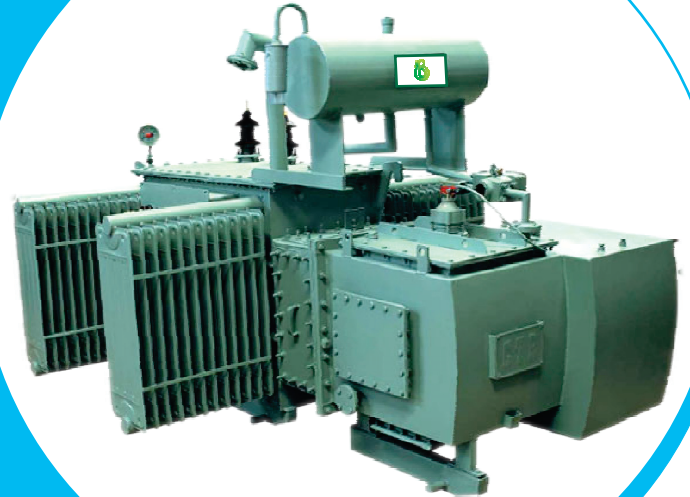
Entire range of distribution transformers is produced by us .Wide range of such transformers are accommodated as different SEB's have varied technical specifications. Self protected transformers with Lightning arrestors, MCBs / MCCBs in load side, internal tripping device etc can be used for the same.

Earthing transformers for specific requirements are designed and supplied for typical applications.

MEDIUM POWER TRANSFORMERS : OFF LOAD / ON LOAD

We manufacture ISI approved OFF/ON load medium power transformers starting from 250 to 2500 KVA under BIS-1180 and above 2500 KVA to 5000 KVA under IS-2026.

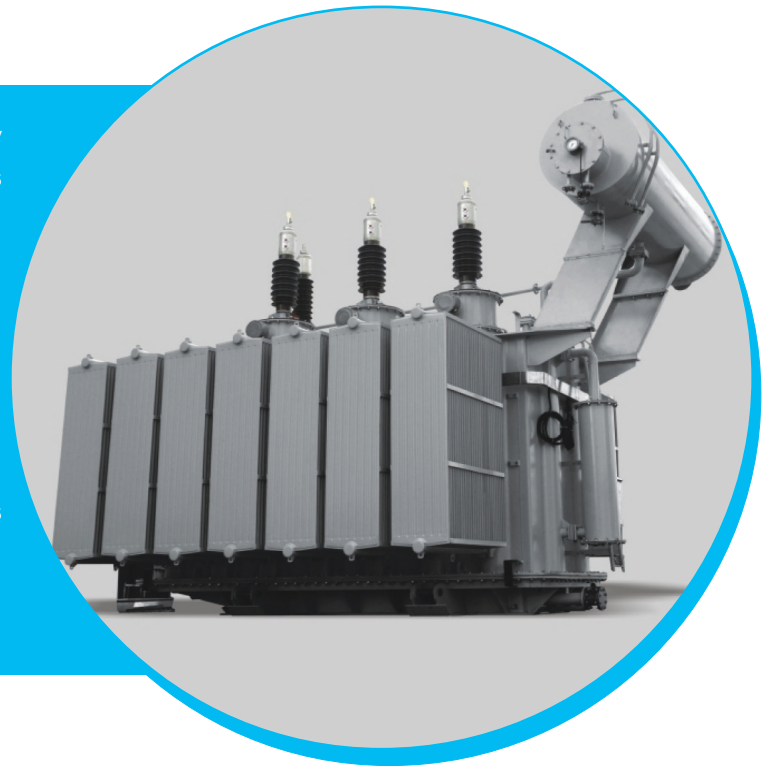
On load Transformers are installed where voltage fluctuations form High voltage side are continuous, so on load transformer changes tap using Automatic voltage Regulator Without any power cut and give continous power and Tap Rang is $\pm 10\% + 5\%$ to $- 15\%$ in 1.25 % steps in 17 position or in 2.5% steps in 9 positions as per customer requirements.



POWER TRANSFORMERS : 30 MVA, 132 KV CLASS

We manufacture Power transformers up to 30 MVA and 132 KV class, best available machineries and testing equipments helps us in manufacturing the best products.

- Manufacturing as per IS and IEC standards
- Use of best quality raw materials for better performance
- ONAN/ONAF/AN/ONWF configurations
- Designed for low loss and flaw less performance
- Voltages : 11, 22, 33, 66 and 132 KV and as per client's requirement
- Best suiting for Solar applications, Earthing transformers



Computer aided designing with using latest software help us in designing accurately to standards and specific requirements.

FURANCE TRANSFORMERS : 10 MVA, 33 KV CLASS

We manufacture and supply furnace transformers up to 33kv class and 10 MVA. Transformers with various classifications are designed and supplied to suit the types and make of electric induction and arc furnace used as under.

Makes : Inductotherm, Electrotherm
ABP, Megatherm,

Voltage levels : 433 V, 460 V, 575 V, 850 V, 1150 V, 1250V

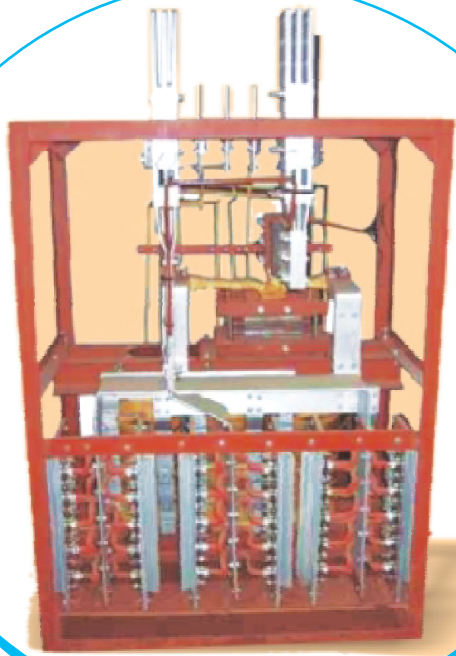
Vector Groups : Dyn-11, Dyn 11 -DDo,

Pulses : 6 pulse, 12 pulse, 24 pulse transformers



As high currents are involved special care is taken in designing tank and assembly of the transformers.

RECTIFIER TRANSFORMERS : 6 MVA, 11 KV CLASS



We manufacture and supply rectifier transformers up to 11 kv class and 6 MVA. Transformers of 6 pulse/12 pulse with high current application can be supplied. Various tapings on main can be supplied or regulating transformer can be used for effective process control using latest current or voltage control methods Transformers can be supplied using diodes or thyristors depending upon application and client's requirement. Different configurations can be used in designing and supplying the rectifier transformers as under.

- Voltage regulation using off-load tap changer, on load tap changer, variac control or thyristors
- 6 pulse, 12 pulses or higher with phase shifting
- ONAN, ONAF, OFAF
- Regulation unit either combined or separate

These transformers are suitable for various D.C. applications like D.C. Traction for trains, smelting operations, electrolysis etc. Fine control of voltage is achieved using saturable reactors on secondary side.

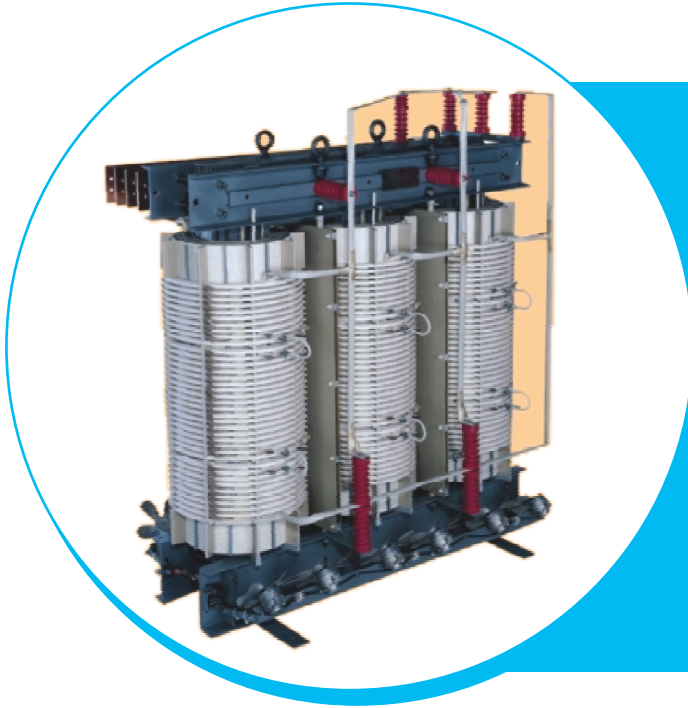
ECO DESIGN TRANSFORMERS



P. Balaji Undertakes to respect the ECO Design directive by manufacturing transformers that straitly comply with the technical specifications and requirements of BIS standard with "CE" marking and checked by a certified and calibrated laboratory test. "Save money, Save nation" program is working on transformer losses found If owner hare old transformer then it's losses is too much higher, So we change by new eco Design transformer. New transformer is lower loss, so low energy consumption means No loss money.

This eco design transformer save losses means save thermal loss. save iron loss and save Bio-oil and other think save owner money and come back money to in his pocket and also save nature pollution, scrap and other hurdles So, it is not a just business program, it is mission to save nature and nation for future.

DRY TYPE TRANSFORMERS (VACUUM PROCESS IMPREGNATED) : 2.5 MVA, 22 KV CLASS



We manufacture and supply dry transformers using vacuum process impregnation up to 2.5 MVA and 22 kv class. Our transformers have following features.

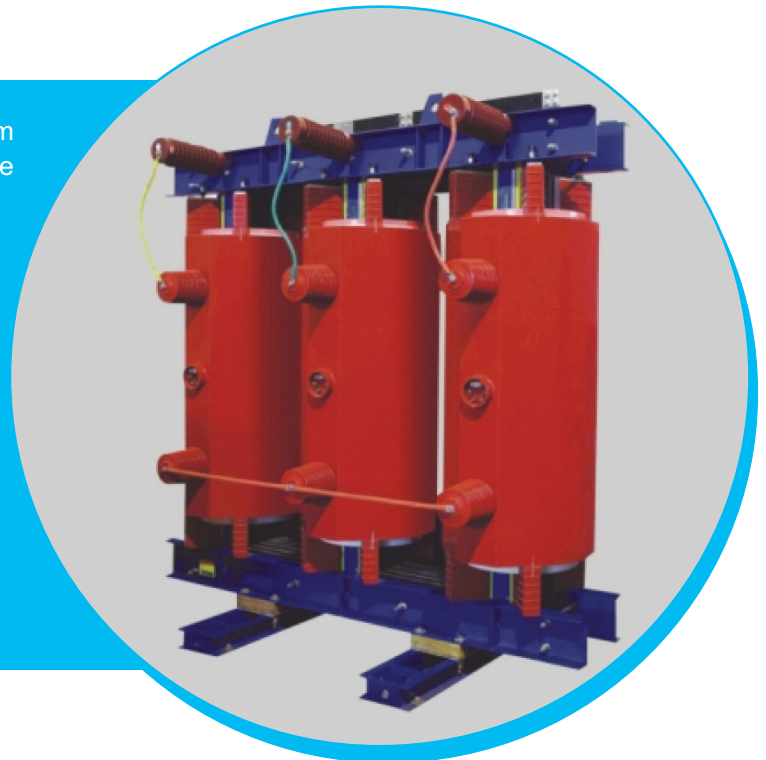
- Use of Nomax insulation for better performance
- Temperature rise of 115 and 150 degree centigrade
- +5% or -5% voltage control using taps in steps of 2.5%
- EC grade copper windings
- Air natural cooling with or without fans
- Very low noise within permissible limits of IS/IEC specifications

These transformers are now a days widely where fire hazard is very dangerous like hotels, shopping malls and hospitals and community centers. Dry type transformers are light in weight compared to conventional oil cooled can easily be installed on upper floors and roofs.

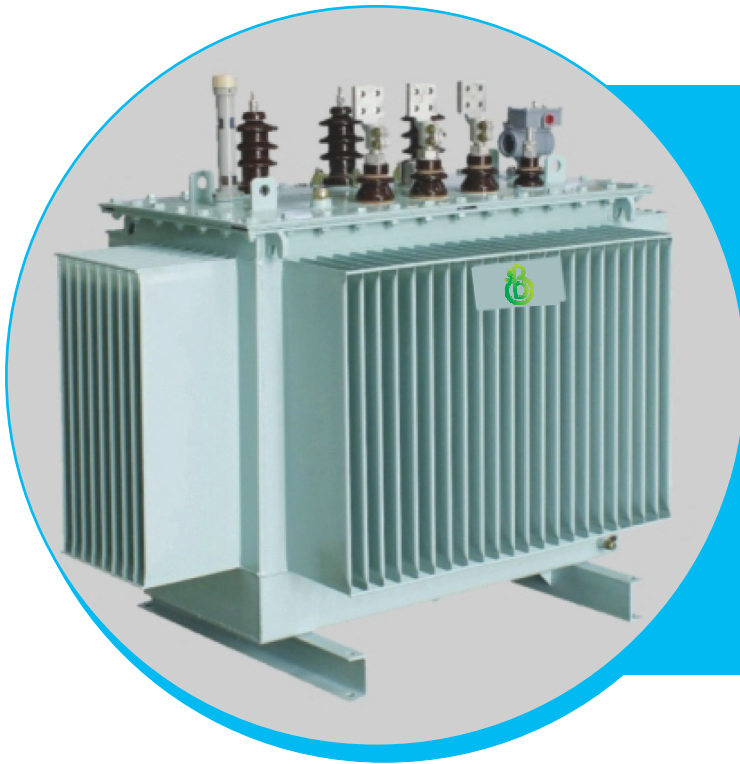
DRY TYPE TRANSFORMERS (RESIN) CAST) : 1.0 MVA, 11 KV CLASS

We manufacture and supply dry transformers using resin vacuum casting up to 1.0 MVA and 11kv class. Our transformers have following features.

- Use of non inflammable windings for safety
- Lowest risk of fire hazard as oil is not used
- Designed for low operating losses
- Very low noise within permissible limits of IS/IEC specifications
- +5% AND -5% voltage control using taps in step of 2.5%
- Air natural cooling with or without fans
- Highest humidity resistance
- Smaller dimensions and hence light weight
- Can be used in off shore applications and near sea shore



CORRUGATED WALL TRANSFORMERS : 2.0 MVA, 11 KV CLASS



Corrugated wall transformers are manufactured by us up to 2.0 MVA and 11 KV class. Such transformers are space saving and are very useful in shopping malls, hospitals, hotel industries and at places where space is a constraint. Even for exports these are widely accepted due to transportation ease.

- Look is very aesthetic and sturdy
- Heat dissipation is improved
- Oil Maintenance is easy
- Hermetically sealed
- Easy to be handled
- With & without OLTC

UNITIZED SUBSTATION : 1.6 MVA, 11/22 KV CLASS

Unitized sub station supplied by us are up to 1600 kva and 11/22kv class. Such USS have the following salient features.

- Compact and sturdy design to save space
- Good aesthetic look
- User friendly & convenient in operation and maintenance
- Designed for ultimate safety of operator and apparatus
- Adequate insulation level using non-hygroscopic material for connection between HV, LV and Transformer Sections
- Emergency stop Push button outside USS
- Properly designed Earthing system
- Remote operation can be supplied for operator safety
- Enclosure designed for moisture and dust protection
- USS are designed to have VCB/RMU units, load feeders, P.F. correction panels, change overs etc.



HV COMPARTMENT :

- HV VCB OR RMU
- HV METERING SET
- LIGHTNING ARRESTORS

LV COMPARTMENT :

- LV ACB/MCCB
- LV METERING SET
- FEEDERS USING HRC FUSE SWITCHES/MCCBs

TRANSFORMERS COMPARTMENT :

- Use if Dry transformer (Either VPI or Resin cast) or corrugated wall oil cooled transformer as per IS/IEC standards deigned for best cooling, longer life and flawless performance.

SMART TRANSFORMER



An IOT Enabled Digital Transformer Monitoring unit
So, How Does it work?

Through our indigenously developed sensing unit installed on transformer. vital parameters are monitored and streamed every five minutes & transmitted over GSM network to our cloud-based application

TRANSFORMER MONITORING

The primary aim is to collect real time information on vital parameters from transformer through sensor. It monitors :

- 3 - Phase load current
- 3 - Phase voltage
- Oil Temperature
- Oil Level
- Ambient Temperature
- Winding Temperature
- Humidity
- GPS Location
- User Defined Alerts, Reminders & Automated Customized Report

AFTER SALES SUPPORT & OTHER SERVICES

Preventive maintenance is most important activity for trouble free operation and uninterrupted supply of power. Annual maintenance contract is the preventive maintenance conducted by us for our customers. AMC plan involves periodic maintenance of equipments conducted on quarterly and on annual basis.

We also under take AMC for different type of transformers including unitized substations of any make. Annual for Visits are planned at site by our Service Engineer & Technician team for Periodical maintenance of the Product. Few maintenance Points are as below :

1. For Quarterly Visits :

I. R. Value check, To attend oil leakage check magnetic balance, Inspection of HV & LV Porcelains, & metal parts checking of OTI, WTI, PRV, B. Realy, O.S.R. Radiators, Contact Surfaces at HV & LV side, Ventilation For cooling etc.

2. For Annual Visits :

Taking out main Cover, Sludge Removing by oil jet, inspection of tap changer, conservator, oil filtration for improving B.D.V. & I.R. values.

Note : Replacement of oil and defective components will be done at extra cost.





CERTIFICATE



QRO
QUALITY RESEARCH ORGANIZATION

Certificate of Registration

This is to certify that

P. BALAJI TRAF0 LIMITED

3rd Floor, Chandraprabhu Corporate House, Opp. Khodiyar Resturant, Modhera Cross Road, Mehsana-384002, India
505/P2, Karanpur Ruppura, Nr. Narmda Cnal, Palava, Tal-Bocharaji Road, Ta. Bocharaji, Dist. Mehsana-384210, India

has been independently assessed by QRO and is compliant with the requirements of:

ISO 14001 :2015

Environment Management System

For the following scope of activities:

Manufacturing of Transformers, Control, Panels, Wires, Cables, Motors & MCB Switchgear

Date of Certification 09th June 2020 2nd Surveillance Audit Due 08th June 2022
1st Surveillance Audit Due 08th June 2021 Certificate Expiry 08th June 2023

Certificate Number: 304920060908E






Validity of this certificate is subject to annual surveillance audits to be done successfully on or before 365 days from date of the audit. (In case if surveillance audit is not allowed to be conducted; this certificate shall be suspended / withdrawn).
The Validity of this certificate can be verified at www.qrocert.org
This certificate of registration remains the property of QRO Certification LLP, and shall be returned immediately upon request.

India Office : QRO Certification LLP
142, 1st Floor, Avtar Enclave, Near Paschim Vihar West Metro Station, Delhi-110063, (INDIA)
Website : www.qrocert.org, E-mail : info@qrocert.org



QRO
QUALITY RESEARCH ORGANIZATION

Certificate of Registration

This is to certify that

P. BALAJI TRAF0 LIMITED

Regd. Office: 405, Chandraprabhu Corporate House, Near Navdeep Flats, Modhera Char Rasta, Mehsana-384002 Gujarat (India)
Factory: 345, GIDC-2, Dediyanan, Mehsana-384002 Gujarat (India)

has been independently assessed by QRO and is compliant with the requirements of:

ISO 9001:2015

Quality Management System

For the following scope of activities:

Manufacturing of Transformers, Control, Panels, Wires, Cables, Motors & MCB Switchgear

Date of Certification: 29th May 2020 2nd Surveillance Audit Due: 28th May 2022
1st Surveillance Audit Due: 28th May 2021 Certificate Expiry: 28th May 2023

Certificate Number: 304920052906Q






Validity of this certificate is subject to annual surveillance audits to be done successfully on or before 365 days from date of the audit. (In case if surveillance audit is not allowed to be conducted; this certificate shall be suspended / withdrawn).
The Validity of this certificate can be verified at www.qrocert.org
This certificate of registration remains the property of QRO Certification LLP, and shall be returned immediately upon request.

India Office : QRO Certification LLP
142, 1st Floor, Avtar Enclave, Near Paschim Vihar West Metro Station, Delhi-110063, (INDIA)
Website : www.qrocert.org, E-mail : info@qrocert.org

P. Balaji Trafo Limited

Transformers up to 30 MVA & 132 KV class

- 📍 : 405, Chandrabrabhu Corporate House, Opp. Khodiyar Restaurant, Modhera Cross Road, Mehsana-384002. Gujarat, India.
- 🏠 : 505/p2, Karanpura-Ruppura, Nr.Narmada Canal, Palavasna-Balol-Becharaji Road, Ta. Becharaji, Dist. Mahesana-384210.
- ☎ : +91-2762-231158, +91 91046 55211
- ✉ : info@pbalajitrafo.com, mkt@pbalajitrafo.com
- 🌐 : www.pbalajitrafo.com

