



EPOXY HOUSE[®]
Growth Through Innovation



Instrument Transformers

- Low & Medium Voltage
- Indoor & Outdoor Type





About Epoxy House

Background

With over 50 years of experience, Epoxy House is actively involved in designing, developing and producing advanced range of Low, Medium and High Voltage Electrical and Electro-Mechanical components for the Energy, Mobility, and Industrial Sectors.

Epoxy House is a professionally managed business group working with belief "Growth Through Innovation".

The genesis of Epoxy House started in 1973 with the flagship company Baroda Bushings & Insulators and now we are an extremely diversified group with group of companies named Electrical Controls & Systems, Kaizen Switchgear Products, Baroda Moulds & Dies, Fibertech Industries and Green Brilliance Renewable Energy – LLP

Product Range

- Instrument Transformers Up to 220kV
- Epoxy Bushing & insulator up to 36kV
- Resin Cast Dry-type Transformer / CSS up to 33kV
- OIP and High Current bushings upto 245kV & 36kV 16kA
- CT/PT metering Cubicles/units upto 33kV
- Solenoids actuators
- Voltage Detecting Systems
- Solar PV modules
- SMC/DMC/FRP Components
- Other Epoxy Molded Components

Quality Management Systems Certified with

- ISO 9001:2015
- ISO 14001 : 2004
- OHSAS 18001:2007
- NABL 17025

Our Strength

- Advance APG Casting
- Automatic material mixing HEDRICH Machine
- Automatic Transformer Winding Machines
- Online Production Tracking Systems
- In-House NABL Accredited HV Lab



Innovation, Customization, Quality and Delivery

Electrical Controls & Systems Has been designing and manufacturing Low & Medium Voltage Instrument transformers for Indoor and Outdoor Applications. We are a worldwide supplier to global energy distribution companies and switchgear manufacturers in energy sectors. The Effective quality assurance requires control measurement at each stage of the manufacturing process.

Our commitment to quality continues with all production sequence. Each products undergoes a series of comprehensive process up to final tests to ensure that it will dependably perform to the required specifications.



CORE MANUFACTURING

We manufacture super finest quality grade CRGO (M4, MOH, and ZDMH), CRNGO and Cut Cores with more than 150 Employee, 14 manual 1 fully automatic Core Winding machines with capacity 4 to 5 MT per day.



TRANSFORMER WINDING

For CT, With more than 12 Semi-Automatic winding Machine and with more than 35 quality Controllers. For VT, With fully automatic HV winding Machine and with more than 18 Semi-Automatic winding Machine and with more than 40 quality Controllers.



TRANSFORMER ASSEMBLY

The highest quality Insulating materials are specified to meet the most demanding operating environments.





Casting

More than 24 Advance automatic pressure gelation (APG) Casting Machines and 5 Conventional Vacuum plant to ensure High quality and Fastest turnaround time and gives powerful and precise output. It ensures production capacity of more than 2000 No. daily.



Final Testing

Two separate HV PD Testing Lab each for CT and VT, all routine test conducted including excitation loss, polarity, dielectric properties, and turns ratio. CTR measured through Omicron a Universal CT analyzer Testing machine. With Having 200 No. tested per day.



Quality Controls

Producing high quality and aesthetics of components through three-tier quality inspection policy. We have within the group high class & accurate quality inspection gadgets and apparatus to inspect the quality of Raw material, in-process material, and finished products. We have E-Testing & Enterprise Resource Planning System facilities to monitor each product process stage.



Production Monitoring

We have Integrated software module that can check Realtime production process, Production tracking and keeps testing data records. It also ensures delivery lead times statistics of customer commitments and align the delivery commitment on time.





LTCT / LTVT Cluster

Application

- Low Voltage Air / Gas Circuit Breaker Switchgear
- Protection Relay
- Earth Fault Protection
- Bushing Type, Oil immersed CT in Power & Distribution Transformers
- Motor Control Box / Power Control Box
- Bus bar Protection Systems
- Differential Protection System
- Interposing CT to match ration
- Core Balance CT

Features

- Easy to install and Easy to Move.
- Light in weigh and compact in design.
- Customize structures as per application.
- Excellent at on run performance.
- Maintenance free product.
- Highly reliable and Long Lasting Endurance.
- Excellent electrical & Mechanical Characteristics.
- Multi-functional.
- Confirms to IS, IEC & other International Standards as per customer's requirements.
- Type tested at NABL approved testing institutes such as ERDA & CPRI.

Range

RANGE	Construction Type	- Ring Type Resin Cast / Varnished Type / Tape Insulated Type
	Rated Primary Current	- 10000A (Max)
	Max. System Voltage (Um)	- 1.2 kV
	Basic Insulation Level	- Up to 6 kV
	Rated Secondary Current (Is)	- 1A OR 5A OR As per Customer requirement
	Accuracy Class	- 5P or 10P or PS or as per IEC or as per ANSI
	Rated Short Time Current (Ith)	- Up to 100 times rated Primary Current
	Rated Dynamic Peak Current (Idyn)	- 2.5 x Ith kAp
	Max. Possible Cores Nos.	- As per requirements
	Max. Secondary Terminals Nos.	- As per requirements
Rated Frequency	- 50/60 Hz	





Medium Voltage Instrument Voltage Transformer (Indoor)

Application

- Medium Voltage Air / Gas Circuit Breaker Switchgear
- Accurate Metering
- Differential Protection System
- Motor Control Panel
- Energy Meter Panel
- CSS/PSS Metering Cubical

General Features

- Easy to install and Easy to Move.
- Light in weigh and compact in design.
- Customize structures as per application.
- Excellent at on run performance.
- Maintenance free product.
- Highly reliable and Long Lasting Endurance.
- No- Partial Discharge in operating voltage.
- Excellent electrical & Mechanical Characteristics.
- Multi-functional.
- Confirms to IS, IEC & other International Standards as per customer's requirements.
- Type tested at NABL approved testing institutes such as ERDA & CPRI.
- With fuse & without fuse mounting arrangement.

Range

RANGE	Maximum System Voltage	- 3.6kV ~ 36kV
	Rated Frequency	- 50Hz, 60Hz
	Maximum Insulation level	- 36/70/170 kV
	Rated Continuous Thermal Current	- 120%, 150%, 200%
	Rated accuracy Classes	- Metering: 0.2, 0.5, 1.0, 3.0.
		- Protection: 3P, 5P (Open Delta /Star - Star)





Medium Voltage Instrument Current Transformer (Indoor)

Application

- Medium Voltage Air / Gas Circuit Breaker Switchgear
- Accurate Metering
- Differential Protection System
- Motor Control Panel
- Energy Meter Panel
- CSS/PSS Metering Cubical

General Features

- Easy to install and Easy to Move.
- Light in weigh and compact in design.
- Customize structures as per application.
- Excellent at on run performance.
- Maintenance free product.
- Highly reliable and Long Lasting Endurance.
- No- Partial Discharge in operating voltage.
- Excellent electrical & Mechanical Characteristics.
- Multi-functional.
- Confirms to IS, IEC & other International Standards as per customer's requirements.
- Type tested at NABL approved testing institutes such as ERDA & CPRI.

Range

RANGE	Maximum System Voltage	- 3.6kV ~ 36kV
	Rated Primary Current	- 5A to 5000A
	Secondary Current	- 1A or 5A or As per customer requirement
	Secondary Burden	- 2.5 to 20 VA or As per customer requirement
	Accuracy Class	- Metering : 0.2s, 0.2, 0.5, 0.5s, 1.0 or as per IS or IEC or ANSI
		- Protection: 5P10, 5P20, 10P10 or as per IS or IEC or ANSI
	Instrument Safety Factor	- Less than 5
	Rated Frequency	- 50Hz, 60Hz
	Maximum Insulation level	- 36/70/170 kV





Medium Voltage Instrument Transformer (Outdoor)

Application

- Designed for pole mounted applications for metering and Protection

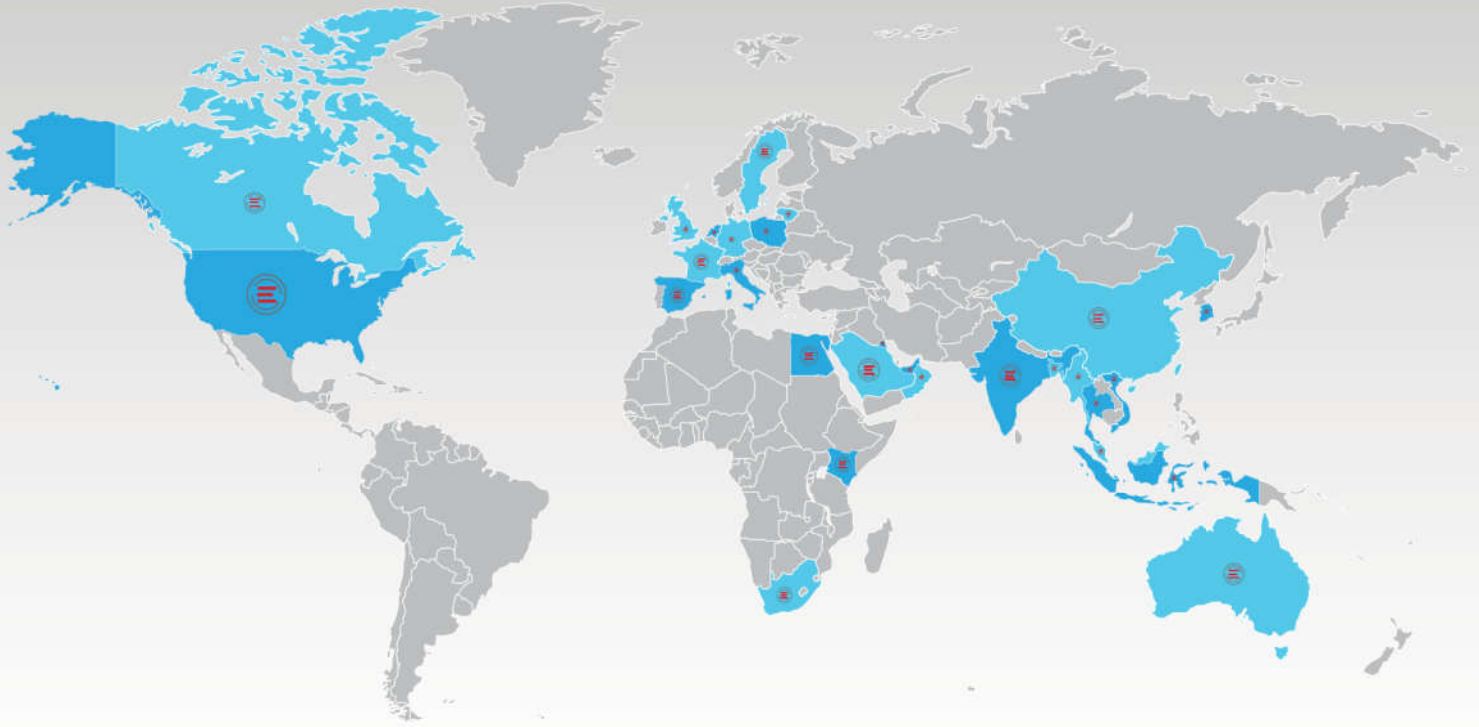
General Features

- Hydrophobic Cycloaliphatic Resin Cast System Especially for outdoor application.
- Most Suited for Coastal and Highly humid areas.
- Maintenance and pollution-free.
- Environmentally friendly and Easy installation.
- Excellent capacity to support overloads.
- Oil free construction hence no fire hazard.
- Excellent resistance to short circuit currents.
- The new lightweight Transformers designed for pole mounted applications
- Offers Superior arc track, ozone, and ultraviolet-resistive properties

Range

Max. System Voltage (Um)

Type	Particulars	3.3 kV	6.6 kV	12 kV	24 kV	36 kV
Current Transformer	Rated Primary Current (Ip)	A Minimum 15 A to 1600 A				
	Rated Secondary Current (Is)	A 1 or 5				
	Rated Short Time Current (Ith)	Up to 700 x Ip Or Max. 50 kA for 1 Sec or 3 Sec				Max.31.5kA 1 for Sec or 3 Sec
	Max. Possible Cores	Nos. 3				
	Max. Secondary Terminals	Nos. 8				
Potential Transformer	Rated Primary Voltage	V 3300/RT3	6600/RT3	11000/RT3	22000/RT3	33000/RT3
	Rated Secondary Voltage	V 110/3 or 110/RT3				
	Rated Voltage Factor	V 1.2 Continuous & 1.9 for 8 Hours or 1.5 for 30 sec				
	Max. Secondary Terminals	Nos. 3				
Common Parameters	Max. Secondary Terminals	Nos. 7				
	Basic Insulation Level	kV 3.6/10/40	7.2/20/60	12/28/75	24/50/125	36/70/170
	Rated Frequency	Hz 50/60				



Divisions



Electricals Controls & Systems (ECS) Unit –1

MV Instruments Transformer Division
Product— Epoxy Resin Cast CTs & VTs and VDS



Electricals Controls & Systems (ECS) Unit –2

Control Coil Division
Product— Hydraulic / Pneumatic / Contractor / CB Coil / Pole Tubes



Electricals Controls & Systems (ECS) Unit –3

Stamping Division
Product— Transformer Cores



Electricals Controls & Systems (ECS) Unit –4

HV Instruments Transformer Division
Product— Cast Resin Dry Type Transformer, High Voltage CTs & VTs and Condenser (OIP) & High Current Bushing



Kaizen Switchgear Product (KSP)

100% Export Oriented Unit
Product— Epoxy Resin Cast Components



Baroda Bushings & Insulators LLP (BBI)

Product— Epoxy Resin Cast Bushings & Insulators



Baroda Moulds & Dies (BMD)

Product— Epoxy Resin Cast Bushings, Insulators and Moulded Components



Fibertech Industries (FI)

Product— FRP / SMC / DMC Components

HEAD OFFICE

248-249 A/B, G.I.D.C Estate, Makarpura, Vadodara, Gujarat - 390 010

Ph: +91-265-2646816 | Cell: +91-9879611652 / 653

Email: sales@epoxyhouse.com

www.epoxyhouse.com

