



EPOXY HOUSE
Growth Through Innovation



Instrument Transformers

- Low & Medium Voltage
- Indoor & Outdoor Type





About Epoxy House

Background

Established in 1972 with flagship company Baroda Bushings & Insulators and later on Electrical Controls & Systems, Kaizen Switchgear Products, Baroda Moulds & Dies, Fibertech Industries and Green Brilliance Renewable Energy – LLP came into existence.

Product Range

We Develop, Design, Manufacture and Supply of a complete range of Epoxy molded components like Instrument Transformers, Epoxy Bushing & insulator, Distribution transformer (Dry-type/ Resin Cast Transformer), EHV bushings like High current busing, OIP Condenser bushing, CT/PT metering Cubicles/units, Encapsulated & Impregnated coil, Customized Solenoids, Voltage Detectors & Detecting Systems and Solar PV modules

Production Capacity for Instrument Transformers

- Medium Voltage up to 36kV : More than 9000 to 10000 Pcs Per Month
- Low Voltage : More than 10000 Pcs Per Month

Our Strengths

Advance APG Casting
Automatic material mixing Hedrich Machine
Automatic Transformer Winding Machine
Online Production Tracking Systems
In-House HV PD Lab

QMSystem Certified For

ISO 9001 : 2015
ISO 14001 : 2004
OHSAS 18001 : 2007

Market / Segment served.

Cement Industries
Petrochemical Industries
Mining
Utilities
Textile Industries
Railways & Metros
Paper & Pulp Industries
Steel Industries
Oil & Gas
Power Generation



Innovation, Customization, Quality and Delivery



Electrical Controls & Systems is an ISO 9001:2015, 14001:2014 and BS OHSAS 18001:2007 Registered Company. The Effective quality assurance requires control measurement at each stage of the manufacturing process.

Our commitment to quality continues with all production sequence. Each transformer 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



CT Winding and Assembly

For CT, With more than 12 Semi-Automatic winding Machine and with more than 35 quality Controllers. For VT, With 1 fully automatic HV winding Machine and with more than 18 Semi-Automatic winding Machine and with more than 40 quality Controllers.



CT Winding and 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

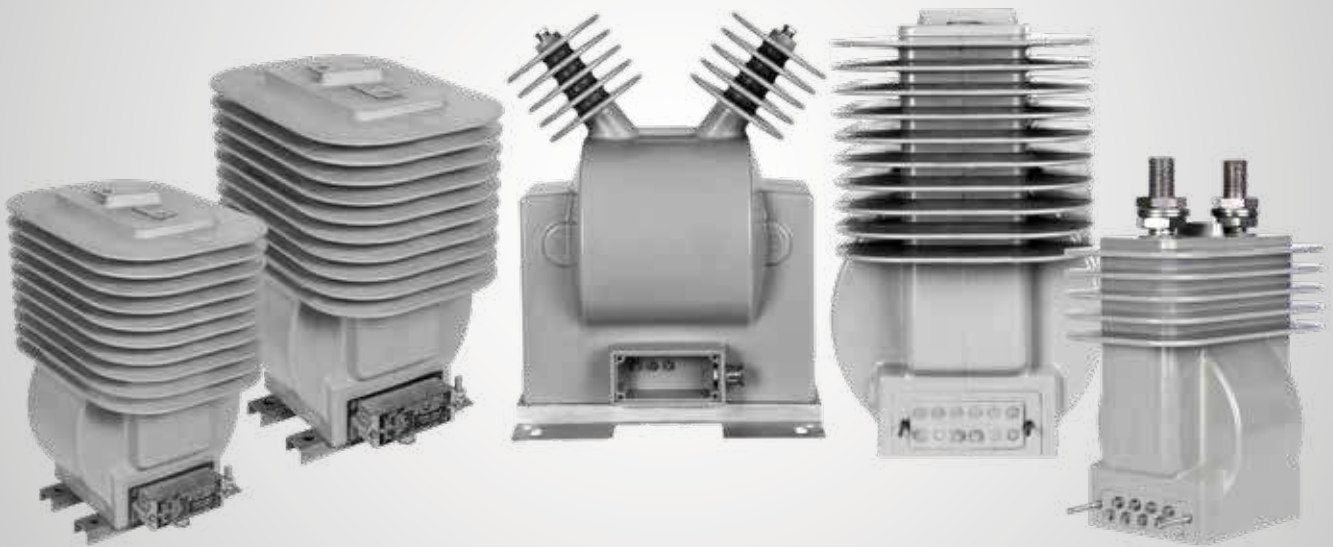
General Features

- 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

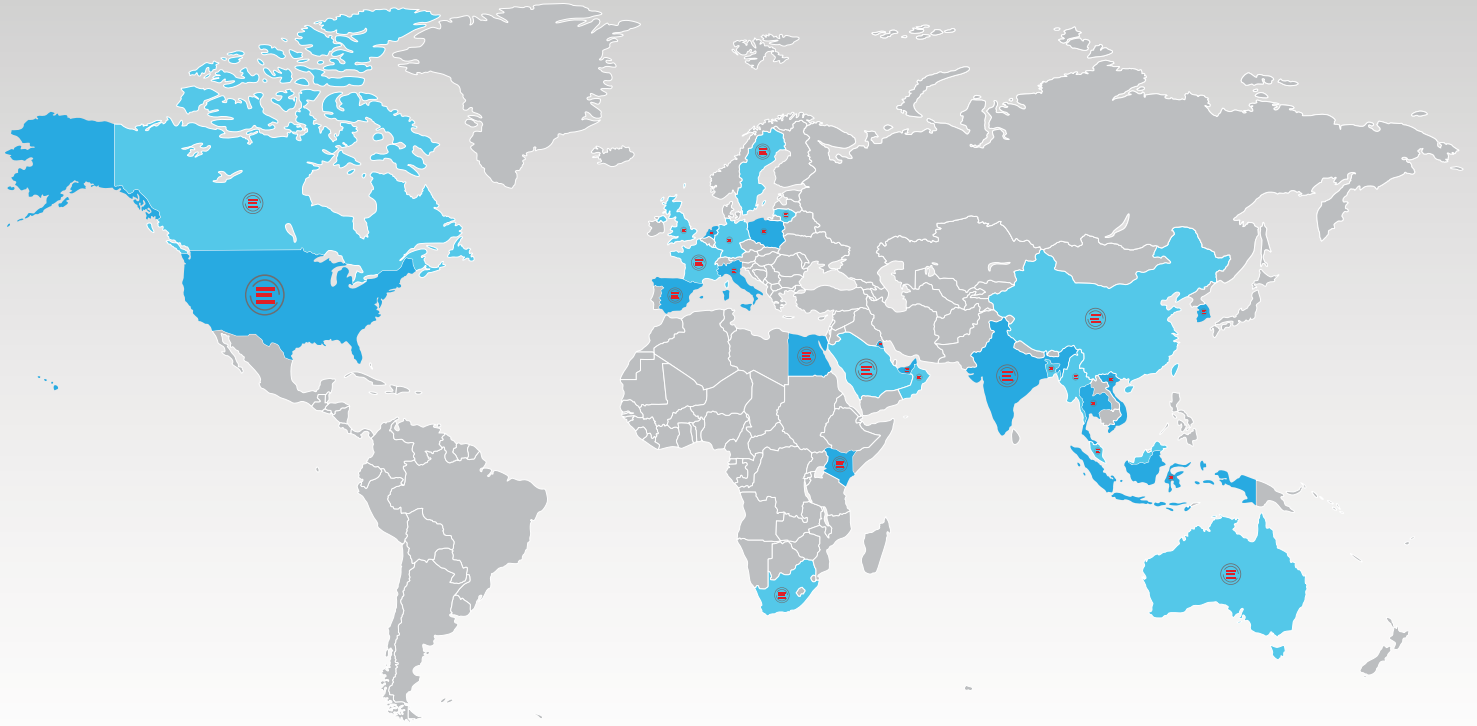
General Features

- 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				
	Max. Secondary Terminals	Nos. 7				
Common Parameters	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				






EPOXY HOUSE

Growth Through Innovation

Divisions



Electrical Controls & systems (ECS) Unit-1

MV Instruments Transformer Division
Product - Epoxy Resing Cast CTs & VTs and VDS / VIPS



Electrical Controls & systems (ECS) Unit-2

MV Instruments Transformer Division
Product - Epoxy Resing Cast CTs & VTs and VDS / VIPS



Electrical Controls & systems (ECS) Unit-3

MV Instruments Transformer Division
Product - Epoxy Resing Cast CTs & VTs and VDS / VIPS



Electrical Controls & systems (ECS) Unit-4

MV Instruments Transformer Division
Product - Epoxy Resing Cast CTs & VTs and VDS / VIPS



Kaizen Switchgear Products (KSP)

100% Export Oriented Unit
Product - Epoxy Resin Cast Components



Baroda busings & Insulators LLP (BBI)

Product - Epoxy Resing Cast Busings & Insulators



Baroda Moulds & Dies (BMD)

Product - Epoxy Resing Cast Bushings, Insulators and Moulded Components



Fibertech Industries (FI)

Product - FRP / SMC / DMC Components



Green brilliance Renewable Energy LLP

Product - Solar PV Modules

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