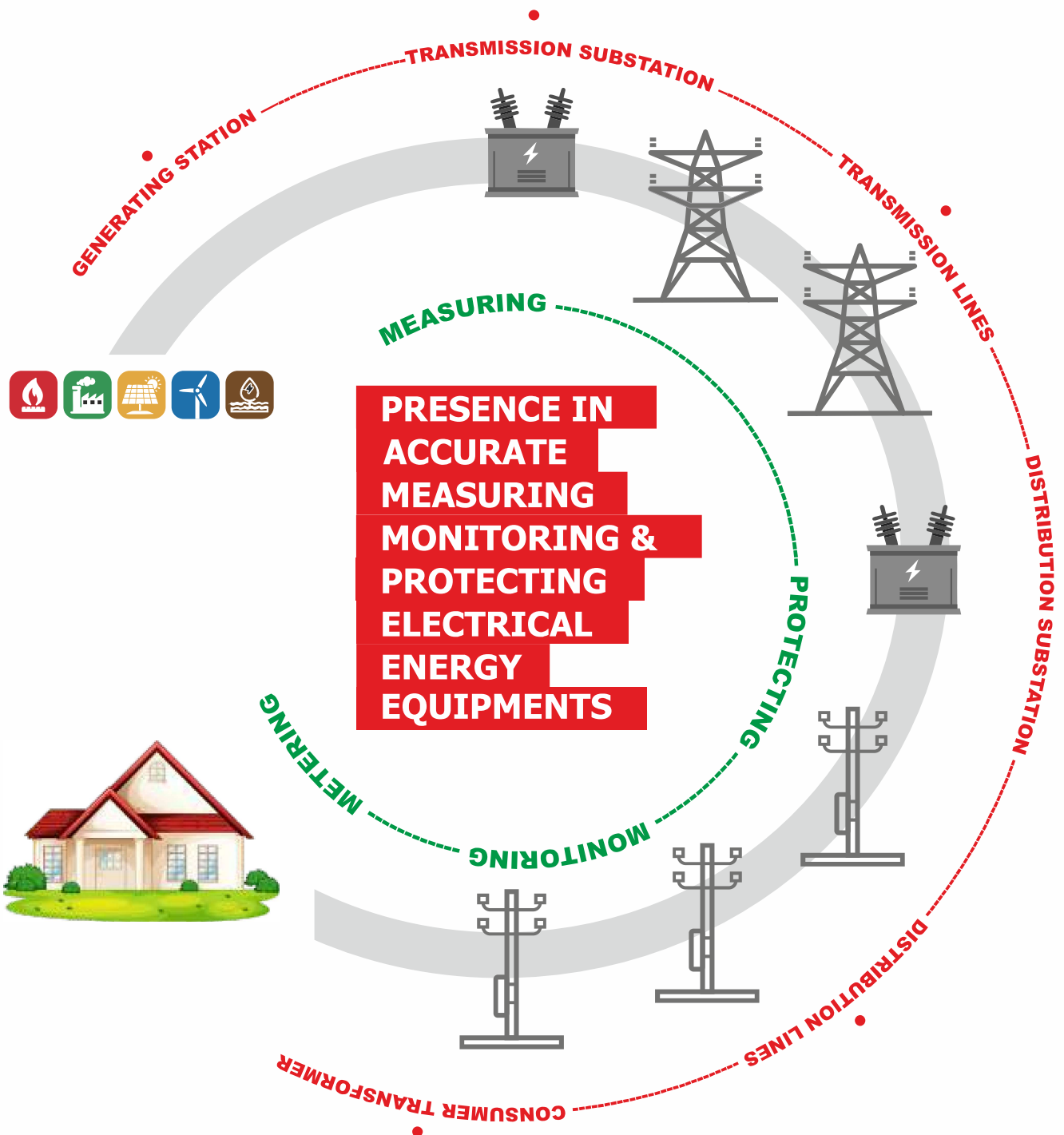


PRAYOG

ELECTRICALS PVT. LTD.

Since 1962



RESIN CAST DRY TYPE VOLTAGE TRANSFORMERS / POTENTIAL TRANSFORMERS (VT / PT)

GENERAL

The measurement of alternating voltage is one of the most frequent operations in present day electrical circuits. Where the magnitude of the voltage is small and where the associated circuit voltage is low direct connection to the measuring apparatus is possible. In a large number of cases however, the magnitude of the voltage precludes the possibility of such direct connections. In all such cases the use of Voltage Transformer is essential.

Basically, a Voltage Transformer is a Transformer in which the secondary voltage is substantially proportional to the primary voltage and ideally in the same phase. The use of a Voltage Transformer not only permits the measurement of voltage in measuring, protective and control circuits, but also provides other advantages as follows :-

- (1) By permitting the use of a standard value of secondary voltage it makes it possible to use standard instruments.
- (2) By permitting the isolation of the primary circuit the hazard to operators is removed.
- (3) In combination with Current Transformers they can be used for measuring & monitoring power or reactive volt-amperes.

RANGE

The PRAYOG range of Voltage Transformers covers practically all combinations of ratios, burdens, accuracy classes and voltages upto 36kV.

These can be further classified as :-

- (1) Single Pole VT where one end of the HV winding is permanently connected to earth.
- (2) Double Pole VT where the HV winding is completely isolated.
- (3) Three Phase VT where neutral may or may not be earthed.
- (4) Five Limb VT : Three Phase VT where at least one secondary is connected in open delta.
- (5) Special Types such as V/V connected or having other variations of Star and Delta.

Each Cast Resin Voltage Transformer is Impregnated & cast under vacuum with high quality epoxy resin mixture prepared under vacuum in sophisticated mixing plant.

Core lamination used are of prime quality high grade non ageing cold rolled grain oriented type steel.

11 kV HRC fuses can be incorporated as an in of the HV busing if specified.

The PRAYOG product conforms to the latest versions of BIS, BS, IEC, or ANSI: IEEE like National & International standards.

TESTS

- 1) Every Voltage Transformer is rigorously tested for all the routine tests outlined in relevant standards.
- 2) Each and every Voltage Transformer of 6.6 kV and above is tested for partial discharge test.
- 3) Type tested for impulse tests (from 60 kV to 170 kV) as well as temperature rise tests.

Governing Standards :

- (1) IS 3156
- (2) IS 16227-3
- (3) IEC 61869-3
- (4) ANSI
- (5) IEEE C57.13

LOW TENSION VOLTAGE TRANSFORMERS UPTO 3.6KV (LT - VT / PT)

- LT Voltage Transformers are manufactured Resin Cast as well as in Insulating Tape wound type as per customer requirement & specification.
- LT Voltage Transformers can be in Single phase or Three Phase Type.



THREE PHASE VOLTAGE TRANSFORMER



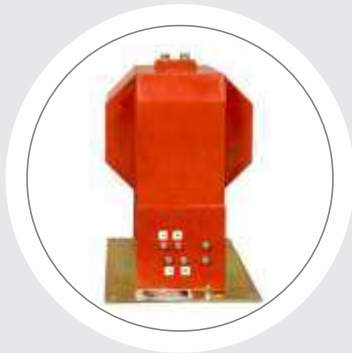
SINGLE PHASE VOLTAGE TRANSFORMER

TECHNICAL SPECIFICATIONS

TECHNICAL SPECIFICATIONS	
Reference Standard	BIS, BS, IEC, IEEE
Voltage Class	Upto 3.6kV
Rated Primary Voltage	415V or $415/\sqrt{3}$ or 110/3V or $110/\sqrt{3}$ 3 V
Rated Secondary Voltage	415 or 110/3V or $110/\sqrt{3}$ 3V
Short Time Current	1,2 Cont. & 1.9 for 8Hrs
Insulation Class	A, B, F, H, C
Burden	As Specified by Customer
Metering Accuracy Class	0.2, 0.5, 1.0 & 3.0
Protection Accuracy Class	3P, 6P
Frequency	50 Hz & 60Hz

HIGH TENSION VOLTAGE TRANSFORMERS UPTO 36KV (HV - VT / PT)

- Voltage Transformer is cast under vacuum with high quality epoxy resin mixture prepared under vacuum in sophisticated mixing plant.
- Voltage Transformers are type tested for impulse test upto 170kV peak.
- Temperature rise test is also performed as a part of type tests.
- The Voltage Transformers can be classified as :-
 - (1) Single Pole VT (One end of the HV winding is permanently connected to earth)
 - (2) Double Pole VT (HV winding is completely isolated)
 - (3) Three Phase VT (Neutral may or may not be earthed)
 - (4) Five Limb VT : Three Phase VT (At least one secondary is connected in open delta)
 - (5) Special Types such as V/V connected or having other variations of Star and Delta.



TOTALLY ENCAPSULATED



COIL CAST TYPE



TWO POLE



GUN TYPE



FUSE BUSHING



RESIDUAL

TECHNICAL SPECIFICATIONS

Reference Standard	BIS, BS, IEC, IEEE
Voltage Class	Upto 36kV
Test Voltage	70kV RMS & 170 kV Peak
Rated Primary Voltage	Upto 33000/v 3V
Rated Secondary Voltage	100/v 3V or 110/v 3 V or 110/3V or 110/3V
Voltage Factor	1.2 Cont. & 1.9 for 8Hrs
Insulation Class	A, B, F, H, C
Burden	Upto 400VA
Metering Accuracy Class	0.2, 0.5, 1.0 & 3.0
Protection Accuracy Class	3P, 6P
Frequency	50 Hz & 60Hz