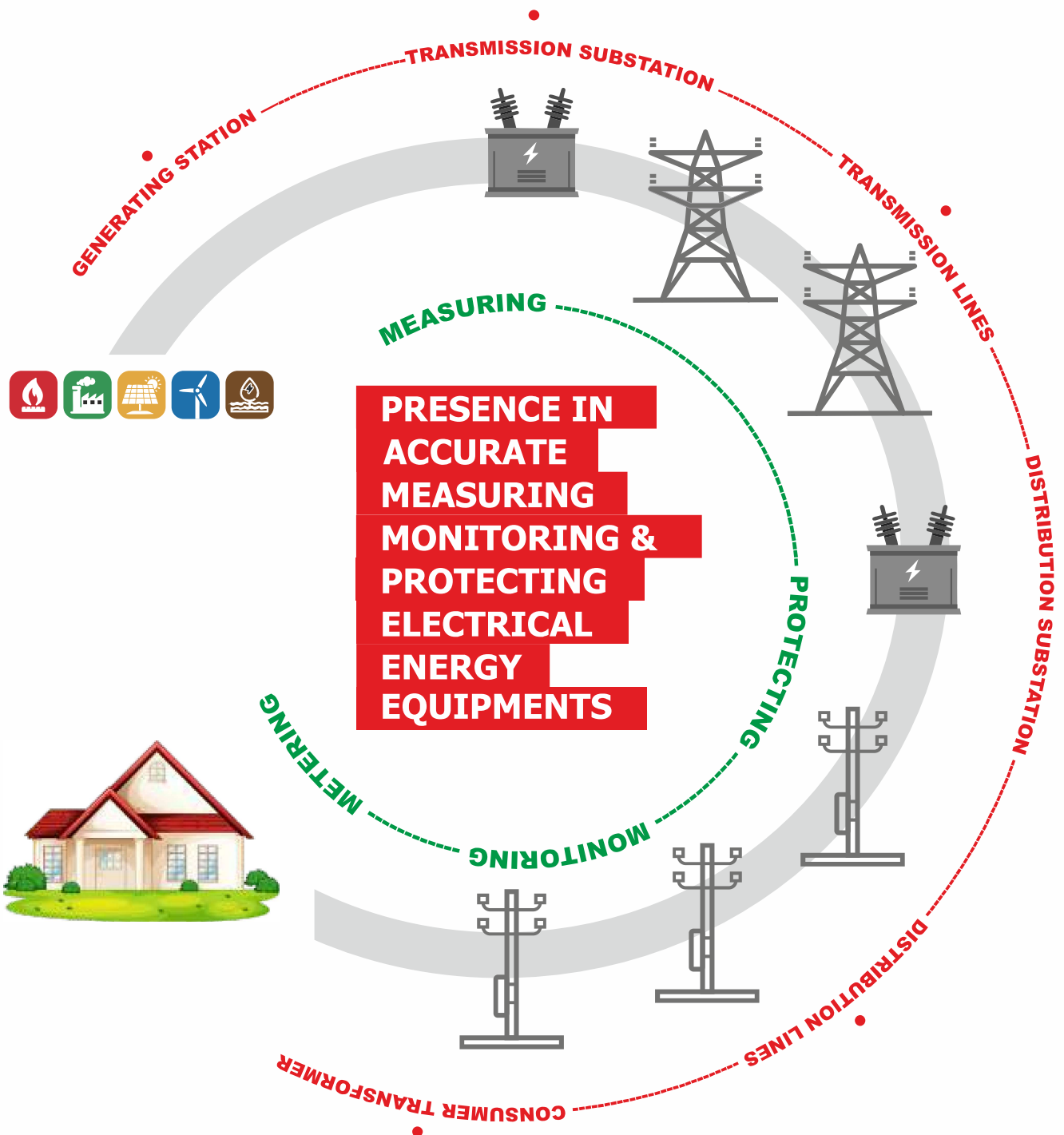


PRAYOG

ELECTRICALS PVT. LTD.

Since 1962



RESIN CAST DRY TYPE CURRENT TRANSFORMERS (CT)

GENERAL

The measurement of alternating currents is one of the most frequent operations in present day electrical circuits. Where the magnitude of the current 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 current or its associated voltage precludes the possibility of such direct connections. In all such cases the use of Current Transformer is essential. Basically, a Current Transformer is a Transformer in which the secondary current is substantially proportional to the primary current and ideally in the same phase.

The use of a Current Transformer not only permits the measurement of current in measuring, protective and control circuits, but also provides other advantages as follows :

- (1) By permitting the use of a standard value of secondary current it makes it possible to use standard instruments.
- (2) By permitting the isolation of the primary circuit the hazard to operators is removed.
- (3) By careful choice of design parameters it is possible to restrict the secondary current to safe values, so that the possibility of damage to connected apparatus is reduced to a minimum.
- (4) Secondary windings of several current transformers can be inter-connected to summate the primary currents or to isolate a particular component (such as the zero-sequence or earth current) for specific application.
- (5) In combination with Voltage Transformers they can be used for measuring power or reactive volt-amperes.

RANGE

The PRAYOG range of Current Transformers covers practically all possible combinations of ratios, burdens, accuracy classes and voltages upto and including 36 kV indoor and outdoor (with special Resin) use. Special purpose CTs such as multi-ratio, summation type, core balance are also manufactured. Low tension units are offered both in conventional or epoxy resin cast forms whereas high tension units are normally of the epoxy Resin cast.

Prayog Current Transformers confirm to the latest versions of BIS, BS, IEC or ANSI : IEEE like National and International standards.

TYPES

Current Transformers are normally categorized as

- (a) Ring Type - A Current Transformer where primary winding provided by the user. Busduct Current Transformers also come under this category.
- (b) Wound Primary - A Current Transformer in which the primary winding consists of a single turn (Bar Primary) or multi-turn coil integral with the transformer. In modern electrical installation, Wound Primary Current Transformers are expected to meet extensive demands by way of high burdens, severe restrictions on dimensions, higher basic insulation levels and higher fault conditions.

Each high voltage Current Transformer wherever the main insulation is epoxy resin, is essentially cast under vacuum with epoxy resin mixture prepared under vacuum in a sophisticated mixing plant. Core lamination used are of prime quality high grade non-ageing cold rolled grain oriented steel strip in continuous form.

TESTING

Each and every Current Transformer is rigorously tested for all the routine tests outlined in any of the standard listed below

- (a) Current Transformers have been type tested for appropriate impulse test level.
- (b) Wound Primary Current Transformers have been successfully tested for short circuit test at ERDA / CPRI for 40kA/1 Sec. rms and 110 kA peak.
- (c) Temperature rise test is also performed as a part of type test.

Governing Standard

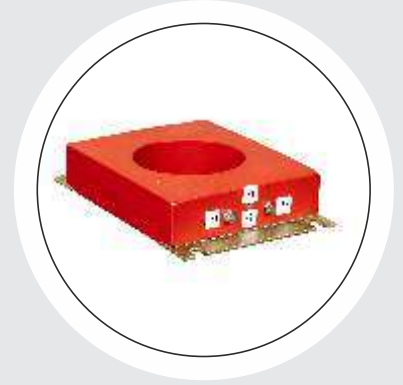
- (1) IS 2705 / 1992
- (2) IS 16227-1
- (3) IEC-61869-2
- (4) ANSI : IEEE C57.13

LOW TENSION CURRENT TRANSFORMERS UPTO 3.6KV (LT - CT)

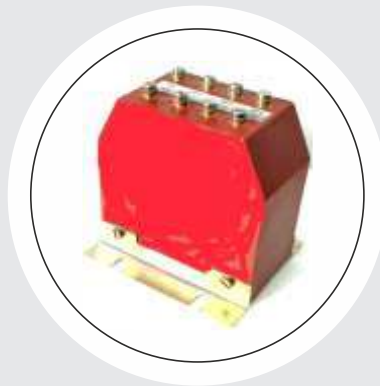
- LV Current Transformers are in Resin Cast as well as in Insulating Tape wound type.
- LV Current Transformer can be Manufactured in Ring Type, Core Balance CTs, Multi ratio Summation CTs, etc as per customer requirement & specification.



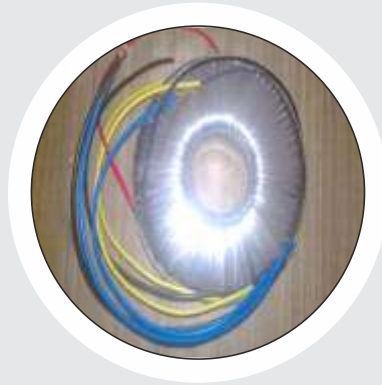
RING TYPE LT CT



CORE BALANCE CT



**MULTI RATIO
SUMMATION CT**



AUXILIARY CT



**CONVENTIONAL
TAPE WOUND CT**

TECHNICAL SPECIFICATIONS	
Reference Standard	BIS, BS, IEC, IEEE
Voltage Class	Upto 3.6kV
Rated Primary Current	Upto 5000A
Rated Secondary Current	5A or 1A
Short Time Current	50 kA
Insulation Class	A, B, F, H, C
Burden	As Specified by Customer
Metering Accuracy Class	0.2S, 0.2, 0.5S, 0.5, 1.0 & 3.0
Protection Accuracy Class	5P, 10 P & 15P
Frequency	50 Hz & 60Hz

HIGH TENSION CURRENT TRANSFORMERS UPTO 12KV (HT - CT)

- These HT Current Transformers are categorized as Window (Ring) type CT, Slot (Rectangular) Type CT, Wound Primary Type CT & Bar Primary Type CT
- We are specialized in replacement market & we can customize size & shape to suit existing dimensions.



WINDOW TYPE



SLOT (RECTANGULAR) TYPE



BAR PRIMARY TYPE



WOUND PRIMARY TYPE

TECHNICAL SPECIFICATIONS

Reference Standard	BIS, BS, IEC, IEEE
Voltage Class	Upto 12kV
Rated Primary Current	Upto 5000A
Rated Secondary Current	5A or 1A
Short Time Current	50 kA
Insulation Class	A, B, F, H, C
Burden	As Specified by Customer
Metering Accuracy Class	0.2S, 0.2, 0.5S, 0.5, 1.0 & 3.0
Protection Accuracy Class	5P, 10 P & 15P
Frequency	50 Hz & 60Hz

HIGH TENSION BUSDUCT CURRENT TRANSFORMER UPTO 36KV (HT - BUSDUCT CT)

- Current Transformers of this category are type tested for impulse test level upto 170kVp
- Temperature rise test is performed upto 30000A as a part of type test.
- Maximum OD 1500mm



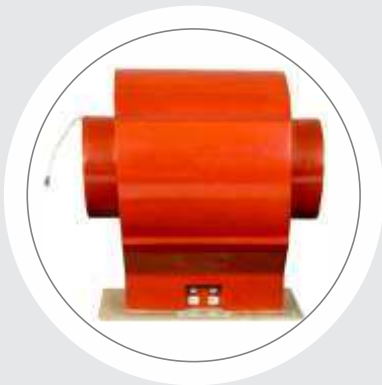
RING TYPE BUSDUCT



BOTH SIDE PEDESTAL



ONE SIDE PEDESTAL



TUBE TYPE PEDESTAL



INSULATING TAPE WOUND



RECTANGULAR SHAPE

TECHNICAL SPECIFICATIONS

Reference Standard	BIS, BS, IEC, IEEE
Voltage Class	Upto 36kV
Rated Primary Current	Upto 30000A
Rated Secondary Current	5A or 1A
Short Time Current	50 kA
Insulation Class	A, B, F, H, C
Burden	As Specified by Customer
Metering Accuracy Class	0.2S, 0.2, 0.5S, 0.5, 1.0 & 3.0
Protection Accuracy Class	5P, 10 P & 15P
Frequency	50 Hz & 60Hz